

Somerset Region Planning Scheme Version Four



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Citation and commencement

This planning scheme may be cited as the Somerset Region Planning Scheme.

A notice was published in the Government Gazette No. 20 on 5 February, 2016 for the planning scheme for the Somerset Region of the Somerset Regional Council.

The commencement date for the planning scheme was 1 March 2016.

Amendments to the planning scheme are included at Appendix 2.

Community statement

The region is unique and Council is committed to ensuring future growth and development protects and maintains:

- Our strong community values
- Our rural production and lifestyle
- Our towns and their distinct and unique regional identities
- Our rich natural environmental assets
- Our accessibility to other areas and regions, and
- Our community led initiatives to build a resilient region.

Editor's note—the community statement is extrinsic material to the planning scheme.

Contents

1	Part 1 About the planning scheme	1
1.1	Introduction.....	1
1.2	Planning scheme components	3
1.3	Interpretation.....	4
1.3.1	Definitions	4
1.3.2	Standard drawings, maps, notes, editor's notes and footnotes	4
1.3.3	Punctuation.....	5
1.3.4	Zones for roads, closed roads, waterways and reclaimed land	5
1.4	Categories of development	5
1.5	Hierarchy of assessment benchmarks.....	6
1.6	Building work regulated under the planning scheme	6
1.7	Local government administrative matters	6
2	Part 2 State planning provisions	1
2.1	State planning policy.....	1
2.2	Regional plan	1
2.3	Referral agency delegations	2
2.4	Regulated requirements.....	2
3	Part 3 Strategic framework.....	1
3.1	Preliminary	1
3.2	Strategic intent.....	2
3.2.1	Background and context.....	2
3.2.2	Somerset's history	3
3.2.3	Somerset in 2013	3
3.2.4	Plans for the future	5
3.2.5	Strategic intent for 2031	7
3.3	Settlement pattern	9
3.3.1	Strategic outcomes.....	9
3.3.2	Element— Urban growth management	10
3.3.3	Element— Compact urban form.....	11
3.3.4	Element— Affordable living	11
3.3.5	Element— Town centres network	12
3.3.6	Element— Industry development	12
3.3.7	Element— Small townships.....	13
3.3.8	Element— Rural residential areas.....	14
3.3.9	Element— Long-term urban growth	14
3.3.10	Element— High impact activities	15
3.3.11	Element— Flooding	16
3.3.12	Element— Bushfire.....	16
3.3.13	Element— Landslide	17
3.3.14	Element— Climate change.....	17
3.4	Natural environment	19
3.4.1	Strategic outcomes.....	19
3.4.2	Element— Biodiversity network.....	19
3.4.3	Element— Watercourses and wetlands	20
3.4.4	Element— Air and noise environment.....	20
3.4.5	Element— Contaminated land	21
3.5	Natural resources	22
3.5.1	Strategic outcomes.....	22
3.5.2	Element— Agricultural land.....	22
3.5.3	Element— Extractive resources	22
3.5.4	Element— Mining tenements	23
3.5.5	Element— Forestry.....	23

3.5.6	Element— Potable water resources.....	24
3.6	Community identity and regional landscape character	26
3.6.1	Strategic outcomes.....	26
3.6.2	Element— Town identity.....	27
3.6.3	Element— Town identity—Esk.....	27
3.6.4	Element— Town identity—Fernvale.....	28
3.6.5	Element— Town identity—Kilcoy.....	29
3.6.6	Element— Town identity—Lowood.....	30
3.6.7	Element— Town identity—Toogoolawah.....	32
3.6.8	Element— Cultural heritage.....	33
3.6.9	Element— Community activities and infrastructure.....	33
3.6.10	Element— Open space, sport and recreation facilities network.....	34
3.6.11	Element— Scenic amenity.....	35
3.7	Economic development.....	36
3.7.1	Strategic outcomes.....	36
3.7.2	Element— Town centres network.....	36
3.7.3	Element— Industrial development.....	37
3.7.4	Element— Rural Production.....	38
3.7.5	Element— Low Carbon economy.....	39
3.7.6	Element— Tourism and recreation.....	39
3.7.7	Element— Home based business.....	41
3.8	Infrastructure and services.....	42
3.8.1	Strategic outcomes.....	42
3.8.2	Element— Urban infrastructure.....	42
3.8.3	Element— Water supply network.....	43
3.8.4	Element— Sewerage network.....	44
3.8.5	Element— Stormwater management network.....	44
3.8.6	Element— Major infrastructure corridors and sites.....	44
3.8.7	Element— Energy infrastructure.....	45
3.8.8	Element— Telecommunications infrastructure.....	45
3.9	Transport.....	46
3.9.1	Strategic outcomes.....	46
3.9.2	Element— Road network.....	46
3.9.3	Element— Public transport network.....	46
3.9.4	Element— Active transport network.....	47
3.9.5	Element— Aviation facilities.....	47
4	Part 4 Local Government Infrastructure Plan.....	1
4.1	Preliminary.....	1
4.2	Planning assumptions.....	2
4.2.1	Population and employment growth.....	4
4.2.2	Development.....	4
4.2.3	Infrastructure demand.....	5
4.3	Priority infrastructure area.....	7
4.4	Desired standards of service.....	7
4.4.1	Transport network.....	7
4.4.2	Stormwater network.....	8
4.4.3	Public parks and community land network.....	10
4.5	Plans for trunk infrastructure.....	11
4.5.1	Plans for trunk infrastructure maps.....	11
4.5.2	Schedule of works.....	11
4.6	Extrinsic material.....	12
5	Part 5 Tables of assessment.....	1
5.1	Preliminary.....	1
5.2	Reading the tables.....	1
5.3	Categories of development and assessment.....	1

5.3.1	Process for determining the category of development and category of assessment for assessable development	1
5.3.2	Determining the category of development and categories of assessment	2
5.3.3	Determining the requirements for accepted development and assessment benchmarks and other matters for assessable development	2
5.4	Regulated categories of development and categories of assessment prescribed by the Regulation	4
5.5	Categories of development and assessment—Material change of use	5
5.6	Categories of development and assessment—Reconfiguring a lot	55
5.7	Categories of development and assessment—Building work	56
5.8	Categories of development and assessment—Operational work	57
5.9	Category of development and assessment—Overlays	59
6	Part 6 Zones	1
6.1	Preliminary	1
6.2	Zone codes	2
6.2.1	Centre zone code	2
6.2.2	Community facilities zone code	7
6.2.3	Emerging community zone code	10
6.2.4	General residential zone code	15
6.2.5	High impact industry zone code	21
6.2.6	Industry zone code	24
6.2.7	Recreation and open space zone code	27
6.2.8	Rural residential zone code	30
6.2.9	Rural zone code	33
6.2.10	Township zone code	38
7	Part 7 Overlays	1
7.1	Preliminary	1
7.2	Overlay codes	2
7.2.1	Agricultural land overlay code	2
7.2.2	Air transport overlay code	4
7.2.3	Biodiversity overlay code	6
7.2.4	Bushfire hazard overlay code	15
7.2.5	Catchment management overlay code	20
7.2.6	Extractive resources overlay code	23
7.2.7	Flood hazard overlay code	27
7.2.8	High impact activities management area overlay code	38
7.2.9	Infrastructure overlay code	40
7.2.10	Landslide hazard overlay code	44
7.2.11	Local heritage overlay code	46
7.2.12	Scenic amenity overlay code	50
7.2.13	Stock route management overlay code	53
8	Part 8 Development codes	1
8.1	Preliminary	1
8.2	Use codes	2
8.2.1	Animal keeping code	2
8.2.2	Aquaculture code	6
8.2.3	Business activities code	9
8.2.4	Caretaker's accommodation code	15
8.2.5	Community activities code	17
8.2.6	Dwelling house code	20
8.2.7	Extractive industry code	24
8.2.8	Home based business code	28
8.2.9	Industrial activities code	35
8.2.10	Intensive animal industry code	39

8.2.11	Multiple dwelling and dual occupancy code	43
8.2.12	Recreation activities code	50
8.2.13	Renewable energy facility code	52
8.2.14	Retirement facility and residential care facility code	55
8.2.15	Roadside stall code	59
8.2.16	Rural industry code	60
8.2.17	Rural workers accommodation code	64
8.2.18	Sales office code	66
8.2.19	Short-term accommodation code	67
8.2.20	Telecommunications facilities code	73
8.2.21	Tourist park and relocatable home park code	75
8.2.22	Utility installation and substation code	78
8.3	Other development codes	80
8.3.1	Advertising devices code	80
8.3.2	Filling and excavation code	82
8.3.3	Landscaping code	85
8.3.4	Reconfiguring a lot code	89
8.3.5	Services, works and infrastructure code	95
8.3.6	Transport, access and parking code	102
Schedule 1	Definitions	1
SC1.1	Use definitions	1
SC1.1.1	Defined activity groups	30
SC1.1.2	Industry thresholds	33
SC1.2	Administrative terms and definitions	35
Schedule 2	Mapping	1
SC2.1	Map index	1
SC2.2	Strategic framework maps	4
SC2.3	Zone maps	4
SC2.4	Local plan maps	4
SC2.5	Overlay maps	4
SC2.6	Other plans maps	4
Schedule 3	Local government infrastructure plan mapping and tables.....	1
SC3.1	Planning assumption tables	1
SC3.2	Schedules of works	10
SC3.3	Local government infrastructure plan maps	16
Schedule 4	Notations required under the Planning Act 2016.....	1
SC4.1	Notation of decisions affecting the planning scheme under section 89 of the Act	1
SC4.2	Notation of resolution(s) under Chapter 4, Part 2, Division 2 of the Act	1

SC4.3 Notation of registration for urban encroachment provisions under section 267 of the Act.....	2
Schedule 5 Designation of premises for development	1
Schedule 6 Planning scheme policies.....	1
SC6.1 Planning scheme policy index.....	1
SC6.2 Planning Scheme Policy 1 – Ecological Assessment Guidelines.....	2
SC6.2.1 Introduction.....	2
SC6.2.2 Application.....	2
SC6.2.3 Ecological Assessment	2
SC6.3 Planning Scheme Policy 2 – Heritage Places	6
SC6.4 Planning Scheme Policy 3 – Catchment Management Analysis Guidelines	8
SC6.4.1 Introduction.....	8
SC6.4.2 Application.....	8
SC6.4.3 Site Analysis and Site Management Plan	8
SC6.4.4 Elements and Impacts of Development	9
SC6.5 Planning Scheme Policy 4 – Design Standards	17
SC6.5.1 INTRODUCTION.....	17
SC6.5.2 APPLICATION	17
SC6.5.3 ENVIRONMENTAL DESIGN STANDARDS	17
SC6.5.4 ENVIRONMENTAL MANAGEMENT PLAN REQUIREMENTS.....	18
SC6.5.5 TREE PRESERVATION	19
SC6.5.6 LANDSCAPING ENVIRONMENTAL DESIGN STANDARDS	19
SC6.5.7 EARTHWORKS DESIGN STANDARDS	20
SC6.5.8 ROADWORKS DESIGN STANDARDS	22
SC6.5.9 STORMWATER DESIGN STANDARDS	34
SC6.5.10 SEWER DESIGN STANDARDS.....	49
SC6.5.11 WATER DESIGN STANDARDS.....	50
SC6.5.12 LANDSCAPING DESIGN STANDARDS	51
SC6.5.13 ELECTRICAL AND TELECOMMUNICATION DESIGN STANDARDS	57
SC6.5.14 PROCEDURES, DOCUMENTATION AND CERTIFICATION	60
SC6.5.15 CONSTRUCTION AND SUPERVISION STANDARDS	66
SC6.5.16 GENERAL CONSTRUCTION STANDARDS	67
SC6.5.17 PAVEMENT SUBGRADE INSPECTION.....	68
SC6.5.18 SUB-BASE PAVEMENT INSPECTION.....	69
SC6.5.19 PRE-SEAL INSPECTION	69
SC6.5.20 “ON MAINTENANCE”	70
SC6.5.21 “OFF MAINTENANCE” INSPECTION STANDARDS.....	71
SC6.5.22 MATERIALS TESTING	74
SC6.5.23 CONCRETE TESTING STANDARDS.....	75
SC6.5.24 MAINTENANCE PERIOD	75
SC6.5.25 BONDS	76
SC6.5.26 CONTRIBUTIONS	78
SC6.5.27 EARTHWORKS CONSTRUCTION AND TESTING STANDARDS	78
SC6.5.28 ROADWORKS CONSTRUCTION AND TESTING STANDARDS	80
SC6.5.29 STORMWATER DRAINAGE CONSTRUCTION AND TESTING STANDARDS	85
SC6.5.30 Interallotment Drainage Construction Standards.....	86
SC6.5.31 SEWER CONSTRUCTION STANDARDS	86
SC6.5.32 WATER CONSTRUCTION STANDARDS	86

SC6.5.33	LANDSCAPING AND EMBELLISHMENT CONSTRUCTION AND TESTING	
	STANDARDS	86
SC6.5.34	AS CONSTRUCTED STANDARDS	88
	APPENDIX A STANDARD DRAWINGS DRAWING LIST	90
	APPENDIX B CHECKLISTS AND FORMS.....	92
	Form - Consulting Engineer's Certificate.....	93
	Checklist – Operational Works Lodgement Requirements	94
	Checklist - Requirements for the Lodgement of Pavement Design Report	95
	Checklist - “Pre-On Maintenance” Inspection Checklist of Works.....	96
	Checklist - Formal “On Maintenance” Requirements	100
	Checklist - Off Maintenance Requirements.....	102
	Compliance Requirements for Public Works Table.....	103

SC6.6 Planning Scheme Policy 5 Bushfire hazard and risk assessment and bushfire management plan guidelines 106

SC6.6.1	Introduction.....	106
SC6.6.2	Application.....	106
SC6.6.3	Guidelines for preparation of a bushfire hazard and risk assessment report	106
SC6.6.4	Guidelines for preparation of a bushfire management plan	107
SC6.6.5	Competency to prepare a bushfire hazard and risk assessment report and/or a bushfire management plan.....	108
	Appendix 6.6A Methodology for undertaking bushfire hazard assessment	109

Tables

Table Number	Table Name	Page
1.6.1	Building Act provision variations	1–6
1.7.1	Temporary use limitations	1–7
2.3.1	Delegated referral agency jurisdictions	2–2
4.2.1	Relationship between LGIP development categories, LGIP development types and uses	4–3
4.2.1.1	Population and employment assumptions summary	4–4
4.2.2.1	Residential dwellings and non-residential floor space assumptions summary	4–4
4.2.3.1	Transport (Roads) network – assumed demand summary	4–5
4.2.3.2	Public Parks and Community Land network assumed demand summary	4–5
5.4.1	Development under schedules 6 and 7 of the Regulation : material change of use	5–4
5.4.2	Regulated categories of development and categories of assessment: reconfiguring a lot	5–4
5.4.3	Regulated categories of development and categories of assessment: operational work	5–4
5.5.1	Centre zone	5–5
5.5.2	Community facilities zone	5–13
5.5.3	Emerging community zone	5–19
5.5.4	General residential zone	5–22
5.5.5	High impact industry zone	5–25
5.5.6	Industry zone	5–28
5.5.7	Recreation and open space zone	5–33
5.5.8	Rural residential zone	5–37
5.5.9	Rural zone	5–39
5.5.10	Township zone	5–48
5.6.1	Reconfiguring a lot	5–55
5.7.1	Building work	5–56
5.8.1	Operational work	5–57
5.9.1	Assessment benchmarks for Agricultural land overlay	5–59
5.9.2	Assessment benchmarks and requirements for Air transport overlay	5–61
5.9.3	Assessment benchmarks for Biodiversity overlay	5–64
5.9.4	Assessment benchmarks for Bushfire hazard overlay	5–68
5.9.5	Assessment benchmarks for Catchment management overlay	5–70
5.9.6	Assessment benchmarks for Extractive resources overlay	5–73
5.9.7	Assessment benchmarks for Flood hazard overlay	5–75

Table Number	Table Name	Page
5.9.8	Assessment benchmarks for High impact activities exclusion area overlay	5–77
5.9.9	Assessment benchmarks for Infrastructure overlay	5–78
5.9.10	Assessment benchmarks for Landslide hazard overlay	5–81
5.9.11	Assessment benchmarks for Local heritage overlay	5–83
5.9.12	Assessment benchmarks for Scenic amenity overlay	5–85
5.9.13	Assessment benchmarks for Stock route management overlay	5–87
6.2.1.3	Centre zone code Requirements for accepted development and assessment benchmarks for assessable development	6–3
6.2.2.3	Community facilities zone code Requirements for accepted development and assessment benchmarks for assessable development	6–8
6.2.3.3	Emerging community zone code Requirements for accepted development and assessment benchmarks for assessable development	6–11
6.2.4.3.A	General residential zone code Requirements for accepted development and assessment benchmarks for assessable development	6–16
6.2.4.3.B	General residential zone code—Park residential precinct Requirements for accepted development and assessment benchmarks for assessable development	6–18
6.2.5.3	High impact industry zone code Requirements for accepted development and assessment benchmarks for assessable development	6–22
6.2.6.3	Industry zone code Requirements for accepted development and assessment benchmarks for assessable development	6–25
6.2.7.3	Recreation and open space zone code Requirements for accepted development and assessment benchmarks for assessable development	6–28
6.2.8.3	Rural residential zone code Requirements for accepted development and assessment benchmarks for assessable development	6–31
6.2.9.3	Rural zone code Requirements for accepted development and assessment benchmarks for assessable development	6–34
6.2.10.3	Township zone code Requirements for accepted development and assessment benchmarks for assessable development	6–39
7.2.1.3.A	Agricultural land overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–2
7.2.1.3.B	Agricultural land overlay code Compatible development with Agricultural Land Class A and Class B	7–3
7.2.2.3	Air transport overlay code	7–4

Table Number	Table Name	Page
	Requirements for accepted development and assessment benchmarks for assessable development	
7.2.3.3.A	Biodiversity overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–7
7.2.3.3.B	Biodiversity overlay code Watercourse setbacks	7–13
7.2.4.3	Bushfire hazard overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–15
7.2.5.3	Catchment management overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–20
7.2.6.3	Extractive resources overlay code Assessment benchmarks for assessable development	7–23
7.2.7.3.A	Flood hazard overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–29
7.2.8.3	High impact activities management area overlay code Assessment benchmarks for assessable development	7–38
7.2.9.3	Infrastructure overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–40
7.2.10.3	Landslide hazard overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–44
7.2.11.3	Local heritage overlay code Assessment benchmarks for assessable development	7–47
7.2.12.3	Scenic amenity overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–50
7.2.13.3	Stock route management overlay code Requirements for accepted development and assessment benchmarks for assessable development	7–53
8.2.1.3	Animal keeping code Requirements for accepted development and assessment benchmarks for assessable development	8–2
8.2.2.3	Aquaculture code Assessment benchmarks for assessable development	8–6
8.2.3.3	Business activities code Assessment benchmarks for assessable development	8–9
8.2.4.3	Caretaker's accommodation code Assessment benchmarks for assessable development	8–15
8.2.5.3	Community activities code Assessment benchmarks for assessable development	8–17
8.2.6.3	Dwelling house code Requirements for accepted development and assessment benchmarks for assessable development	8–20

Table Number	Table Name	Page
8.2.7.3	Extractive industry code Assessment benchmarks for assessable development	8–24
8.2.8.3	Home based business code Requirements for accepted development and assessment benchmarks for assessable development	8–28
8.2.9.3	Industrial activities code Assessment benchmarks for assessable development	8–35
8.2.10.3.A	Intensive animal industry code Assessment benchmarks for assessable development	8–39
8.2.10.3.B	Intensive animal industry code Boundary setbacks and minimum site area	8–41
8.2.10.3.C	Intensive animal industry code Separation distances to sensitive receptors	8–41
8.2.10.3.D	Intensive animal industry code Poultry farming (over 1000 birds) setbacks distances	8–42
8.2.11.3	Multiple dwelling and dual occupancy code Assessment benchmarks for assessable development	8–43
8.2.12.3	Recreation activities code Assessment benchmarks for assessable development	8–50
8.2.13.3	Renewable energy facility code Assessment benchmarks for assessable development	8–52
8.2.14.3	Retirement facility and residential care facility code Assessment benchmarks for assessable development	8–55
8.2.15.3	Roadside stall code Requirements for accepted development and assessment benchmarks for assessable development	8–59
8.2.16.3	Rural industry code Assessment benchmarks for assessable development	8–60
8.2.17.3	Rural workers accommodation code Assessment benchmarks for assessable development	8–64
8.2.18.3	Sales office code Requirements for accepted development and assessment benchmarks for assessable development	8–66
8.2.19.3	Short-term accommodation code Requirements for accepted development and assessment benchmarks for assessable development	8–67
8.2.20.3	Telecommunications facilities code Assessment benchmarks for assessable development	8–73
8.2.21.3.A	Tourist park and relocatable home park code Requirements for accepted development and assessment benchmarks for assessable development	8–75
8.2.21.3.B	Tourist park and relocatable home park code Site design and layout requirements	8–77
8.2.22.3	Utility installation and substation code Assessment benchmarks for assessable development	8–78
8.3.1.3	Advertising devices code Assessment benchmarks for assessable development	8–80

Table Number	Table Name	Page
8.3.2.3	Filling and excavation code Assessment benchmarks for assessable development	8–82
8.3.3.3	Landscaping code Assessment benchmarks for assessable development	8–85
8.3.4.3.A	Reconfiguring a lot code Assessment benchmarks for assessable development	8–89
8.3.4.3.B	Reconfiguring a lot code Minimum lot sizes and dimensions	8–94
8.3.5.3.A	Services, works and infrastructure code Requirements for accepted development and assessment benchmarks for assessable development	8–95
8.3.5.3.B	SQMP Construction Phase	8–100
8.3.5.3.C	SQMP Post Construction Phase	8–101
8.3.6.3.A	Transport, access and parking code Requirements for accepted development and assessment benchmarks for assessable development	8–102
8.3.6.3.B	Transport, access and parking code Minimum car parking and service vehicle requirements	8–106
SC1.1.1	Index of use definitions	SC1–2
SC1.1.2	Use definitions as per the regulated requirements	SC1–3
SC1.1.1.1	Index of defined activity groups	SC1–30
SC1.1.1.2	Defined activity groups	SC1–30
SC1.1.2.1	Industry thresholds	SC1–33
SC1.2.1	Index of administrative terms and definitions	SC1–35
SC1.2.2	Administrative terms and definitions	SC1–36
SC2.1.1	Map index	SC2–1
SC3.1.1	Existing and projected population	SC3-1
SC3.1.2	Existing and projected employees	SC3-3
SC3.1.3	Planned density and demand generation rate for a trunk infrastructure network	SC3-5
SC3.1.4	Existing and projected residential dwellings	SC3-6
SC3.1.5	Existing and projected non-residential floor space	SC3-8
SC3.2.1A	Transport (Roads) schedule of works	SC3-10
SC3.2.1B	Transport (Intersections) schedule of works	SC3-11
SC3.2.1C	Transport (Bridges/Structures) schedule of works	SC3-12
SC3.2.2	Public parks and community land schedule of works	SC3-13
SC4.1.1	Notation of decisions under section 89 of the Act	SC4–1
SC4.2.1	Notation of resolutions under Chapter 4, Part 2, Division 2 of the Act	SC4–1
SC4.3.1	Notation of registrations made under section 267 of the Act	SC4–2
SC5.1	Designation of premises for development infrastructure under Section 42 of the Act	SC5–1

Table Number	Table Name	Page
SC6.1.1	Planning scheme policy index	SC6–1
AP1.1	Abbreviations and acronyms	A1–1
AP2.1	Table of amendments	A2–1

Figures

Figure Number	Figure Name	Page
Map 1	Local government planning scheme area and context	1–2
8.2.8.3	Tourism Areas	8–34
8.2.19.3	Tourism Areas	8–73

1 Part 1 About the planning scheme

1.1 Introduction

- (1) The Somerset Region Planning Scheme (planning scheme) has been prepared in accordance with the *Sustainable Planning Act 2009* (the SP Act) as a framework for managing development in a way that advances the purpose of the SP Act.
- (2) The planning scheme was amended for alignment with the *Planning Act 2016* (the Act) by the Minister's rules under section 293 of the Act on 28 June 2017 (with commencement on 3 July 2017).
- (3) In seeking to achieve this purpose, the planning scheme sets out Somerset Regional Council's intention for the future development in the planning scheme area, over the next 15 years.
- (4) The planning scheme seeks to advance state and regional policies through more detailed local responses, taking into account the local context. .
- (5) While the planning scheme has been prepared with a 15 year horizon, it will be reviewed periodically in accordance with the Act to ensure that it responds appropriately to the changes of the community at a local, regional and state level.
- (6) The planning scheme applies to the planning scheme area of Somerset Region including all premises, roads, internal waterways and interrelates with the surrounding local government areas illustrated in **Map 1**.

Editor's note—The planning scheme has been amended to align with Use of zones from schedule 2 column 1 from the Regulation and Use of RGB colour for zones stated in Schedule 2 Column 3 of the Regulation and Use and Administrative terms in schedules 3 and 4. In accordance with section 16(3) of the Act, the regulated requirements (to the extent chosen) apply to the planning scheme to the extent of any inconsistency.



Map 1—Local government planning scheme area and context

1.2 Planning scheme components

- (1) The planning scheme comprises the following components:
 - (a) about the planning scheme;
 - (b) state planning provisions;
 - (c) the strategic framework;
 - (d) the local government infrastructure plan;
 - (e) tables of assessment;
 - (f) the following zones:
 - (i) Centre zone;
 - (ii) Community facilities zone;
 - (iii) Emerging community zone;
 - (iv) General residential zone;
 - (A) Park residential precinct;
 - (v) High impact industry zone;
 - (vi) Industry zone;
 - (vii) Recreation and open space zone;
 - (viii) Rural residential zone;
 - (ix) Rural zone;
 - (x) Township zone.
 - (g) there are no local plans
 - (h) the following overlays:
 - (i) Agricultural land overlay
 - (ii) Air transport overlay;
 - (iii) Biodiversity overlay;
 - (iv) Bushfire hazard overlay;
 - (v) Catchment management overlay;
 - (vi) Extractive resources overlay;
 - (vii) Flood hazard overlay;
 - (viii) High impact activities management overlay;
 - (ix) Infrastructure overlay;
 - (x) Landslide hazard overlay;
 - (xi) Local heritage overlay;
 - (xii) Scenic amenity overlay;
 - (xiii) Stock route management overlay.
 - (i) the following development codes:
 - (i) the following use codes:
 - (A) Animal keeping code;
 - (B) Aquaculture code;
 - (C) Business activities code;
 - (D) Caretaker's accommodation code;
 - (E) Community activities code;
 - (F) Dwelling house code;
 - (G) Extractive industry code;
 - (H) Home based business code;
 - (I) Industrial activities code;
 - (J) Intensive animal industry code;
 - (K) Multiple dwelling and dual occupancy code;
 - (L) Recreation activities code;
 - (M) Renewable energy facility code;
 - (N) Retirement facility and residential care facility code;
 - (O) Roadside stall code;
 - (P) Rural industry code;
 - (Q) Rural workers accommodation code;
 - (R) Sales office code;
 - (S) Short-term accommodation code;
 - (T) Telecommunications facilities code;
 - (U) Tourist park and relocatable home park code;
 - (V) Utility installation and substation code.
 - (ii) the following other development codes:

- (A) Advertising devices code;
 - (B) Filling and excavation code;
 - (C) Landscaping code;
 - (D) Reconfiguring a lot code;
 - (E) Service, works and infrastructure code;
 - (F) Transport, access and parking code.
 - (j) schedules and appendices.
- (2) The following planning scheme policies support the planning scheme:
- (a) PSP No. 1 — Ecological Assessment Guidelines;
 - (b) PSP No. 2 — Heritage Places;
 - (c) PSP No. 3 — Catchment Management Analysis Guidelines.
 - (d) PSP No. 4 — Design Standards
 - (e) PSP No. 5 — Bushfire hazard and risk assessment and bushfire management plan guidelines

1.3 Interpretation

1.3.1 Definitions

- (1) A term used in the planning scheme has the meaning assigned to that term by one of the following:
- (a) the Planning Act 2016 (the Act);
 - (b) the Planning Regulation 2017 (the Regulation);
 - (c) the definitions in Schedule 1 of the planning scheme;
 - (d) the *Acts Interpretation Act 1954*;
 - (e) the ordinary meaning where that term is not defined in any of the above.
- (2) In the event a term has been assigned a meaning in more than one of the instruments listed in sub-section 1.3.1(1), the meaning contained in the instrument highest on the list will prevail.
- (3) A reference in the planning scheme to any act includes any regulation or instrument made under it, and where amended or replaced, if the context permits, means the amended or replaced act.
- (4) A reference in the planning scheme to a specific resource document or standard, means the latest version of the resource document or standard.
- (5) A reference to a part, section, table or schedule is a reference to a part, section, table or schedule of the planning scheme.

Editor's note—The planning scheme has been amended to align with Zones and Purpose statements from Schedule 2 column 1 and 2 from the Regulation (with exception of the Recreation and Open space zone) and Use of RGB colour for zones stated in Schedule 2 Column 3 of the Regulation and Use and Administrative terms in schedules 3 and 4. In accordance with section 16(3) of the Act, the regulated requirements (to the extent chosen) apply to the planning scheme to the extent of any inconsistency. (Refer to Section 2.4 for further details).

1.3.2 Standard drawings, maps, notes, editor's notes and footnotes

- (1) Standard drawings contained in codes or schedules are part of the planning scheme.
- (2) Maps provide information to support the outcomes and are part of the planning scheme.
- (3) Notes are identified by the title "note" and are part of the planning scheme.
- (4) Editor's notes and footnotes are extrinsic material, as per the *Acts Interpretation Act 1954*, and are identified by the title "editor's note" and "footnote" and are provided to assist in the interpretation of the planning scheme; they do not have the force of law.

Note— This is an example of a note.

Editor's note— This is an example of an editor's note.

1.3.3 Punctuation

- (1) A word followed by “;” or “, and” is considered to be “and”.
- (2) A word followed by “; or” means either or both options can apply.

1.3.4 Zones for roads, closed roads, waterways and reclaimed land

- (1) The following applies to a road, closed road, waterway or reclaimed land in the planning scheme area:
 - (a) if adjoined on both sides by land in the same zone—the road, closed road, waterway or reclaimed land is in the same zone as the adjoining land;
 - (b) if adjoined on one side by land in a zone and adjoined on the other side by land in another zone—the road, closed road, waterway or reclaimed land is in the same zone as the adjoining land when measured from a point equidistant from the adjoining boundaries;
 - (c) if the road, closed road, waterway or reclaimed land is adjoined on one side only by land in a zone—the entire waterway or reclaimed land is in the same zone as the adjoining land;
 - (d) if the road, closed road, waterway or reclaimed land is covered by a zone then that zone applies.

Editor's note—the boundaries of the local government area are described by the maps referred to within the Local Government Regulation 2012.

1.4 Categories of development

- (1) The categories of development under the Act are:

- (a) accepted development

Editor's note—A development approval is not required for development that is accepted development. Under section 44(6)(a) of the Act, if a categorising instrument does not apply a category of development to a particular development, the development is accepted development. Schedule 7 of the Regulation also prescribes accepted development.

- (b) assessable development
 - i. code assessment
 - ii. impact assessment

Editor's note—A development approval is required for assessable development. Schedules 9, 10 and 12 of the Regulation also prescribe assessable development.

- (c) prohibited development.

Editor's note—A development application may not be made for prohibited development. Schedule 10 of the Regulation prescribes prohibited development.

- (2) The planning scheme states the category of development for certain types of development, and specifies the category of assessment for assessable development in the planning scheme area in Part 5 Section 5.4 to 5.10.

Editor's note—Section 43 of the Act identifies that a categorising instrument categorises development and specifies categories of assessment and may be a regulation or local categorising instrument. A local categorising instrument includes a planning scheme, a TLPI or a variation approval.

1.5 Hierarchy of assessment benchmarks

- (1) Where there is inconsistency between provisions within the planning scheme, the following rules apply:
 - (a) the strategic framework prevails over all other components to the extent of the inconsistency for impact assessment;
 - (b) relevant codes as specified in schedules 6 and 10 of the Regulation prevail over all other components to the extent of the inconsistency;
 - (c) overlays prevail over all other components (other than mentioned in (a) and (b) to the extent of the inconsistency;
 - (d) zone codes prevail over use codes and other development codes to the extent of the inconsistency.

1.6 Building work regulated under the planning scheme

- (1) Section 17(b) of the Regulation identifies the assessment benchmarks for building work that a local planning instrument must not change the effect to the extent the building work is regulated under the building assessment provisions unless permitted under the *Building Act 1975*.
- (2) The building assessment provisions are listed in section 30 of the *Building Act 1975*.

Editor's note—The building assessment provisions are stated in section 30 of the *Building Act 1975* and are assessment benchmarks for the carrying out of building assessment work or building work that is accepted development subject to requirements (see also section 31 of the *Building Act 1975*).

- (3) This planning scheme, through Part 5, regulates building work in accordance with sections 32 and 33 of the *Building Act 1975*.

Editor's note—the *Building Act 1975* permits planning schemes to:

- regulate, for the Building Code of Australia (BCA) or the Queensland Development Code (QDC), matters prescribed under a regulation under the *Building Act 1975* (section 32). These include variations to provisions contained in parts MP1.1, MP1.2 and MP1.3 of the QDC such as heights of buildings related to obstruction and overshadowing, siting and design of buildings to provide visual privacy and adequate sight lines, on-site parking and outdoor living spaces. It may also regulate other matters, such as land liable to flooding, designating land as bushfire prone areas and transport noise corridors.
- deal with an aspect of, or matter related or incidental to building work prescribed under a regulation under section 32 of the *Building Act 1975*;
- specify alternative boundary clearances and site cover provisions for Class 1 and 10 structures under section 33 of the *Building Act 1975*.

Refer to Schedule 9 of the Regulation to determine assessable development, the type of assessment and any referrals applying to the building work.

- (4) The building assessment provisions are contained in the following parts of this planning scheme:

Table 1.6.1 Building Act provision variations

Building Assessment Provision	Planning Scheme Part
Maximum building heights for <i>Dwelling house</i>	Part 6 – Zones, Part 8 – Development Codes
Alternative site cover clearances for <i>Dual occupancy</i>	Part 6 – Zones, Part 8 – Development Codes
Floor level heights on land liable to flooding	Part 7.2.5 – Flood hazard overlay code
Building work on and adjoining a local heritage place	Part 7.2.11 – Local heritage overlay code

Editor's note—A decision in relation to building work that is assessable development under the planning scheme can only be issued as a preliminary approval. See section 83(b) of the *Building Act 1975*.

Editor's note—In a development application, the applicant may request preliminary approval for building work. The decision on that development application also be taken to be a referral agency's response under section 56 of the Act, for building work assessable against the *Building Act 1975*. The decision notice must state this.

1.7 Local government administrative matters

Table 1.7.1 describes the limitations on a *temporary use* in accordance with **SC1.1—Use Definitions** and **SC1.2—Administrative definitions**.

Table 1.7.1—Temporary use limitations

Column 1 Defined use	Column 2 Limitations on the scope of the temporary use	Column 3 Maximum timeframe for the temporary use
<i>Food and drink outlet</i>	If: (a) limited to a <i>light refreshment booth</i> ; and (b) located on premises in the Centre zone, Community facilities zone, Recreation and open space zone or Township zone; and (c) ancillary to <i>indoor sport and recreation</i> or <i>outdoor sport and recreation</i> .	2 days per week
<i>Major sport, recreation and entertainment facility</i>	If located on premises in the Rural zone or Recreation and open space zone.	7 days per calendar year
<i>Market</i>	If: (a) located on premises in the Centre zone, Community facilities zone, Recreation and open space zone or Township zone; and (b) located on land owned by Council or land for which Council is the trustee and Council consent has been provided.	1 day per week
<i>Motor sport facility</i>	If located on premises in the Rural zone or Recreation and open space zone.	7 days per calendar year
<i>Tourist attraction</i>	If located on premises in the Rural zone or Recreation and open space zone.	7 days per calendar year

2 Part 2 State planning provisions

2.1 State planning policy

The Minister has identified that the State planning policy (July 2014 version) is integrated in the planning scheme in the following ways:

State interests in the state planning policy appropriately integrated

- (1) Liveable communities
- (2) Housing supply and diversity
- (3) Agriculture
- (4) Development and construction
- (5) Mining and extractive resources
- (6) Tourism
- (7) Biodiversity
- (8) Cultural heritage
- (9) Water quality
- (10) Emissions and hazardous activities
- (11) Natural hazards, risk and resilience
- (12) Energy and water supply
- (13) State transport infrastructure
- (14) Strategic airports and aviation facilities

State interests in the state planning policy (July 2014 version) not integrated

Nil

State interests in the state planning policy not relevant to Somerset Regional Council

- (1) Coastal environment
- (2) Strategic ports

2.2 Regional plan

The Minister has identified that the planning scheme, specifically the strategic framework, appropriately advances the *South East Queensland Regional Plan 2009–2031*, as it applies in the planning scheme area.

2.3 Referral agency delegations

Schedule 10 of the Regulation identifies referral agencies for certain aspects of development. The following referral agencies have delegated the following referral agency jurisdictions to Somerset Regional Council:

Table 2.3.1—Delegated referral agency jurisdictions

Column 1 Application involving	Column 2 Referral agency and type	Column 3 Referral jurisdiction
Under Schedule 14 of the Regulation – Particular Reconfiguring a lot requiring code assessment if- (a) the land is in the area of a local government that, under the SEQ Water Act, is a participating local government for a distributor-retailer; (b) the participating local government is the assessment manager; and (c) the development application is made before 1 July 2014.	Queensland Urban Utilities – as a concurrence agency	The effects of the development on a water service or wastewater service of a distributor-retailer
Development in the area of a local government that, under the SEQ Water Act, is a participating local government for a distributor-retailer, if the development application is made before 1 July 2014	Queensland Urban Utilities – as a concurrence agency	The effects of the development on a water service or wastewater service of a distributor – retailer

Editor's note—For the above listed referral agency delegations the applicant is not required to refer the application to referral agency listed under Schedule 10 of the Regulation because the local government will undertake this assessment role.

2.4 Regulated requirements

The following regulated requirements prescribed in the Planning Regulation 2017 dated 3 July 2017 are appropriately reflected in the planning scheme.

- (1) Use of Zones and Purpose statements from Schedule 2 column 1 and 2 from the Regulation.
- (2) Use of RGB colour for zones stated in Schedule 2 Column 3 of the Regulation
- (3) Use and administrative terms and definitions in schedules 3 and 4 of the Regulation.

Editor's note: Under Section 5 (2)(a) of the Act, additional administrative terms and definitions are included in this planning scheme and are appropriately identified.

3 Part 3 Strategic framework

3.1 Preliminary

- (1) The strategic framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs within the planning scheme area for the life of the planning scheme.
- (2) Mapping for the strategic framework is referenced throughout Part 3 and is included in Schedule 2.
- (3) For the purpose of describing the policy direction for the planning scheme, the strategic framework is structured in the following way:
 - (a) the strategic intent;
 - (b) the following seven (7) themes that collectively represent the policy intent of the scheme:
 - (i) settlement pattern;
 - (ii) natural environment;
 - (iii) natural resources;
 - (iv) community identity and regional landscape character;
 - (v) economic development;
 - (vi) infrastructure and services; and
 - (vii) transport;
 - (c) the strategic outcome(s) proposed for development in the planning scheme area for each theme;
 - (d) the element(s) that refine and further describe the strategic outcome(s);
 - (e) the specific outcomes sought for each or a number of elements;
 - (f) the land use strategies for achieving these outcomes.
- (4) Although each theme has its own section, the strategic framework is read in its entirety as the policy direction for the planning scheme.

3.2 Strategic intent

3.2.1 Background and context

The Somerset Region local government area ('Somerset Region' or 'the Region') is the largest local government area in South East Queensland ("SEQ").

Covering an area of 5,379 square kilometres generally encompassing the upper catchments of the Brisbane and Stanley Rivers between the D'Aguilar and Blackbutt Ranges, including the regionally significant drinking water supplies of Lake Somerset, Lake Wivenhoe and the Mid-Brisbane River, Somerset Region is bounded by eight local government areas:

- (a) Gympie Region to the north;
- (b) the Sunshine Coast and Moreton Bay Regions and Brisbane City to the east;
- (c) Ipswich City and Lockyer Valley Region to the south; and
- (d) Toowoomba Region and South Burnett Region to the west.

The five towns of Esk (the administrative centre of Somerset Region), Fernvale, Kilcoy, Lowood and Toogoolawah are the major settlements in the Region. The nine small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa are established across the rural areas across the Region.

These communities rely heavily on the road network for access and economic development, particularly freight transport. The Brisbane Valley Highway and D'Aguilar Highway provide important connections both within the Region and to the adjoining local government areas of Ipswich City and the Moreton Bay and South Burnett Regions. Other roads provide secondary connections to Brisbane City and the Gympie, Lockyer Valley and Toowoomba Regions.



3.2.2 Somerset's history

Prior to the first European settlement in 1841, the area was occupied by the Jagera, Yuggera, Jinibara and Ugarapul Aboriginal people. These people lived for millennia in balance with the natural resources of the region that sustained them.

In the 1840s, pastoral leases were taken up throughout the Brisbane Valley, including Durundur, Kilcoy, Mount Esk and Cressbrook pastoral runs. In the following decades, some of these were more closely settled for various agricultural activities, including cotton-growing, dairying and mixed cropping. Apart from these, timber-getting was also important early and complementary to establishing the land for grazing and dairying. There were also a number of mines.

European settlement led to the displacement of the previous Aboriginal inhabitants.

The railway was progressively extended up the Brisbane Valley from Ipswich from the 1880s, reaching Esk by 1886, Toogoolawah by 1904 and Linville in 1910. Sawmills and dairy factories were established in several of the towns and the railway also assisted farmers to ship a range of other agricultural produce to markets in Brisbane. The railway towns also became the centres for rural and community services. The railway service finished in 1989 and the rails have been pulled up. Kilcoy meatworks was opened in 1953.



Somerset Region has now accommodated two major water supply reservoirs, Lake Somerset and Lake Wivenhoe. Somerset Dam was completed in 1948 and Wivenhoe Dam in 1985. These impoundments took up large areas that previously had been used for rural production but resulted in lakes which, as well as providing water supplies also were suitable for water-based recreation for a growing SEQ population. Lake Atkinson is also located in the south-west of the region and is used for agricultural and recreational purposes. The Mid-Brisbane River below Wivenhoe Dam and Lake Cressbrook are also located in the region and are used for storage of water supply.

Reflecting broad Australian trends, the population of Somerset Region's towns and rural areas gradually declined from about 10,000 in the 1920s to 7,700 by 1971. This overall trend was reversed by changes in land subdivision policy from the 1970s to 2004 which permitted rural residential settlement in a number of locations generally near the towns. While further rural residential subdivision has generally now been curtailed, more recently urban expansion has occurred at Fernvale, Lowood and Kilcoy, related essentially to population growth in South East Queensland and the feasibility of commuting from these towns in particular to jobs beyond Somerset Region. By 2006, the population of Somerset Region had grown again, to 18,400.

3.2.3 Somerset in 2013

The Somerset Region encompasses a wealth of natural resources and productive rural activities set in areas of natural environmental significance and scenic amenity. Foremost among these natural

resources are the water supply reservoirs of Lake Wivenhoe and Lake Somerset (the latter from which the region takes its name), their adjoining catchment reserves and over 40 other reserves: national parks, conservation parks, state forests, forest reserves and nature reserves.

The Somerset Region is the smallest local government area in South East Queensland by population although the largest in area. The majority of residents live in rural areas; in 2010, the region's five towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah accounted for just one-third of the region's population of 22,500. However, there are new residential estates in Fernvale, Kilcoy and Lowood, which are serviced by new supermarket-based shopping centres in each town centre. The five towns remain the centres for delivery of services including shopping, education and community services, for the population of the region.

The present distribution of population across Somerset Region is to a significant degree a result of the past development policies that allowed rural subdivision, evident in the extensive rural residential settlement in parts of the south of the region and around Kilcoy in the north-east. These development patterns have raised concerns about the fragmentation of the regional landscape and productive rural lands and the sustainable provision of infrastructure and services to these residents. There are also issues about the reasonable expectations of amenity in these areas. However, these settlements also provide lifestyle opportunities for their residents not available to residents of the towns.

Especially since the construction of Wivenhoe Dam, there have been restrictions on further land subdivision and there remain extensive pastoral and other rural holdings throughout much of the region. Intensive rural land use presents risks to the quality of drinking water supplies in the Lake Somerset, Lake Wivenhoe and Brisbane River catchments. The Kilcoy Pastoral Company continues to be a major employer. As the population grows, more local jobs have been created providing services to the population, especially in the five main towns.

The former Brisbane Valley Railway is in the process of being converted to a recreation trail, that is, the Brisbane Valley Rail Trail, and the two lakes also provide important venues for sustainable levels of regional recreation, cognisant of their primary purpose as drinking water storages.

3.2.4 Plans for the future

The planning schemes for the former local government areas of Kilcoy and Esk, which were amalgamated to form Somerset Region, provide the background for contemporary local planning. These planning schemes identified consolidated urban settlement primarily in the five towns, areas of rural residential settlement, extensive rural areas within which a wide range of productive rural activities were permitted and areas of scenic amenity and conservation significance whose natural values should be protected. Essentially, this planning scheme continues the broad thrust of those strategies.

The *South East Queensland Regional Plan 2009-2031* (“the SEQ Regional Plan”) is based on the medium series population projection for the SEQ region to 2031 and forecasts that Somerset Region will experience continued strong growth, increasing to a resident population of 32,800 by 2031. However, the strong population growth experienced in Somerset Region in recent years suggests that a medium-high series growth path is more likely, which would result in a resident population of 34,400 by 2031. The SEQ Regional Plan identifies:

- (a) that Somerset Region is to accommodate an additional 6,500 dwellings within an urban footprint which directs urban growth primarily towards Lowood and Fernvale in the southern part of the region and Kilcoy in the northern part of the region;
- (b) the towns of Fernvale, Esk and Kilcoy as major rural activity centres; and
- (c) most of Somerset Region as part of the Regional Landscape and Rural Production Area regional land use category.

In line with broader national trends, the Somerset Region population is also forecast to age and household sizes to decline by 2031.

During 2010/11, Somerset Regional Council, in consultation with the community, developed *Somerset Futures*, the long-term community plan for Somerset Region, intended to provide foundations for future growth in the region. Elements of the community’s vision for Somerset Region, developed in the course of the community planning process, provide guidance for the regulation of land use in the planning scheme, namely: ***natural, vibrant, prosperous and well-planned Somerset***.

Aside from and in response to the challenges of managing future population growth and demographic change introduced above, the following foundations for growth broadly describe the development challenges facing Somerset Region identified during the community planning process:

- (a) maintaining the distinct identity of each of our towns;
- (b) protecting and enhancing our rich natural environment assets;
- (c) protecting rural character as a setting for lifestyle;
- (d) protecting opportunities for rural production;
- (e) creating economic vibrancy through growth and diversity;
- (f) providing adequate community services and infrastructure; and
- (g) maintaining our accessibility to other areas and regions.

In addition to the desired regional outcomes, principles and policies of the SEQ Regional Plan, the State planning policy adds to the context for developing the planning scheme, including in relation to:

- (a) planning for liveable communities and housing;
- (b) planning for economic growth, particularly agriculture, development and construction, mining and extractive resources, and tourism;
- (c) planning for the environment and heritage, particularly biodiversity, cultural heritage and water quality;
- (d) planning for hazards and safety, particularly emissions and hazardous activities and natural hazards such as flood, bushfire and landslide; and
- (e) planning for infrastructure, particularly energy and water supply, state transport infrastructure, and strategic airports and aviation facilities.

From the studies undertaken in preparing the planning scheme and further engagement with stakeholders, the following issues have formed as appropriate to address in addition to those already dealt with in the existing planning framework:

- (a) balancing growth with maintaining the present valued character, especially in the towns and along major routes;
- (b) promoting and maintaining the green and rural image of the region by enhancing protection of its natural and scenic assets and encouraging consistent activities;
- (c) accommodating new recreational and tourism activities the demand for which springs from population growth in South East Queensland;
- (d) taking advantage of the potential to develop a tourism industry focused on synergies between the natural and rural character of the Region, the western side of Lake Wivenhoe, the Brisbane Valley Rail Trail, the Brisbane Valley Highway and the towns of Toogoolawah and Esk (as illustrated in **Strategic Framework Map 7—Tourism Strategy**);
- (e) the need to protect the amenity of towns, small townships, rural residential and rural lifestyles areas, and tourism areas;
- (f) the capacity to accommodate high impact activities (rural and recreational) that will seek a location in Somerset Region;
- (g) balancing the protection of the primary role of Lake Somerset, Lake Wivenhoe and the Upper and Mid-Brisbane River as the major drinking water supply catchment for South East Queensland with the promotion of sustainable economic development opportunities, including tourism and recreational development that leverages off these natural assets but is respectful of their primary role as a drinking water supply;
- (h) the desirability of optimising the growth of local employment; and
- (i) the potential in the long term to create a more sustainable urban settlement pattern, including feasible public transport and more local employment opportunities, through the urbanisation of Glamorgan Vale and the desire to plan for that in the short to medium term.

The achievement of a more sustainable urban settlement pattern focussed around the five towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah and, in the longer-term, Glamorgan Vale, also provides a prudent response to the risks posed to Somerset Region by climate change by:

- (a) consolidating future population growth in locations with good access to the range of local employment and services provided in the towns, thus assisting in the achievement of an element of self-containment, particularly as Glamorgan Vale comes online, and reducing the community's carbon footprint in a 'carbon constrained economy';
- (b) reducing exposure to natural hazards (i.e. bushfire, flood and landslide) prevalent in the regional landscape which are predicted to increase in number and severity; and
- (c) maximising opportunities for primary production and food security in the context of more hostile climatic conditions which threaten rural productivity.

The planning scheme provides a framework for sustainable growth management.

3.2.5 Strategic intent for 2031

In 2031, the population of Somerset Region has grown by about 50% to nearly 35,000, with most of the additional population concentrated into compact urban expansions of the towns of Fernvale, Lowood and Kilcoy. The other towns of Esk and Toogoolawah have also grown, but to a lesser extent.

Together, these five towns are the centres for the delivery of services to residents and visitors.

Each of the five towns contains a range of facilities commensurate with the role it plays for a surrounding population, including shopping, education, health and other community services. The historical character of each of these towns remains evident, based first upon its traditional main street and adjoining town centre environment. Notable features of the natural and rural settings and the original layout of the town centre are obvious to those using the centre and the urban environmental quality of each is distinctive, vital and of a high standard; because of this, visiting these town centres is an enjoyable and satisfying experience for people who live in Somerset Region.

While many residents find work locally, mostly in the towns but also in rural enterprises, a large proportion commute to work outside the region, especially residents of the southern towns who are closest to the employment centres of Ipswich and Brisbane. Some are able to rely on improved public transport to travel to work. Planning is underway for a major new urban area at Glamorgan Vale, which will support a more sustainable urban development pattern in the future, joining up the southern urban areas of Somerset with those of Ipswich in an urban corridor that will enable the viable provision of better public transport to work, higher education opportunities and other social infrastructure. Already new employment areas are being developed in the Glamorgan Vale area relying upon superior accessibility to the Warrego Highway and Brisbane Valley Highway.

Otherwise, additional employment has been developed in well-separated industrial areas in each of the towns and in a number of new rural processing industries that have been suitably located in rural parts of the Region.

In 2031, a range of affordable housing has been provided in the towns to respond to the diverse requirements of the Somerset community, including those of an ageing population.

Somerset Region also provides rural residential lifestyle opportunities in various settlements in the southern part of the Region and around Kilcoy. The settlement pattern in these localities has consolidated and matured with further investment in the housing stock and properties. People living in these areas generally obtain services in the nearest of the towns, but in some cases in one of the region's small townships, namely Coominya, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa, which also contribute to housing and lifestyle choice.

Fernvale is the largest town in the southern Somerset Region and Lower Brisbane Valley and its town centre offers the broadest mix of facilities and services, including the highest order of shopping in the region. Nearby, Lowood also provides a range of local services for its growing population. Esk is the district centre of the middle Brisbane Valley and administrative centre for Somerset Region. Toogoolawah provides a mix of local services for the population of the surrounding area. Kilcoy is the district centre of the Upper Brisbane Valley and D'Aguilar Highway corridor.

Within the towns, residents enjoy improved amenity and safety, with facilities having been developed that provide greater opportunities for local recreation, walking and cycling.

Overall, the community and settlement pattern is resilient in the face of flooding, bushfire and landslide and associated increased risks and severity forecast from climate change.

Outside the towns, over 99%¹ of the region is excluded from urban development and is reserved for open space, rural production, natural resources and/or environmental conservation; this has strengthened the Region's natural and rural character. In a period when the population of SEQ has increased to about 4.5 million, these qualities are increasingly valued and Somerset Region is recognised as offering a welcome respite from the more intensive urban qualities of areas closer to the centre of the metropolitan area. Lakes Wivenhoe and Somerset, their catchment protection areas, the natural areas of the D'Aguilar Ranges and other scenic attractions, have promoted the role of Somerset as a venue for recreation and tourism.

The area generally west of Lake Wivenhoe, centred on the Brisbane Valley Highway towns of Esk and Toogoolawah, has emerged as a focus for tourism with accommodation and activities strung along the Brisbane Valley Rail Trail. Toogoolawah is a centre for grey nomads tourism based on the facilities

¹Excluding the Glamorgan Vale Urban Investigation Area.

and local attractions provided. Resort accommodation of various kinds and water-based recreation activities have been developed and expanded in the western interface area of Lake Wivenhoe, subject to the highest standards of environmental performance. Likewise the areas on the western edge of Lake Somerset are also centres for water-based recreation and tourism.

The open space and scenic values comprised in various types of reserve, notably those of Lakes Wivenhoe and Somerset and forested mountainsides, have been protected and provide a backdrop and setting for recreation, tourism and a distinctive rural lifestyle; in particular, the visual and ecological qualities of natural and rural areas visible from major transport routes and tourism focus areas have been protected. The contribution that the waterways, wetlands and forests of Somerset Region make towards the biodiversity of SEQ and the clean water quality of streams that feed important SEQ water supply resources has been protected and consolidated. The sustainable use of the natural resources is acknowledged as providing one of the foundations for the economic prosperity of Somerset Region. The attractive green environmental values of Somerset Region have been enhanced in parts by new agricultural enterprises including carbon forestry and this adds to its appeal to visitors and new residents.

The extensive area of Somerset Region also provides many opportunities for higher impact rural and recreational activities to be accommodated, without adversely affecting established populations in towns, small townships and protected settlement areas and the regionally significant drinking water storages.

While the importance of protecting the amenity of human settlement areas and tourism areas is well understood, the further evolution of sustainable economic activity in rural areas, the historical economic foundation of Somerset Region and the essence of its character, is encouraged to occur without undue interference or over-regulation.

3.3 Settlement pattern

3.3.1 Strategic outcomes

- (1) Somerset Region is widely recognised and appreciated as an alternative natural/rural based destination to the burgeoning South East Queensland metropolitan area;
- (2) Urban growth and development is directed towards the compact urban expansion of the five towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah, in order to:
 - (a) promote the efficient provision of infrastructure and services;
 - (b) realise the intended role and function of town centres in the Somerset Region town centres network;
 - (c) protect environmental, landscape and scenic amenity values and the productive rural activities and use of natural resources prevalent in rural areas; and
 - (d) minimise the risks to life and property from natural hazards;
- (3) The majority of urban growth is accommodated by the urban expansion of the towns of Fernvale and Lowood located in the south of Somerset Region, with comparatively lesser urban growth opportunities provided in Kilcoy and limited growth opportunities provided in Esk and Toogoolawah;
- (4) The towns of Somerset Region provide adequate supplies of urban land for development to the year 2031;
- (5) Urban growth within the greenfield areas of the towns and infill development within established town areas contributes to the achievement of a compact urban form that can be efficiently serviced by a range of urban infrastructure, including road and active transport networks;
- (6) Affordable living opportunities are facilitated through the provision of housing, lifestyle and transport choice in compact towns focussed on the employment opportunities, infrastructure and services provided in the Somerset Region town centres and industrial development areas;
- (7) The Somerset Region town centres network is the focus for the location of appropriate business, centre, community, tourism, accommodation and recreation activities around the historic main streets of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah;
- (8) Industry activities provide employment opportunities in industrial development areas located in each town and operate without land use conflict with sensitive land uses;
- (9) A network of nine small townships spread throughout Somerset Region have experienced little change through development and continue to provide limited infrastructure, facilities and services to their immediate rural surrounds;
- (10) The Minden North rural residential area provides an alternative housing and lifestyle choice with very limited access to local infrastructure, facilities and services;
- (11) Land use conflicts are minimised through the appropriate separation of incompatible activities, including industrial and rural-based high impact activities that conflict with sensitive land uses and strategic tourism development areas that leverage off the natural and rural qualities of Somerset Region;
- (12) The Glamorgan Vale Urban Investigation Area may provide a longer-term urban development opportunity post-2031 and is protected from development that compromises this opportunity; and
- (13) The settlement pattern responds to the adverse impacts of natural hazards, including flooding, bushfire and landslide, and their forecast increase in frequency and severity as a result of climate change and achieves increased community resilience in the face of these impacts.

3.3.2 Element— Urban growth management

The orderly urban expansion of the five towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah provide the focus for future urban growth in the region.

The proportion of total regional urban growth to be accommodated by each town is a function of the size of its *urban area*.

Fernvale and Lowood offer the greatest urban growth opportunities, given their generous urban areas relative to the existing development footprint of these two towns. Kilcoy offers significant urban growth opportunities in the north of Somerset Region. Esk and Toogoolawah have comparatively restrictive urban areas relative to the existing development footprint of these two towns and will therefore provide for fewer urban growth opportunities.

3.3.2.1 Specific outcomes

- (a) Urban growth is concentrated mostly in the orderly urban expansion of the towns of Fernvale, Lowood and Kilcoy and to a lesser extent, Esk and Toogoolawah identified on **Strategic Framework Map 1—Settlement Pattern**;
- (b) The small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa identified on **Strategic Framework Map 1—Settlement Pattern** provide very limited urban growth opportunities;
- (c) The physical extent of urban development in the towns is limited so as to:
 - (i) promote the efficient provision of urban infrastructure and services provided in these towns;
 - (ii) realise the role and function of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah town centres in the Somerset Region town centres network;
 - (iii) protect the environmental, landscape and scenic amenity values of the regional landscape;
 - (iv) protect productive natural resources such as agricultural land and protect the operation of rural activities from land use conflict; and
 - (v) minimise the risks to life and property from natural hazards, including flood, bushfire and landslide, and the forecast increase in frequency and severity of natural hazards arising from climate change.
- (d) The Emerging Community Areas, identified on **Strategic Framework Maps 1d, 1e, 1f, 1g and 1h – Desired Settlement Pattern: Emerging Community Areas** that indicate the preferred future urban settlement pattern, are protected from premature development that may negatively impact on the ability to utilise the area for preferred development in the future.

3.3.2.2 Land Use Outcomes

- (a) Development for urban purposes within the Emerging Community Areas identified on the **Strategic Framework Maps 1d, 1e, 1f, 1g and 1h – Desired Settlement Pattern: Emerging Community Areas** must not occur until such time as the development is supported by detailed land use investigations that demonstrate:
 - (i) need for additional urban land for the purpose specified on the **Strategic Framework Maps 1d, 1e, 1f, 1g and 1h – Desired Settlement Pattern: Emerging Community Areas**, being Future Residential, Future Park Residential, Future Industry or Future Community;
 - (ii) compatibility of the proposed use with the intent for the land specified on the **Strategic Framework Maps 1d, 1e, 1f, 1g and 1h – Desired Settlement Pattern: Emerging Community Areas**;
 - (iii) satisfactorily addresses all potential constraints where in a Constrained Area identified on the **Strategic Framework Maps 1d, 1e, 1f, 1g and 1h – Desired Settlement Pattern: Emerging Community Areas**;
 - (iv) mitigation or avoidance of all applicable natural hazards;

- (v) suitable mitigation or offset arrangements in respect to impacts on matters of state environmental significance;
- (vi) infrastructure servicing arrangement and sequencing.

3.3.3 Element— Compact urban form

Development within the towns of Somerset Region achieves a compact urban form. The compact urban promotes the efficient use of urban infrastructure and services, promotes the use of residential areas for housing choice and diversity, and promotes employment opportunities in town centres and industrial areas.

3.3.3.1 Specific outcomes

- (a) The towns of Somerset Region are developed in an appropriate fashion that:
 - (i) maximises the efficient and timely use of designated urban land and infrastructure;
 - (ii) assists in the achievement of dwelling targets set for Somerset Region by the SEQ Regional Plan;
 - (iii) assists in the achievement of housing choice and affordability through the provision of a mix of accommodation activities that are responsive to the diverse needs of the community;
 - (iv) delivers a transport network that effectively and efficiently connects residential areas with town centres and industrial development areas; and
 - (v) promotes active transport as a viable alternative travel mode to the private motor vehicle;
- (b) The towns of Fernvale and Lowood are sufficiently consolidated to support the possible future provision of a viable public transport service to Ipswich City and the greater Brisbane metropolitan area, including via a possible future *urban area* at Glamorgan Vale;
- (c) Higher density residential development provides housing choice within and adjacent to the town centres of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah;
- (d) Further park residential development in the towns of Esk, Fernvale, Lowood and Kilcoy is limited to land located away from town centres which is relatively more constrained and less suitable for intensive urban development;
- (e) Non-resident and other temporary worker accommodation, including those developments that service the resources sector, is focussed in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah which provide the necessary urban infrastructure and service networks to support such development; and
- (f) Urban development is sequenced so as to achieve a logical and orderly expansion of the towns in a manner that provides for the efficient extension of infrastructure networks in accordance with **Part 4—Priority Infrastructure Plan**.

3.3.4 Element— Affordable living

The concept of affordable living takes a broader view of cost-of-living beyond the cost of housing itself to also consider operational and transport costs.

Affordable living opportunities are best achieved in a compact urban form that is supported by a multi-modal transport network. The delivery of housing and lifestyle choices that are responsive to individual needs and located close to the employment, facilities and services provided in town centres and industrial development areas enables transport choice and assists in the management of living costs.

3.3.4.1 Specific Outcomes

- (a) Housing and lifestyle choice is delivered in the towns through greenfield development and infill development in established town areas that provide:
 - (i) a mix of accommodation activities, including, but not limited to, dwelling houses, dual occupancies and multiple dwellings;

- (ii) dual occupancies and multiple dwellings close to the infrastructure and services provided in town centres;
 - (iii) dwelling houses on a variety of lot sizes from smaller lot housing to park residential development on larger lots in a semi-rural setting;
- (b) The design of residential neighbourhoods in greenfield town areas:
 - (i) promotes accessibility to the local town centre and industrial development areas via active transport; and
 - (ii) incorporates Crime Prevention through Environmental Design ('CPTED') principles that promote healthy and safe communities.

3.3.5 Element— Town centres network

The Esk, Fernvale, Kilcoy, Lowood and Toogoolawah town centres collectively form the Somerset Region town centres network that provide the focus for business transactions and community life in the region.

3.3.5.1 Specific outcomes

- (a) The Somerset Region town centres network identified on **Strategic Framework Map 1—Settlement Pattern** provides the focus for the location of business, centre, community and recreation activities across the region;
- (b) Town centres are focussed on the following historic main streets and offer a diverse mix of business, centre, community and recreation activities in a pedestrian-oriented environment:
 - (i) Esk district centre—Brisbane Valley Highway;
 - (ii) Fernvale district centre—Brisbane Valley Highway;
 - (iii) Kilcoy district centre—William Street, Mary Street and Hope Street;
 - (iv) Lowood local centre—Main Street and Railway Street;
 - (v) Toogoolawah local centre—Cressbrook Street;
- (c) The role and function of the Somerset Region town centres network is maintained through the direction of appropriate development in-centre and the achievement of the specific outcomes detailed further in **section 3.7.2—Element— Town centres network**.

3.3.6 Element— Industry development

Opportunities for industrial development are provided for in each town of Somerset Region and operate with minimal land use conflict with sensitive land uses.

The development of industry activities in the Glamorgan Vale Urban Investigation Area provides a possible medium-long term industrial land supply in the southern part of Somerset Region.

3.3.6.1 Specific outcomes

- (a) Industry activities, including business activities that are ancillary to an industry activity, are located in the Industrial Development Areas of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah identified on **Strategic Framework Map 4—Economic Development and Natural Resources**;
- (b) The location of industry activities is appropriately separated from sensitive land uses to protect the health, wellbeing, amenity and safety of the community and individuals from the impacts of air, noise and odour emissions, and hazardous materials;
- (c) High impact industry located to the east of the Kilcoy *urban area* is restricted to the High impact industry zone so as to prevent expansion in a westerly direction that has the potential to generate land use conflict with sensitive land uses in the town;
- (d) The operation of medium impact industry and high impact industry are protected from encroachment by sensitive land uses, where not ancillary to the industrial use of a site;
- (e) Industry development minimises off-site impacts on nearby sensitive land uses through best practice environmental performance and design;

- (f) Industry development is appropriately located and operated to avoid adverse impacts on the water quality of the major drinking water storages of Lake Somerset and Lake Wivenhoe and the Upper and Mid-Brisbane River and their tributaries;
- (g) Industry development areas are not provided for in the small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa identified on **Strategic Framework Map 1—Settlement Pattern**, however these small townships may accommodate low impact industry and service industry that:
 - (i) solely meets the needs of the small township and its surrounding rural district; and
 - (ii) is of a limited scale that is consistent with expectations for residential amenity and character in the small township;
- (h) In the medium to long-term, additional industry activities are developed in an orderly manner:
 - (i) south of Fernvale in the possible future industrial development areas identified on **Strategic Framework Map 4—Economic Development and Natural Resources**, which are likely to take the form of a new industrial area developed adjacent to the Brisbane Valley Highway in conjunction with planning for the Glamorgan Vale Urban Investigation Area; and
 - (ii) east of Kilcoy in the possible future industrial development area identified on **Strategic Framework Map 4—Economic Development and Natural Resources**.

3.3.7 Element— Small townships

The small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa identified on **Strategic Framework Map 1—Settlement Pattern** are located on major roads in rural areas of Somerset Region.

Given the direction of future urban growth to the five towns, the region's small townships will experience little development pressure and/or change and planning strategies for these places will seek to generally maintain the existing development setting.

3.3.7.1 Specific outcomes

- (a) Small townships generally provide dwelling houses as the dominant accommodation activity;
- (b) Small townships provide limited access to local employment opportunities, infrastructure and services, which generally cater to their immediate local population and the surrounding rural district;
- (c) Towns continue to provide for most employment opportunities and goods and service needs for residents of small townships;
- (d) The expansion of a small township beyond its established footprint is limited to circumstances where a new service is provided in the small township that was not previously offered. The expansion of a small township is logical, orderly and consistent with the specific outcomes expressed in **section 3.3.2—Element— Urban growth management**.



3.3.8 Element— Rural residential areas

The Minden North rural residential area identified on **Strategic Framework Map 1—Settlement Pattern** provides the only rural residential living opportunity in Somerset Region.

3.3.8.1 Specific outcomes

- (a) Rural residential areas offer a distinct housing and lifestyle choice, that is, very low density residential development via dwelling houses on small rural lots in a natural and/or rural setting; and
- (b) Rural residential areas provide very limited access to local employment opportunities, infrastructure and services, which necessitates travel by residents to nearby towns and/or small townships to meet employment and goods and service needs.

3.3.9 Element— Long-term urban growth

The Glamorgan Vale Urban Investigation Area provides a possible longer-term urban land supply that is protected from inappropriate interim development that compromises its ultimate urban development opportunity.

3.3.9.1 Specific outcomes

- (a) The urban areas identified on **Strategic Framework Map 1—Settlement Pattern** for the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah provide an adequate supply of urban land to meet forecast demand to 2031;
- (b) The Glamorgan Vale Urban Investigation Area identified on **Strategic Framework Map 1—Settlement Pattern** provides a possible urban land supply to be developed post-2031 that is protected from inappropriate interim development that:
 - (i) creates the potential for future land use conflict between rural activities and future urban development, or
 - (ii) compromises long-term consolidated urban growth;
- (c) The realisation of the Glamorgan Vale Urban Investigation Area Notional Development Scenario identified on **Strategic Framework Map 1i—Glamorgan Vale Urban Investigation Area Notional Development Scenario** and other alternative and feasible development options are not compromised by inappropriate interim development;
- (d) Transport infrastructure planning, including the following projects relevant to the Glamorgan Vale Urban Investigation Area in the short-medium term, has regard to the potential realisation of the Notional Development Scenario and other alternative and feasible development options:

- (i) proposed Warrego Highway/Western Ipswich Bypass interchange; and
- (ii) possible future Brisbane Valley Highway interchanges; and
- (iii) public transport planning; and
- (e) The Possible Future Industrial Development Areas identified on **Strategic Framework Map 1i—Glamorgan Vale Urban Investigation Area Notional Development Scenario** may be favourably considered ahead of comprehensive planning for the area;

3.3.9.2 Land use strategies

- (a) Urban development does not occur in the Glamorgan Vale Urban Investigation Area identified on **Strategic Framework Map 1—Settlement Pattern** until:
 - (i) the subject land is included in the urban footprint regional land use category of the SEQ Regional Plan in force at the time urban development is proposed to occur; and
 - (ii) detailed analyses have identified that the land is suitable for and able to accommodate development having regard to physical constraints and efficient servicing with urban infrastructure.

3.3.10 Element— High impact activities

Towns, small townships, rural residential areas and other substantial settlements of established small rural lifestyle lots, together with major drinking water storages, strategic tourism and recreation focus areas and long-term urban growth opportunities in Somerset Region are protected from the impacts of *high impact activities*.

3.3.10.1 Specific outcomes

- (a) The location of *high impact activities* in Somerset Region:
 - (i) provides a reasonable level of amenity protection for towns, small townships, rural residential areas and other substantial settlements of established small rural lifestyle lots;
 - (ii) protects the amenity of the Principal Future Strategic Tourism Focus Area and the Lake Somerset Water-based Recreation Focus Area in order to promote tourism and recreation development opportunities in these two focus areas;
 - (iii) protects the long-term urban growth opportunities provided by the Glamorgan Vale Urban Investigation Area;
 - (iv) has no adverse impact on water quality in the catchments of the major drinking water storages of Lake Somerset, Lake Wivenhoe and the Mid-Brisbane River below Wivenhoe Dam;
 - (v) does not worsen the opportunity for rural activities to be undertaken on adjoining premises by way of impacts arising from the operation of the *high impact activity*.
- (b) *High impact activities* are appropriately located and managed to protect the health, well being, amenity, safety and environmental health of communities and individuals from the impacts of air, noise and odour emissions and from the impacts of hazardous materials;

3.3.10.2 Land use strategies

- (a) The effects of *high impact activities* are designed to minimise the impact on adjacent and surrounding sensitive land uses. This may have the effect of restricting larger-scale *high impact activities* to very large sites. Smaller-scale *high impact activities* may form part of rural diversification where appropriately located and managed, and where detailed analysis confirms that the site is suitable for the use in terms of access, ecological impacts, landscape character, and effective buffering from sensitive uses;
- (b) The development of new dwellings in rural areas is controlled to ensure that separation distances and buffers around *high impact activities* are not compromised.

3.3.11 Element— Flooding

The towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah are subject to varying degrees of flood hazard and risk.

The risk to life and property from flooding is minimised through the avoidance of development on land subject to the defined flood event or the incorporation of appropriate mitigation measures where development demonstrates exceptional circumstances.

3.3.11.1 Specific outcomes

- (a) Areas prone to flooding in the defined flood event are identified in **Part 8—Overlays**;
- (b) The risk of loss of life and property due to flood hazards, including that associated with a greater frequency of extreme weather events and increased rainfall intensities as a result of climate change, is minimised;
- (c) The flood storage and conveyance capacity of floodplains are protected from earthworks that:
 - (i) significantly alter natural drainage patterns; and
 - (ii) worsen existing flooding conditions;
- (d) Land subject to inundation during the defined flood event is protected from increased residential development and other sensitive land uses that require a high level of flood protection except in the following circumstances and only where the impacts of flooding on the development can be mitigated such that there is no foreseeable risk to life or property:
 - (i) the development is for a dwelling house and/or associated structure on a lot registered prior to the commencement of the planning scheme; or
 - (ii) the development is on land that is already committed to urban or rural residential development by an development approval granted prior to the commencement of the planning scheme; or
 - (iii) the development is redevelopment of land that is already used for an urban purpose and the redevelopment is consistent with the intent of the applicable zone in terms of nature, scale and intensity of development; or
 - (iv) an overriding community need in the public interest has been demonstrated that warrants approval of the development despite its occurrence within an area subject to flooding; or
 - (v) the development is for infrastructure identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure**;
- (e) *Vulnerable uses* and transport access are located and designed to remain functional during the defined flood event; and
- (f) The flood mitigation capacity of Wivenhoe Dam is protected by the appropriate location and / or setbacks of major sediment generating activities within the catchment, which may otherwise reduce its capacity to do so.

3.3.11.2 Land use strategies

- (a) Further studies to identify the nature and extent of the flood hazard affecting the Somerset Region will be undertaken, particularly in response to the key recommendations of the *Queensland Floods Commission of Inquiry Final Report* released in March 2012. Further planning evaluations to identify the level of flood risk and the possible land use responses to these hazards will be undertaken.

3.3.12 Element— Bushfire

Areas located in a Bushfire Hazard Area in Somerset Region are identified in **Part 8—Overlays** and are generally located in forested areas of the region away from the central alluvial plains.

The risk to life and property from bushfire is minimised through the avoidance of development in higher-risk locations and/or appropriate mitigation measures.

3.3.12.1 Specific outcomes

- (a) The risk of loss of life and property due to bushfires is minimised through:
 - (i) the appropriate use of land having regard to its level of bushfire hazard; and
 - (ii) the incorporation of appropriate siting and design measures that mitigate bushfire risks;
- (b) Sensitive land uses which require a high level of immunity from natural hazards avoid locating in areas of high bushfire hazard;
- (c) Community infrastructure is located and designed to maintain the necessary level of functionality to support affected persons during and immediately after a bushfire event.
- (d) The location and design of development and land use:
 - (i) supports, and does not unduly burden, disaster management response or recovery capacity and capabilities;
 - (ii) directly, indirectly and cumulatively avoids an increase in the severity of bushfire hazard and the potential for damage on the site or to other properties;
 - (iii) maintains or enhances natural processes and the protective function of landforms and vegetation that can mitigate risks associated with bushfire hazard;

3.3.13 Element— Landslide

Areas of landslide risk in Somerset Region are identified in **Part 8—Overlays**.

The risk to life and property from landslide is minimised through the avoidance of development in higher-risk locations and/or appropriate mitigation measures.

3.3.13.1 Specific outcomes

- (a) The risk of loss of life and property due to landslide is minimised through:-
 - (i) the appropriate use of land having regard to its level of landslide hazard; and
 - (ii) the incorporation of appropriate siting and design measures that mitigate landslide risks.

3.3.14 Element— Climate change

The settlement pattern and the economy of Somerset Region are robust in the face of future climate change.

3.3.14.1 Specific outcomes

- (a) Urban development is restricted to within the *Urban Area* and the Glamorgan Vale Urban Investigation Area identified on **Strategic Framework Map 1—Settlement Pattern**;
- (b) The design and location of development in urban areas protect against the anticipated impacts of climate change on quality of life and property;
- (c) Agricultural land is protected from fragmentation, encroachment and diminished productivity by incompatible development;
- (d) Renewable energy generation appropriate for its location in the rural landscape provides local economic benefit and minimises dependence on fossil fuels.



3.4 Natural environment

3.4.1 Strategic outcomes

- (1) In 2031, the natural environment of Somerset Region has increased its significant contribution to the natural environmental values of the greater South East Queensland region in terms of both extent and quality;
- (2) The various terrestrial and aquatic features of the natural environment of Somerset Region are recognised and protected, including, but not limited to the following features distinctive to the region:
 - (a) The D'Aguilar, Brisbane and Blackbutt mountain ranges;
 - (b) The D'Aguilar and Conondale National Parks;
 - (c) The Stanley River, its tributaries and Lake Somerset;
 - (d) The Upper Brisbane River, its tributaries and Lake Wivenhoe;
 - (e) Lake Cressbrook;
 - (f) Lake Atkinson; and
 - (g) The Mid Brisbane River below Lake Wivenhoe and its tributaries, including Lockyer Creek;
- (3) The diverse ecological communities of Somerset Region are retained for future generations (ecological communities range from Eucalypt forest and woodlands to vine thicket, gallery rainforests, brigalow and swamps that support a diversity of native flora and fauna of Commonwealth, State and regional significance);
- (4) Waterways and wetlands are protected as natural features in the landscape, and their contribution to local and regional biodiversity and water quality values is enhanced;
- (5) The biodiversity, waterway and *wetland* elements of the natural environment of Somerset Region are linked via a network of biodiversity corridors to provide for species fitness and resilience in allowing for the movement of flora and fauna across the landscape and longer-term shifts in response to climate change;
- (6) The air and noise environment of Somerset Region is maintained at a high quality consistent with the natural/rural lifestyle offering of the region;
- (7) The biosecurity of Somerset Region is improved through management actions that prevent the establishment or spread of known or potential weed and pest species.

3.4.2 Element— Biodiversity network

The biodiversity network of Somerset Region is protected and enhanced. The biodiversity network is fundamental to the natural image of Somerset Region.

3.4.2.1 Specific outcomes

- (a) The areas of ecological significance identified on **Strategic Framework Map 2—Natural Environment** are protected (including significant vegetation (remnant, regrowth and other vegetation of local significance), waterways and wetlands);
- (b) Areas of ecological significance are protected from the adverse impacts of development unless the proposal:
 - (i) is a significant community project and/or for an infrastructure item identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure**; or
 - (ii) is for a small-scale, low-impact, nature-oriented tourism activity; or
 - (iii) avoids, mitigates or offsets the impacts of the development on the area of ecological significance;
- b) Areas of ecological significance located adjacent to a development proposal are protected, mitigated or offset through appropriate measures that minimise impacts on the area of ecological

significance, including setbacks to the area, fencing and supplementary planting, as deemed reasonable and relevant to the proposal; and

- c) The integrity of the biodiversity corridors identified on **Strategic Framework Map 2—Natural Environment** are maintained or enhanced through the minimisation of development footprint and strategic rehabilitation works.

3.4.3 Element— Watercourses and wetlands

The watercourses and wetlands of Somerset Region are integral to its natural image and the maintenance of healthy waters, biodiversity, scenic amenity and recreational outcomes are protected.

3.4.3.1 Specific outcomes

- a) The waterways and wetlands of Somerset Region identified on **Strategic Framework Map 2 – Natural Environment** are protected and enhanced;
- b) Waterways and wetlands are protected from the adverse impacts of development unless the proposal:
 - (i) Is a significant community project and/or for an infrastructure item identified on **Strategic Framework Map 5 – Access, Mobility and Infrastructure**; or
 - (ii) Is for small scale, low-impact, nature-oriented tourism activities; or
 - (iii) Avoids, mitigates or offsets the impacts of the development on the waterway and/or wetland;
- c) Waterways and wetlands located adjacent to a development proposal are protected, mitigated or offset through appropriate measures that minimise impacts on the waterway and/or wetland, including setbacks to the waterway and/or wetland, fencing and supplementary planting, as deemed reasonable and relevant to the proposal; and
- d) Industry standard best practice water quality management principles are incorporated in development proposals in the region's towns and small townships.



3.4.4 Element— Air and noise environment

The air and noise environment of Somerset Region is maintained at a high quality consistent with the natural/rural values of the region, the protection of the amenity enjoyed by *sensitive land uses*, and the natural environment more generally.

3.4.4.1 Specific outcomes

- (a) Air, noise and odour emissions from development and their impacts on community health and wellbeing and the natural environment are minimised through appropriate design, siting, construction and operation;
- (b) High impact activities that are likely to generate noise or air emissions avoid unacceptable environmental and amenity impacts through appropriate separation from towns or urban areas, small townships, rural residential areas and other settlements of established small rural lifestyle lots, Regional Water Storages, the Principal Future Strategic Tourism Focus Areas, the Lake Somerset Water-based Recreation Focus Areas and the Glamorgan Vale Urban Investigation Areas; and
- (c) High impact industry is located, designed, constructed and operated to avoid or minimise air, odour and noise emissions and any potential impacts on *sensitive land uses*.

3.4.5 Element— Contaminated land

The health and wellbeing of the Somerset Region community is protected from the impacts of contaminated land arising from historic and future land use.

3.4.5.1 Specific outcomes

- (a) The potential impacts of hazardous and harmful materials used in industrial, rural or other activities are avoided or appropriately mitigated;
- (b) Development that has the potential to release contaminants into the landscape incorporates appropriate mitigation strategies; and
- (c) *Sensitive land uses* are not located on contaminated land, unless the land is remediated to a degree that is acceptable for community health and wellbeing.

3.5 Natural resources

3.5.1 Strategic outcomes

- (1) In 2031, Somerset Region has retained its diverse natural resource base, including:
 - (a) agricultural land located across the alluvial plains of the Brisbane Valley and Lockyer Creek catchments and adjacent to other waterways of the region;
 - (b) extractive resources providing a variety of construction materials for development locally and across South East Queensland;
 - (c) identified mining tenements;
 - (d) native and plantation forestry resources; and
 - (e) potable water resources in Lake Somerset, Lake Wivenhoe, Lake Cressbrook and the Mid-Brisbane River that supply the residents of South East Queensland;
- (2) The receiving waters of Lake Somerset, Lake Wivenhoe and the Mid-Brisbane River below Wivenhoe Dam, which together provide the major drinking water supply catchment for South East Queensland, are protected and enhanced;
- (3) The sustainable development of natural resources provides ongoing economic benefits for the region;
- (4) Natural resources are protected from inappropriate development that creates land use conflict and diminishes the productive potential or quality of the resource; and
- (5) Natural resource extraction is managed to minimise external impacts on amenity and environmental values.

3.5.2 Element— Agricultural land

Agricultural land is located across the alluvial plains of the Brisbane Valley and Lockyer Creek catchments and adjacent to other waterways of Somerset Region. Agricultural land is protected from inappropriate development that compromises the ongoing and sustainable use of the resource.

3.5.2.1 Specific outcomes

- (a) Agricultural land identified on **Strategic Framework Map 4—Economic Development and Natural Resources** is protected for sustainable agricultural uses, through avoidance from fragmentation, alienation and/or use for non-agricultural development unless there is an overriding need for the proposal and it cannot be located on an alternative site; and
- (b) Sensitive land uses that have the potential to generate land use conflict with the current or future use of agricultural land identified on **Strategic Framework Map 4—Economic Development and Natural Resources** for agricultural purposes are appropriately separated from that land.

3.5.2.2 Land use strategies

- (a) Appropriate separation distances and buffering measures are provided to strategic agricultural land identified on **Strategic Framework Map 4—Economic Development and Natural Resources** to minimise land use conflict.

3.5.3 Element— Extractive resources

Key resource areas are extractive resources of State or regional significance while local resource areas are extractive resources of local significance.

The Banff Terrace, Dingyarra, Glen Arden, Harris Terrace, Schmidt's Terrace, Hills Terrace, Wiralee and Summerville key resource areas provide a long-term supply of sand and gravel resources for the construction industries in Somerset Region and adjoining local government areas.

The Horse Mountain key resource area provides a significant hard rock resource in the region.

Key/local resource areas, their separation areas and transport routes are protected from land use conflict that compromises current and future extraction of the resource.

3.5.3.1 Specific outcomes

- (a) Key/local resource areas identified on **Strategic Framework Map 4—Economic Development and Natural Resources** are protected from development that might prevent or severely constrain current or future extraction when the need for the resource and its processing and transportation arises;
- (b) Extractive industry is located in the resource/processing area, or, alternatively, may be located in the separation area where the function of the separation area in effectively managing environmental impacts on sensitive land uses located external to the key resource area is not compromised;
- (c) Separation areas for the resource/processing areas are protected from the location of additional sensitive land uses that have the potential to generate land use conflict;
- (d) The safe and efficient operation of transport routes are protected from the location of additional sensitive land uses that have the potential to generate land use conflict; and
- (e) Extractive industry is appropriately managed to avoid adverse impacts on the water quality of the major drinking water storages of Lake Somerset, Lake Wivenhoe and the Upper and Mid-Brisbane River and their tributaries.

3.5.4 Element— Mining tenements

Mining tenements in Somerset Region identified on **Strategic Framework Map 4—Economic Development and Natural Resources** include mining leases and are protected from land use conflict.

3.5.4.1 Specific outcomes

- (a) Mining tenements are protected from land use conflict by the consolidation of development predominantly within the towns, and, to a lesser extent, small townships, rural residential areas and other settlements of established small rural lifestyle lots and remain available for sustainable use;²
- (b) Sensitive land uses that have the potential to generate land use conflict with a mining tenement are appropriately separated from the mineral, coal, petroleum and gas resource.

3.5.5 Element— Forestry

Forestry forms a major part of the rural landscape of Somerset Region, particularly in northern parts of the region. Forestry activities are protected from land use conflict, observe sustainable practices and operate in a manner that is compatible with other rural activities.

3.5.5.1 Specific outcomes

- (a) The ongoing productive use of the State Forests identified on **Strategic Framework Map 4—Economic Development and Natural Resources** and other native and plantation forests is protected and supported by ancillary uses as necessary;
- (b) Off-site impacts from forestry enterprises are minimised, having regard to:
 - (i) adjoining land uses;
 - (ii) areas of environmental significance;
 - (iii) local infrastructure networks; and
 - (iv) bushfire risk.

² The *Sustainable Planning Act 2009* does not apply to development authorised under the *Mineral Resources Act 1989*.

3.5.6 Element— Potable water resources

Lake Somerset, Lake Wivenhoe, Lake Cressbrook and the Mid-Brisbane River below Wivenhoe Dam identified on **Strategic Framework Map 4—Economic Development and Natural Resources** are the major contributors to the drinking water supply of South East Queensland.

The catchments of these regionally significant water bodies and watercourses are protected for safe, secure and efficient water supply through responsible development that maintains environmental and water quality values.

Water Supply Buffer Areas to the major drinking water storages are identified on **Strategic Framework Map 6—Water Supply**.



3.5.6.1 Specific outcomes

- (a) The Lake Somerset, Lake Wivenhoe and Lake Cressbrook catchments and the Mid-Brisbane River below Wivenhoe Dam are protected from development that adversely affects water quality;
- (b) Development within the Water Supply Buffer Areas identified on **Strategic Framework Map 6—Water Quality** is undertaken in a manner that contributes to the maintenance and improvement, where possible, of water quality.
- (c) Development in the following sub-catchments present a higher risk of adverse impacts on water quality in drinking water catchments and will be required to incorporate increased setbacks and vegetation buffering:
 - (i) Brisbane River (Upper and Middle);
 - (ii) Buaraba Creek;
 - (iii) Cooyar Creek;
 - (iv) Cressbrook Creek;
 - (v) Emu Creek;
 - (vi) Kilcoy Creek;
 - (vii) Lake Somerset;
 - (viii) Lake Wivenhoe;
 - (ix) Lockyer Creek;

- (x) Monsildale Creek;
 - (xi) Sandy Creek; and
 - (xii) Sheep Station Creek;
- (d) Potential adverse impacts on the water quality are managed within property boundaries, having regard to the appropriate siting of development, retention of riparian vegetation and on-site wastewater treatment and stormwater management;
- (e) Water sensitive urban design principles are applied to the treatment of stormwater runoff in urban areas.

3.5.6.2 Land Use Outcomes

- (a) Low-impact development, including rural activities and nature-based tourism activities, may be appropriate within the rural parts of the Water Supply Buffer Areas to Lake Somerset and Lake Wivenhoe where it can be demonstrated that water quality values will be protected; and
- (b) Urban development is appropriate in the urban parts of the Water Supply Buffers Areas to Lake Somerset and Lake Wivenhoe where it can be demonstrated that water quality values will be maintained.

3.6 Community identity and regional landscape character

3.6.1 Strategic outcomes

- (1) The identity of the towns of Fernvale, Lowood, Esk, Kilcoy and Toogoolawah is strengthened through appropriate development outcomes that protect and enhance the unique elements that contribute to the understanding and identity of the town centres;
- (2) Somerset Region celebrates its indigenous and non-indigenous cultural heritage through the protection and sensitive treatment of heritage places and structures;
- (3) The provision of diverse social and community infrastructure and an open space, sport and recreation facilities network across the region contributes to the celebration of culture and history and a strengthened community identity and well-being;
- (4) The provision of community activities and infrastructure responds to community need and is maintained so that places for people to gather, meet and socially interact are accessible, comfortable and safe and promote active and healthy communities;
- (5) Somerset Region retains its distinctive and attractive natural landscape qualities, including, but not limited to:
 - (a) lakes and rivers set amongst rolling hills and forested mountains contributing to the region's iconic 'valley of the lakes' imagery, particularly in the middle and upper reaches of the Brisbane and Stanley Rivers;
 - (b) ranges and steep hills which form a scenic backdrop to lake and rural views in the southern part of the region; and
 - (c) scenic viewing experiences within forested hill and valley settings.



3.6.2 Element— Town identity

The historical character and identity of Fernvale, Lowood, Esk, Kilcoy and Toogoolawah remain evident in their town centres. Expansion of the range of facilities and services in each town centre does not diminish the historical character and identity of each town.

3.6.2.1 Specific outcomes

- (a) The dominance of natural landforms and open space in the Rural Area identified on **Strategic Framework Map 3A—Community Identity and Regional Landscape Character** and associated landscape and scenic amenity values identified on **Strategic Framework Map 3B – Community Identity and Regional Landscape Character**, which provide the setting for the towns and rural areas, are maintained; and
- (b) Elements of town character that provide the basis for the distinct identity of each town of Somerset Region such as the historical town layout and the presence of older buildings and other features that reflects town histories and character are complemented and strengthened by development.

3.6.3 Element— Town identity—Esk

Analysis of Important Factors

The image and identity of Esk is strongly associated with the experience that people have of the town in the commercial / institutional strip of the Brisbane Valley Highway, north from Sandy Creek as far as, say, Richard Street.

The town setting is dominated by the presence of Mount Glen Rock to the east. The presence of the Sandy Creek corridor through the town is also an important influence on the town's identity, especially in the area where the highway crosses it.

The Sandy Creek corridor, the spacious sites adjoining it at the entry to the town centre on both sides of the Brisbane Valley Highway, and the spaces associated with major open space uses including the former rail corridor (now the Brisbane Valley Rail Trail), are all important to the quality of the town image.

The role of Esk as a centre of administration and of the social and cultural life of the Region is also evident in this locality, contributing to a strong sense of place.

Guidelines for Future Development of Town Identity

Further development of commercial town facilities in the centre of Esk should retain the town centre's compact form, between Richard Street and Sandy Creek on the Brisbane Valley Highway.

Any redevelopment of sites on the Brisbane Valley Highway immediately to the north of Sandy Creek must maintain the spacious leafy character of this locality.

New development must be accompanied by improvements to the streetscape of the town centre, including footpaths and other pedestrian facilities.

Built form and land use within the town centre generates an active and pedestrian-oriented frontage to the Brisbane Valley Highway within the central area of the town. Car-oriented uses such as service stations are discouraged in this central area as they do not reinforce a coherent and active streetscape.

Map Reference: Strategic Framework Map 3C—Town Identity—Esk

3.6.3.1 Specific outcomes

- (a) Commercial town facilities, especially shops, offices and, to a lesser extent, community services are consolidated within the Centre zone of the *Esk Identity Focus* on **Strategic Framework Map 3C—Town Identity—Esk** to maintain the town centre's compact form;

- (b) Commercial and community activities which maintain a spacious character are encouraged in the *Esk Identity Focus* on **Strategic Framework Map 3C—Town Identity—Esk**, beyond the Centre zone, using the fabric of existing buildings where possible;
- (c) The spacious leafy character provided at the entry to the town centre located to the immediate north of the Sandy Creek corridor inside the *Esk Identity Focus* on **Strategic Framework Map 3C—Town Identity—Esk** is maintained;
- (d) Built form and land use generates an active and pedestrian-oriented frontage to the Brisbane Valley Highway particularly within the Centre zone identified on **Strategic Framework Map 3C—Town identity—Esk**. Car-oriented uses that do not reinforce a coherent and active streetscape, such as service stations, are discouraged in the Centre zone; and
- (e) Development of commercial or industrial facilities in the *Esk Image Management Area* on **Strategic Framework Map 3C—Town Identity—Esk** is not permitted; instead these areas maintain an open or residential character.

3.6.4 Element— Town identity—Fernvale

Analysis of Important Factors

The development along the Brisbane Valley Highway as it passes through Fernvale comprises the most significant element of the character of the town.

What seems now to be a very elongated pattern of development of town facilities finds its roots in the earliest development of the town, with the Fernvale State School site (1874) located on the highway about one kilometre north of the Fernvale railway station, which otherwise was the focus of the first settlement.

Whilst buildings from earlier times remain along this section of the highway, and add to its character, it is the linear pattern of development of town's central facilities which is distinctive and provides the most defining aspect of the town's character.

The primary school site at the junction with Forest Hill—Fernvale Road provides a suitable, strong northern endpoint to the centre. The southern edge of the central area is less well defined but in the future could be made more definite, in the general area to the south of the junction with Fairneyview Fernvale Road.

Guidelines for Future Development of Town Identity

The focus of attention to conserve and improve the town identity of Fernvale should be the section of the Brisbane Valley Highway frontage between commercial development near the junction of the Fairneyview Fernvale Road at the southern end, and Forest Hill—Fernvale Road at the northern end. This section of the Brisbane Valley Highway frontage contains the great majority of the town's facilities.

New facilities that serve the town should be located so as to consolidate this existing central area, thereby enhancing the strength of what is an elongated and potentially dissipated town centre image.

The appearance and amenity of spacious localities next to the highway, such as the Fernvale Futures complex and its surrounds, and the Fernvale State School and its proposed southward extension of recreation facilities, will be important to the town's identity in the future.

The quality of the streetscape through the town, including future tree planting, can likewise benefit the town's image.

The Brisbane Valley Highway will need to be made progressively more friendly towards pedestrian cross-movement, to achieve a suitable town image.

Conservation of historical buildings is another worthwhile objective, including elements of the shopping strip along the eastern frontage.

Urban development north of Forest Hill—Fernvale Road should be prevented, to maintain the distinct identity of the northern entry to the town, and attention could be paid to achieving a

more attractive entry by way of landscaping and embellishment of this side of the school property.

Future extensions of retail development should be located in the existing town centre, so that it remains the focus of activity for the residents of Fernvale and visitors to the town, and thus serves to reinforce this elongated area as the heart of the town's identity.

Built form and land use within the town centre generates an active and pedestrian-oriented frontage to the Brisbane Valley Highway within the central area of the town. Car-oriented uses such as service stations are discouraged in this central area as they do not reinforce a coherent and active streetscape.

The frontage of the Brisbane Valley Highway south of the Fernvale Centre Strip should be managed to maintain a primarily undeveloped, green, non-commercial character. Some minor commercial development may be permitted (for example, a service station) but it should be isolated, well-landscaped and not, in total, detract from providing an attractive, non-commercial entry into the town centre from the south.

Map Reference: Strategic Framework Map 3D—Town identity—Fernvale

3.6.4.1 Specific outcomes

- (a) New facilities that serve the town are consolidated within the *Fernvale Identity Focus* on **Strategic Framework Map 3D—Town identity—Fernvale** to enhance the identity of the town centre;
- (b) Retail development is located in the Centre zone on **Strategic Framework Map 3D—Town identity—Fernvale**, which remains the focus of activity in the *Fernvale Identity Focus*;
- (c) The appearance and amenity of spacious localities next to the Brisbane Valley Highway, such as the Brisbane Valley Rail Trail, Fernvale Futures complex and its surrounds, the Fernvale State School and its proposed southward extension of recreation facilities located within the *Fernvale Identity Focus* on **Strategic Framework Map 3D—Town identity—Fernvale** are maintained;
- (d) Urban development north of Forest Hill–Fernvale Road, where located in the *Fernvale Image Management Area* on **Strategic Framework Map 3D—Town identity—Fernvale**, is prevented to maintain the distinct identity of the northern entry to the town; and
- (e) Built form and land use generates an active and pedestrian-oriented frontage to the Brisbane Valley Highway particularly within the Centre zone identified on **Strategic Framework Map 3D—Town identity—Fernvale**. Car-oriented uses that do not reinforce a coherent and active streetscape, such as service stations, are discouraged in the Centre zone.
- (f) The frontage of the Brisbane Valley Highway to the south of the *Brisbane Valley Highway Fernvale Centre Strip* on **Strategic Framework Map 3D—Town identity—Fernvale**, part of the *Fernvale Image Management Area*, maintains a primarily undeveloped, green, non-commercial character. Minor commercial development (for example, a service station) that is isolated, well-landscaped and does not detract from providing an attractive, non-commercial entry into the town centre from the south may be permitted.

3.6.5 Element— Town identity—Kilcoy

Analysis of Important Factors

The heart of the Kilcoy town centre, focused on William Street and Mary Street provides the foundation of a particularly successful and strong identity for the town; notably, the generous, tree-lined road reserve of William Street, from Kilcoy Creek corridor to the Butler Monument at the top of the hill, is the strongest element of this image.

The central facilities of the town, including the primary and secondary schools and the hospital, are located in a reasonably compact pattern around this centre, contributing to the strength and cohesion.

*The proposed D'Aguilar Highway bypass alignment provides an obvious direction for future growth of the town centre to the south-east, as far as Hope Street, but this needs to be managed in an orderly way so that the cohesion of the town centre is not undermined. This opportunity provides ample area for expansion in a fashion that can build rather than diminish the identity of the town and commercial development should not be permitted beyond the Kilcoy Identity Focus shown on **Strategic Framework Map 3E—Town Identity—Kilcoy**.*

Guidelines for Future Development of Town Identity

All new commercial development in Kilcoy should be located in the existing Centre zone and the area to its east and south, as far as Hope Street.

The existing character of William Street must be conserved and enhanced by new development.

Built form and land use within the town centre generates an active and pedestrian-oriented frontage to William Street and Mary Street (D'Aguilar Highway) within the central area of the town. Car-oriented uses such as service stations are discouraged in this central area as they do not reinforce a coherent and active streetscape.

Map Reference: Strategic Framework Map 3E—Town Identity—Kilcoy

3.6.5.1 Specific outcomes

- (a) New commercial development in Kilcoy is located in the Centre zone on **Strategic Framework Map 3E—Town Identity—Kilcoy** and the area located in the *Kilcoy Identity Focus* to its east and south, as far as Hope Street;
- (b) The existing character of William Street is conserved and enhanced by new development which is complementary in scale and character;
- (c) Development that abuts *Important Street Frontages* on **Strategic Framework Map 3E—Town Identity—Kilcoy** addresses, activates and enhances the street environment;
- (d) Built form and land use generates an active and pedestrian-oriented frontage to the land within the Centre zone identified on **Strategic Framework Map 3E—Town identity—Kilcoy**. New car-oriented uses that do not reinforce a coherent and active streetscape, such as service stations, are discouraged in the Centre zone; and
- (e) In general, any new development in the *Kilcoy Image Management Area* on **Strategic Framework Map 3E—Town Identity—Kilcoy** is either residential or open space in character, except for well-landscaped industrial development on the eastern town approaches where located in an Industry zone. However, a service station developed in a spacious setting may also be acceptable.

3.6.6 Element— Town identity—Lowood

Analysis of Important Factors

The development along the frontages of Railway Street and Main Street, particularly nearest to their junction, forms the most important elements of the identity of Lowood and its town centre.

*The important street frontages and civic spaces that are central to the town centre's identity are shown on **Strategic Framework Map 3F—Town Identity—Lowood**.*

The town centre street frontages currently display a 'country town' human scale character of active frontages with minimal setback, awning-covered footpaths and complementary building materials and form.

The alignment of Railway Street and the areas that now are taken up with the central town park and town centre car parking areas reflect the historical importance of the location of the railway through the town, and its former station near the centre (1884).

The town centre has spread west of Main Street in recent years but the heart of its identity remains focused on the Main Street / Railway Street locality which is the most significant area to manage.

There are opportunities around the existing town centre to expand to accommodate additional functions as Lowood grows and it is desirable that such development serves to consolidate the role and range of functions of the town centre, to enhance its convenience and walkability, but also to strengthen its identity, based on its historical development.

*Management of the approaches to the town centre, from Fernvale along Railway Street and from the west, via Forest Hill–Fernvale Road, will be important in maintaining the distinct image of the Lowood centre (refer to **Strategic Framework Map 3F—Town Identity–Lowood**).*

Guidelines for Future Development of Town Identity

It is important that further development of town facilities, especially shops, offices and community services, is concentrated in the town centre, generally within the Centre zone. It is unlikely that any extension of retail or commercial development beyond the extent of the Centre zone will be justifiable within the life of the planning scheme, and permitting development of such activities only in this locality will be beneficial to strengthening the identity, convenience and vitality of the town centre.

The frontage of Railway Street leading into the town centre should be maintained in residential use or otherwise, in the case of former railway-related buildings, in modest-scale non-residential use.

The openness of the former railway reserve adjacent to Railway Street, combined with the appearance of the school grounds beyond, provides a desirable low key character to this entry, which contrasts with the more intense built environment of the town centre, towards Main Street.

Development should be managed to maintain this arrival experience.

The arrival at the town centre from the west is more circuitous, but it is likewise important to the town centre's identity that a definite western edge is developed; accordingly, no commercial development should be approved south and west of the Centre zone on Park Street.

*The identity of the town will be enhanced by further development of the environmental quality of the streetscape of the Important Streets shown on **Strategic Framework Map 3F—Town Identity–Lowood**, in particular.*

Built form and land use within the town centre generates an active and pedestrian-oriented frontage particularly to Main Street, Walters Street, Michel Street and Forest Hill–Fernvale Road (Railway Street) where within the central area of the town. Car-oriented uses such as service stations are discouraged in this central area as they do not reinforce a coherent and active streetscape.

As it is desirable to conserve as many as possible of the older buildings of the town centre, concessions should be made with respect to the usual requirements for car parking and vehicle manoeuvring areas where doing so facilitates the retention of heritage buildings in development proposals.

Map Reference: Strategic Framework Map 3F—Town Identity–Lowood

Specific outcomes

- (a) The concentration of commercial town facilities, especially shops, offices and community services within the Centre zone of the Lowood Town Centre Identity Focus on **Strategic Framework Map 3F—Town Identity–Lowood** strengthens the identity, convenience and vitality of the town centre;
- (b) The low key character and arrival experience provided by Railway Street, where located in the Lowood Image Management Area on **Strategic Framework Map 3F—Town Identity–Lowood**, is maintained through low density residential use or otherwise, in the case of former railway-related buildings, in modest-scale non-residential use;

- (c) The arrival experience provided by Park Street, where located in the *Lowood Image Management Area* on **Strategic Framework Map 3F—Town Identity—Lowood**, is maintained through the consolidation of commercial development in the Centre zone and maintaining the *Lowood Image Management Area* in this location in low density residential use;
- (d) The scale and character of the *Important Street Frontages* identified on **Strategic Framework Map 3F—Town Identity—Lowood** are maintained and reinforced by the complementary scale and character of new development;
- (e) Built form and land use generates an active and pedestrian-oriented frontage to the land within the Centre zone identified on **Strategic Framework Map 3F—Town identity—Lowood**. Car-oriented uses that do not reinforce a coherent and active streetscape, such as service stations, are discouraged in the Centre zone; and
- (f) Where appropriate, concessions about the usual requirements for car parking and vehicle manoeuvring areas are granted to facilitate the retention of character buildings in the town centre.

3.6.7 Element— Town identity—Toogoolawah

Analysis of Important Factors

The most important elements of Toogoolawah's identity are found in the traditional main street system, off the Brisbane Valley Highway bypass of the town; of these, the development along Cressbrook Street is most significant, providing a visually strong traditional main street spine through the town.

The perpendicular streets provide the structure of the town's layout, so that residents are all naturally directed to the town's main street.

To the east of the old railway route (now the Brisbane Valley Rail Trail), which in effect presently serves to divide the town, many government facilities have been located – this polarization of the town's facilities tends to diminish the strength of its image. In the future, ways to strengthen the link between the areas east and west of the former rail alignment should be sought, to benefit the town's identity and cohesion; this is especially desirable now that the route of the old railway serves as a potential recreational and tourism element through the town's central area.

The obvious solution is to push a perpendicular vehicular link across the railway route, more or less on the alignment of Fulham Street, connecting through to Gardner Street. Given the potential of the town to be developed to accommodate tourism and in particular that around grey nomads, perhaps such a link could be developed as part of providing facilities, including campsites, for caravans and mobile homes in this locality. If this was implemented effectively, it could tend to improve the economic base of the main street.

The open character of land uses on the southern approach to Cressbrook Street provides a highly attractive entry to the town that should be protected and embellished if possible.

The open area adjacent to Dingyarra Street at the northern entry to the town is also a potential contributor to the quality of the town image in the future.

Guidelines for Future Development of Town Identity

New commercial development should be concentrated in the existing Centre zone, except possibly for additional facilities developed as part of a link between Fulham Street and Gardner Street. No additional commercial development except for say, a service station or truck stop, should be permitted on the bypass route as it will diminish the strength of the image of the historical town centre, and the quality of the town image itself, as well as potentially the town centre's commercial underpinnings.

Management of the visual and functional character of the areas to the north and south of the traditional main street locality, that connect it to the Brisbane Valley Highway, is critical to the satisfactory presentation of the town's identity. These areas should be kept free of commercial development and instead accommodate recreational and institutional land uses.

Built form and land use within the town centre generates an active and pedestrian-oriented frontage particularly to Cressbrook Street and Fulham Street within the central area of the town. Car-oriented uses such as service stations are discouraged in this central area as they do not reinforce a coherent and active streetscape.

Accommodation of sympathetically designed tourist-oriented development in the town centre area (including the area east of the former rail route through the town) has the potential to enhance the town centre's economic base and identity.

Map Reference: Strategic Framework Map 3G—Town Identity—Toogoolawah

3.6.7.1 Specific outcomes

- (a) Tourist-oriented development in the town centre area and east of the Brisbane Valley Rail Trail located in *Toogoolawah Identity Focus* is connected legibly with the town's *Important Street Frontages* by way of an attractive, straight, tree-lined boulevard over the *Possible Future Street* alignment on **Strategic Framework Map 3G—Town Identity—Toogoolawah**;
- (b) The open character of land uses at the southern entry to the town on Cressbrook Street located in the *Toogoolawah Identity Focus* identified on **Strategic Framework Map 3G—Town Identity—Toogoolawah** is protected and may accommodate recreational and institutional land uses;
- (c) The open character of land uses adjacent to Dingyarra Street at the northern entry to the town located in the *Toogoolawah Identity Focus* identified on **Strategic Framework Map 3G—Town Identity—Toogoolawah** is protected and may accommodate recreational and institutional land uses;
- (d) Development that abuts *Important Street Frontages* on **Strategic Framework Map 3G—Town Identity—Toogoolawah** addresses, activates and enhances the street environment;
- (e) Built form and land use generates an active and pedestrian-oriented frontage to the land within the Centre zone identified on **Strategic Framework Map 3G—Town Identity—Toogoolawah**. Car-oriented uses that do not reinforce a coherent and active streetscape, such as service stations, are discouraged in the Centre zone; and
- (f) Commercial development on the Brisbane Valley Highway located in the *Toogoolawah Image Management Area* identified on **Strategic Framework Map 3G—Town Identity—Toogoolawah** is limited to service station or truck stop.

3.6.8 Element— Cultural heritage

Places and structures of indigenous and non-indigenous cultural heritage significance across Somerset Region that have aesthetic, historic and social value and contribute to identity and a sense of place are to be retained for the enjoyment of current and future generations.

3.6.8.1 Specific outcomes

- (a) The cultural heritage places and structures identified on **Strategic Framework Map 3Aa, 3Ab and 3Ac—Community Identity and Regional Landscape Character** and on the local heritage register are protected;
- (b) The cultural heritage significance of the place or structure is recognised through a sensitive design outcome, having regard to the scale, form, materials, setting, architectural theme and style of existing development; and
- (c) Compliance with the cultural heritage duty of care and the effective recognition, protection and conservation of Aboriginal cultural heritage under the *Aboriginal Cultural Heritage Act 2003* (Qld) is achieved.

3.6.9 Element— Community activities and infrastructure

Community activities and infrastructure supports community health, well-being and identity. Community activities are appropriately and equitably located in town centres as much as possible, to

reinforce the role and function of town centres as focal points of community activity, and away from land use conflict and natural hazard areas.

3.6.9.1 Specific outcomes

- (a) Community activities and infrastructure³ are established within or adjacent to the Somerset Region town centres network, towns and small townships;
- (b) Existing or proposed community activities and infrastructure are sensitive land uses that are:
 - (i) not located on land subject to flood, bushfire and landslide hazard; and
 - (ii) protected from the encroachment of incompatible development that creates land use conflicts in order to protect the health, wellbeing, amenity and safety of the community.

3.6.9.2 Land Strategies

- (a) The social and economic impacts of the location of industrial activities within Potential Future Industrial Development Areas on and adjacent to the Brisbane Valley Rail Trail are to be considered in the future planning of the Glamorgan Vale Urban Investigation Area.

3.6.10 Element— Open space, sport and recreation facilities network

3.6.10.1 Specific outcomes

- (a) The towns and small townships of Somerset Region enjoy equality of access to open space, sport and recreation facilities network;
- (b) The public parks and land for community facilities network of the **Part 4—Priority infrastructure plan** is implemented by development through land or monetary contributions;
- (c) The open space, sport and recreation facilities network:
 - (i) is not located on land subject to flood, bushfire and landslide hazard risk; or
 - (ii) where located in an area subject to natural hazard risks, incorporates appropriate measures to mitigate the impacts on development from these risks; and
 - (iii) is protected from the encroachment of incompatible development that creates land use conflicts in order to protect the health, wellbeing, amenity and safety of the community.

³**Social and community infrastructure** includes *community care centre, community use, educational establishment, health care services and hospital.*



3.6.11 Element— Scenic amenity

The distinctive scenic amenity values of Somerset Region, including high scenic amenity areas comprising of lakes and rivers set amongst rolling hills and forested mountain ranges, and diverse landscape character types are retained and enhanced.

3.6.11.1 Specific outcomes

- (a) The landscape values and scenic quality of high scenic amenity areas identified on **Strategic Framework Map 3B, 3Ba, 3Bb and 3Bc—Community Identity and Regional Landscape Character** are retained and enhanced;
- (b) The landscape values, contribution to character and potential scenic amenity of other scenic mountains and watercourses identified on **Strategic Framework Map 3B, 3Ba, 3Bb and 3Bc—Community Identity and Regional Landscape Character** are retained and enhanced; and
- (c) Views from scenic route sections identified on **Strategic Framework Map 3B, 3Ba, 3Bb and 3Bc—Community Identity and Regional Landscape Character** of high scenic amenity areas and other scenic mountains and watercourses are protected from inappropriate development.

3.7 Economic development

3.7.1 Strategic outcomes

- (1) In 2031, Somerset Region supports a diversified and prosperous economy that is consistent with its image as a natural/rural based destination;
- (2) In the towns of Somerset Region, the expansion of industrial activities in industrial development areas and the provision of services in town centres provides opportunity for economic diversification in response to the population growth that is directed to these locations, particularly the towns of Fernvale, Kilcoy and Lowood;
- (3) The Somerset Region town centres network provides the focus for the location of administrative, business, centre, community, recreation activities and services in the region;
- (4) Town centres are locations of significant employment generating uses in a 'main street' setting which are protected through the appropriate location of development for specific business and centre activities and other uses that realise the intended role and function of the town centre;
- (5) Fernvale, Esk and Kilcoy are the district centres for the Lower, Middle and Upper Brisbane Valleys respectively and locations providing the highest-order and broadest mix of administrative, business, centre, community, recreation activities and services in Somerset Region;
- (6) Lowood and Toogoolawah are local centres providing complementary activities and services to the higher-order district centres of Fernvale and Esk;
- (7) Industrial development areas are locations of major employment generating land uses which are well connected to centres and low density residential areas in each town;
- (8) Traditional industries centred on natural resource development and rural production are adaptable and resilient in response to changing market demands, to capitalise on the strategic location of Somerset Region to service growing metropolitan markets and to respond to local and national food security strategies;
- (9) Equine activities are established in proximity to the Kilcoy racecourse;
- (10) The rural areas of Somerset Region are positioned to exploit appropriate economic opportunities that promote Australia's transition to a low carbon economy;
- (11) Tourism and recreation activity development capitalises on the intrinsic natural assets and established character of Somerset Region. Strategic tourism and recreation focus areas offer attractive urban and natural/rural settings that are protected to facilitate the provision of attractions, services, facilities and accommodation needs for visitors;
- (12) Tourism and recreational development related to Lake Somerset and Lake Wivenhoe protects the water quality of these regionally significant potable water storages; and
- (13) Home based economic activity provides complementary enterprise opportunities.

3.7.2 Element— Town centres network

The higher-order centres of the Somerset Region town centres network reflects the activity centres network of the SEQ Regional Plan⁴, which identifies Esk, Fernvale and Kilcoy as major rural activity centres. Further, the town centres network identifies two further lower-order centres, that are, Lowood and Toogoolawah, which complement the three centres of regional significance identified in the SEQ Regional Plan.

The designation of centres in the network reflects the desired role and function of each centre, having regard to their population base, strategic location, accessibility and the type of activities they accommodate.

3.7.2.1 Specific outcomes

- (a) The Somerset Region town centres network identified on **Strategic Framework Map 4—Economic Development and Natural Resources** promotes the development of appropriate

⁴ Refer Map 10: Activity centres network of the *SEQ Regional Plan 2009-2031*.

services within town centres, in accordance with the role and function of each town centre as described in further detail below:

Town centre	Specific outcomes
Fernvale district centre Esk district centre Kilcoy district centre	(i) District centres provide the broadest array of employment opportunities in Somerset Region, including district level retail, commercial office, community and recreational facilities that service residents of the town and sub-regional catchments; (ii) The Esk district centre retains its role as the administrative and cultural centre of Somerset Region; (iii) The Fernvale district centre develops as the largest retail and commercial office node in Somerset Region;
Lowood local centre Toogoolawah local centre	(iv) Local centres provide local services for residents of their immediate urban and surrounding rural areas that complement, but are sub-ordinate to, the higher-order services provided in the nearby district centres of Fernvale and Esk respectively

- (b) The introduction of competing centres rivalling the established district and/or local centre in each town is not supported;
- (c) Centre activities and particular business activities are consolidated within the Fernvale, Esk and Kilcoy district centres and the Lowood and Toogoolawah local centres, to the exclusion of all other locations, except where alternative locations are otherwise provided for particular business activities such as industrial development areas;
- (d) The design of town centres embody the following elements:-
 - (i) a main street focus within a compact town centre focussed on historic main street that is efficiently integrated with adjoining residential areas; and
 - (ii) active frontages and urban design that contribute to a public domain that enhances the pedestrian experience and linkages between commerce and community uses and supports and encourages social interaction.
- (e) Should the supply of land available for development in the Fernvale district centre exhaust earlier than anticipated over the life of this planning scheme, the centre will expand adjacent to the Brisbane Valley Highway/Clive Street intersection;
- (f) Following the construction of the D'Aguilar Highway bypass, the Kilcoy town centre retains its main street focus through a managed orderly expansion towards Hope Street that maintains a cohesive centre and addresses potential flooding issues in this location. The expanded town centre is the preferred location for a full-line supermarket, additional social infrastructure and complementary business activities; and
- (g) Should the supply of land available for development in the Lowood local centre exhaust earlier than anticipated over the life of this planning scheme, the centre will expand north on the eastern side of Main Street/Railway Street intersection.

3.7.3 Element— Industrial development

Industrial land is an important economic resource that provides for the diversification of the Somerset Region economy through the accommodation of industry activities and ancillary support services.

3.7.3.1 Specific outcomes

- (a) The industrial development areas located in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah identified on **Strategic Framework Map 4—Economic Development and Natural Resources** are generally developed as follows:
 - (i) the industrial development areas of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah accommodate low impact industry activities;

- (ii) the industrial development areas located on the D'Aguilar Highway east of Kilcoy accommodate a mix of low impact industry and high impact industry;
- (b) Industrial land is protected from reverse amenity impacts and/or other land use conflicts having regard to:
 - (i) the location of business activities in the Industrial Development Areas of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah identified on **Strategic Framework Map 4—Economic Development and Natural Resources** that are not ancillary to an industry activity is not supported;
 - (ii) the operation of higher impact industry activities in Lowood and Kilcoy are protected from encroachment by sensitive land uses, where not ancillary to the industry use of a site;
 - (iii) the level of impact associated with an industry use is appropriate for its location;
- (c) Industrial development areas are located in towns with a high level of accessibility to town centres and residential areas via multi-modal road and active transport networks; and
- (d) A diverse supply of serviced industrial development areas provide for a range of lot sizes and adaptable building formats that respond to industry needs.

3.7.3.2 Land use strategies

- (a) Should the supply of low-medium impact industry land in the southern Somerset Region allocated in this planning scheme exhaust earlier than anticipated, the Possible Future Industrial Development Areas located in the Glamorgan Vale Urban Investigation Area identified on **Strategic Framework Map 4—Economic Development and Natural Resources** may proceed, provided the following criteria are met:
 - (i) the subject land is included in the urban footprint regional land use category of the SEQ Regional Plan at the time urban development is proposed to occur; and
 - (ii) detailed analyses have identified that the land is suitable for and able to accommodate industry development having regard to physical constraints;
 - (iii) detailed analyses have identified that the land is suitable for and able to accommodate industry development having regard to the efficient servicing with urban infrastructure
- (b) The Possible Future Industrial Development Areas in Kilcoy identified on **Strategic Framework Map 4—Economic Development and Natural Resources** requires further investigation to determine suitability for development and identify potential flood constraints.

3.7.4 Element— Rural Production

The continued operation and expansion of productive rural activities are facilitated through the protection of agricultural land and other rural land from inappropriate development.

3.7.4.1 Specific outcomes

- (a) Agricultural land identified on **Strategic Framework Map 4—Economic Development and Natural Resources** is protected for its highest and best use for cropping and intensive horticulture, animal husbandry, intensive animal husbandry and other appropriate rural uses that maintain the ongoing productive capacity of these lands;
- (b) Sensitive land uses that have the potential to generate land use conflict with the current or future agricultural use of agricultural land are appropriately separated from that land;
- (c) Rural industry is located in rural areas where:
 - (i) the use is not more appropriately located in an industry area in a town;
 - (ii) off-site impacts on amenity, including the impacts of air, noise and odour emissions, and hazardous materials on nearby sensitive land uses and infrastructure networks are appropriately managed; and
 - (iii) not located on agricultural land, unless there is an overriding need for the proposal in terms of public benefit and there is no alternative site;

- (d) Intensive animal industry is appropriately located having regard to the achievement of the specific outcomes and land use strategies described in **section 3.3.10—Element—High impact activities**;
- (e) Tourism activities that are associated with and promote rural production are supported where they do not detract from the primary rural use of the rural area.

3.7.4.2 Land use strategies

- (a) The Coominya Food Production Investigation Area identified on **Strategic Framework Map 4 – Economic Development and Natural Resources** provides for a food based production hub incorporating:
 - (i) poultry protein precinct including food processing, feed mill, hatcheries, growing farms, training facility, composting establishment and green energy production;
 - (ii) industrial uses including warehousing, storage and distribution;
 - (iii) educational / training uses including a training facility.
- (b) The Coominya Food Production Investigation Area identified on **Strategic Framework Map 4 – Economic Development and Natural Resources** requires further investigation to determine that the land is suitable and able to accommodate the proposed food based production hub having regard to:
 - (i) the efficient servicing with infrastructure;
 - (ii) impacts on amenity, including the impacts of air, noise and odour emissions on nearby sensitive land uses.

3.7.5 Element— Low Carbon economy

Emerging low carbon economy development opportunities provide economic benefits to the region where able to co-exist with existing rural and sustainable natural resource development.

3.7.5.1 Specific outcomes

- (a) Emerging low carbon economy development opportunities, including, but not limited to permanent plantations, renewable energy facilities and carbon or environmental offset projects are appropriately located in rural areas having regard to:
 - (i) the minimisation of off-site impacts on the amenity of sensitive land uses;
 - (ii) the protection of agricultural land in order to maximise the highest and best use of those soils and their economic output; and
 - (iii) maintaining scenic amenity and important landscape elements.

3.7.6 Element— Tourism and recreation

Tourism and recreation activity development capitalises on the intrinsic natural assets and established character of Somerset Region.

The Principal Future Strategic Tourism Focus Area and the Lake Somerset Water-based Recreation Focus Area identified on **Strategic Framework Map 7—Tourism Strategy** are the key locations of tourism infrastructure and amenity value where appropriate tourism and recreation related activities are supported and consolidated.

The protection of the amenity and natural/rural values of these non-urban focus areas provides the foundation for the promotion of tourism and recreation development opportunities in these locations. Tourism activities provide opportunity for further value adding to the productive use of rural areas including accommodation, events, outdoor and food based activities provided they do not restrict the intended use of rural areas.

The town centres of Somerset Region also provide a location for tourism and accommodation activities, focussing upon the historic main streets of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah. The historic character of the main streets of each town is maintained.

3.7.6.1 Specific outcomes

- (a) The function of the Brisbane Valley Rail Trail as an important tourism and recreational asset to Somerset Region is promoted. The Brisbane Valley Rail Trail and surrounds is protected from land uses that have the potential to conflict on its use and context. Development of allied accommodation, transport and food and drink uses are encouraged, particularly at nodes along the Brisbane Valley Rail Trail to benefit users and promote the trail;
- (b) Tourism and recreation uses are of an appropriate scale, nature and intensity that recognises the location in a primary drinking water catchment, and development maintains downstream water quality;
- (c) The Principal Future Strategic Tourism Focus Area and the Lake Somerset Water-based Recreation Focus Area identified on **Strategic Framework Map 7—Tourism Strategy** offers significant amenity value for the recreational users of Lake Somerset. These focus areas are protected from inappropriate non-tourism related development that have the potential to compromise the rural, natural and environmental values; and
- (d) Tourism development in the Principal Future Strategic Tourism Focus Area and the Lake Somerset Water-based Recreation Focus Area prioritises activities that respond to and are compatible with the rural and water-based context, and which are serviced by an appropriate level of infrastructure. This may include accommodation activities such as low-impact resorts, farm stays, bed and breakfasts and rural retreats, together with nature-based tourism, function facilities, food and drink offerings such as wineries, outdoor recreation and sport activities, and other compatible tourism and recreational uses.
- (e) The consolidation of tourism development in the Principal Future Strategic Tourism Focus Area encourages the development of:
 - (i) Fernvale, Esk, Toogoolawah and Kilcoy as major tourism hubs for the region; and
 - (ii) Coominya, Somerset Dam, Harlin, Moore, Linville, Jimna and to a lesser extent, Lowood, as minor tourism hubs within the region;
- (f) Town centres support tourism development that responds to the traditional character of the towns and that contribute additional attractions, services, facilities, recreational opportunities, cultural venues, function facilities, food and drink establishments and accommodation options.
- (g) Tourism routes and existing tourism facilities identified on **Strategic Framework Map 7 – Tourism Strategy** are supported through the development of associated infrastructure including bed and breakfasts, rural retreats, road side stalls, food and drink offerings such as wineries, tourist parks, and other compatible tourism activities.
- (h) The sense of place and tourism experience provided in each of the Central Lakes, Northern Forests and Southern Rural tourism sub-destinations identified on **Strategic Framework Map 7—Tourism Strategy** is strengthened by development which is consistent with each of those themes and protected from inappropriate development.
 - (i) Northern Forests – the Northern Forests tourism sub-destination contains numerous state forests and national parks. Tourism and recreation development increases the range of nature-based, outdoor recreation and adventure tourism experiences. Additional attractions and services are provided in the small towns, and additional accommodation is provided throughout the sub-destination, to support increased tourism and recreation experiences.
 - (ii) Central Lakes – the Central Lakes tourism sub-destination contains Lake Somerset and Lake Wivenhoe, together with surrounding rural and natural areas. Tourism and recreation development takes advantage of these significant outdoor recreation opportunities and scenic assets. Opportunities exist to develop active, healthy, adventure tourism and recreation associated with the lakes and surrounding areas, as well as more passive tourism activities. Scenic rest stops, food and beverage offerings, and accommodation are provided throughout the sub-destination. Tourism development reinforces Esk and Toogoolawah as the main tourism and recreation service nodes within the sub-destination.
 - (iii) Southern Rural – the Southern Rural tourism sub-destination is focussed on primary production. Tourism products and experiences that are associated with agricultural and rural pursuits are supported, such as farm gate and cottage industries, farm stays, bed

and breakfasts and roadside stalls. The towns of Fernvale and Lowood are southern gateway locations into Somerset. Tourism development in these towns, that provides experiences and facilities to support visitors to Somerset, is encouraged.

3.7.7 Element— Home based business

Home based businesses provide enterprise opportunities and contribute to local economic development in Somerset Region.

3.7.7.1 Specific outcomes

- (a) Home based businesses operate at an appropriate scale and intensity having regard to the character and amenity of the locality in which they are located.

3.8 Infrastructure and services

3.8.1 Strategic outcomes

- (1) In 2031, the efficient and timely provision of infrastructure and services across Somerset Region is aligned with development and facilitates economic development;
- (2) The provision of infrastructure is consistent with reasonable expectations for the servicing of town, small township, low density residential, rural residential settlement and rural areas;
- (3) The towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah located in the priority infrastructure area enjoy a higher standard of service across the greatest number of infrastructure and service networks, including access to reticulated water supply, sewerage and stormwater networks, due to the favourable costs of infrastructure provision in a compact urban form;
- (4) Outside of towns and priority infrastructure areas, a limited range of infrastructure networks may be provided and infrastructure shortfalls are met by development on a site-by-site basis;
- (5) The design and provision of infrastructure across Somerset Region avoids adverse environmental and amenity impacts and retains fauna safety and movement through the landscape;
- (6) Infrastructure provision and decommissioning programs have regard to the risk of natural hazards in Somerset Region by matching trunk infrastructure requirements to changes in settlement pattern and land use transitions occurring in response to the risk of hazard;
- (7) Water supply services community needs and is used sustainably through use of demand management practices and alternative sources;
- (8) Sewerage treatment services community needs and protects community and environmental health and amenity;
- (9) Stormwater is managed using an integrated water management approach and minimises adverse impacts of rainfall events on life, property and the environment;
- (10) The following major infrastructure corridors and sites that provide an essential service to the residents of South East Queensland and Somerset Region are protected and designed for co-location where possible:
 - (a) Water and wastewater pipelines;
 - (b) High voltage electricity transmission lines;
 - (c) Power stations;
 - (d) Gas pipelines; and
 - (e) Utility installations of local significance to Somerset Region, including water and wastewater treatment and waste management facilities;
- (11) Decentralised renewable energy facilities consistent with a low carbon economy are prevalent across the rural landscape of Somerset Region where complementary to the primary productive use of rural land and the natural/rural values and amenity of the locality; and
- (12) Contemporary telecommunications infrastructure is provided that supports the local economy.
- (13) The provision of diverse social and community infrastructure and an open space, sport and recreation facilities network across the region responds to community need and is maintained so that places for people to gather, meet and socially interact are accessible, comfortable and safe and promote active and healthy communities.

3.8.2 Element— Urban infrastructure

The level of service provided by urban infrastructure is appropriate according to the relative location of development in the settlement pattern and its proximity to established networks and proposed extensions of those networks in the priority infrastructure area ('PIA').

The provision of infrastructure appropriately manages its environmental impacts.

3.8.2.1 Specific outcomes

- (a) The effective and efficient delivery of urban infrastructure networks in Somerset Region:
 - (i) assists in the achievement of the specific outcomes of **section 3.3.3—Compact urban form**; and
 - (ii) progressively implements the infrastructure networks of the **Part 4—Priority Infrastructure Plan** in a logical and orderly sequence with urban development;
- (b) The towns of Somerset Region identified on **Strategic Framework Map 1—Settlement Pattern** that are located in the priority infrastructure area identified in **Part 4—Priority infrastructure plan** are serviced by the full suite of urban infrastructure networks, including water supply, sewerage, stormwater, electricity and telecommunications infrastructure networks;
- (c) The full suite of urban infrastructure services are not provided in the small townships and rural areas of Somerset Region identified on **Strategic Framework Map 1—Settlement Pattern** and these areas are partly or fully self-sufficient as far as infrastructure provision is concerned;
- (d) The five infrastructure networks identified in **Part 4—Priority infrastructure plan** are implemented by development through land and/or monetary contributions; and
- (e) Infrastructure provision across Somerset Region avoids adverse environmental and amenity impacts through appropriate design, location, operation and management.

3.8.3 Element— Water supply network

All development is serviced by a reliable water supply via the reticulated water supply network or other alternative means. The use of potable water is minimised where possible.

3.8.3.1 Specific outcomes

- (a) The water supply priority infrastructure area in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah, and the small townships of Linville, Somerset Dam and Tarampa, are serviced by the reticulated water supply network;
- (b) Areas of the settlement pattern that are not serviced by the reticulated water supply network are self-sufficient as far as water supply is concerned and rely upon a sustainable supply of potable water; and
- (c) Demand management practices and the use of alternative supplies to potable water that reduce demands on the reticulated water supply network are incorporated in domestic and commercial/industry development where appropriate.



3.8.4 Element— Sewerage network

The reticulated sewerage network services development located in the priority infrastructure area and the small township of Somerset Dam.

Where development is not serviced by the reticulated sewerage network, an alternative means of sewerage treatment and disposal is required that maintains community and environmental health and amenity.

3.8.4.1 Specific outcomes

- (a) The sewerage priority infrastructure area in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah, and the small township of Somerset Dam, are serviced by the reticulated sewerage network; and
- (b) Areas of the settlement pattern that are not serviced by the reticulated sewerage network incorporate a sewerage collection, treatment and disposal system that maintains environmental and water quality values.

3.8.5 Element— Stormwater management network

Stormwater management adopts an integrated water cycle management approach and contributes to healthy waters through the mitigation of adverse impacts of rainfall events on life, property and the environment.

3.8.5.1 Specific outcomes

- (a) Urban areas located in the stormwater priority infrastructure area identified in **Part 4—Priority infrastructure plan** are serviced by the reticulated stormwater management network;
- (b) Integrated water cycle management and water sensitive urban design principles are included in development in urban areas;
- (c) Stormwater management infrastructure is provided in a manner that minimises risk to life and property from flooding and maintains environmental and water quality values;
- (d) Development is planned, designed, constructed and operated to protect and enhance the environmental values of receiving waters.

3.8.6 Element— Major infrastructure corridors and sites

Regional infrastructure corridors of significance to multiple local government areas in South East Queensland and local utility installations associated with electricity, gas and water distribution, wastewater treatment and waste management provide essential services to the Somerset Region community.

These major infrastructure corridors and sites, identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure**, are protected from land use conflict that has the potential to compromise this essential service provision.

3.8.6.1 Specific outcomes

- (a) Major infrastructure corridors and sites are protected from land use conflicts arising from encroachment by incompatible uses, including, but not limited to sensitive land uses;
- (b) Uses that are incompatible with, and located adjacent to, major infrastructure corridors and sites incorporate an appropriate separation distance that addresses potential amenity and reverse amenity issues;
- (c) Major infrastructure corridors and sites are designed and managed to minimise off-site environmental and amenity impacts; and
- (d) Major infrastructure corridors and sites are co-located where possible to reduce land use conflict.

3.8.7 Element— Energy infrastructure

Energy generation is consistent with the natural/rural values of Somerset Region, minimises off-site impacts and promotes renewable alternatives where possible consistent with a low carbon economy.

3.8.7.1 Specific outcomes

- (a) The location of electricity generation infrastructure in Somerset Region, including decentralised and renewable energy facilities, avoids off-site environmental and amenity impacts on sensitive land uses.

3.8.8 Element— Telecommunications infrastructure

The provision of telecommunications infrastructure is supportive of local economic development outcomes and assists in achieving an element of self-containment within appropriate environmental and amenity guidelines.

3.8.8.1 Specific outcomes

- (a) Telecommunications infrastructure and services are provided by development in response to community need and expectations whilst minimising environmental and amenity impacts.



3.9 Transport

3.9.1 Strategic outcomes

- (1) In 2031, the communities of Somerset Region are connected by a network of safe and efficient State and local roads and within the towns, and a functional transport network;
- (2) The Brisbane Valley and D'Aguilar Highways provide the major transport connections in Somerset Region. These two highways, together with other State and local roads, promote efficient access to Somerset Region town centres network and industrial development areas for residents, visitors and freight transport;
- (3) A multi-modal road and active transport network creates high levels of accessibility between residential areas, town centres and industrial development areas within the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah;
- (4) A compact urban form that effectively integrates land use with transport in Fernvale and Lowood supports the possible future provision of public transport services to the southern Somerset Region via the Glamorgan Vale Urban Investigation Area; and
- (5) The RAAF Amberley Air Base aviation facility located in Ipswich City and locally significant Kilcoy Non-directional Beacon and Mt Glorious Airservices Tower operate efficiently and without impediment from development in Somerset Region.

3.9.2 Element— Road network

A functional road network of State and local roads connects the dispersed communities of the Somerset Region. The road network is protected from inappropriate development in order to maintain efficient access to the employment opportunities, services and facilities provided in town centres and industrial development areas and is augmented by active transport options in towns.

3.9.2.1 Specific outcomes

- (a) The operational safety and efficiency of the road corridors identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure** are protected from potential or actual land use conflict, including, but not limited to the following:
 - (i) Brisbane Valley Highway;
 - (ii) D'Aguilar Highway;
 - (iii) Gatton-Esk Road;
- (b) Road corridor planning and design contributes to the development of a multi-modal transport network that promotes active transport and public transport, and that enhances the efficiency and productivity of heavy vehicle movements;
- (c) The future D'Aguilar Highway bypass of Kilcoy identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure** and other possible future bypasses of Fernvale and Lowood are protected from inappropriate development;
- (d) Industry development is accessed from a freight route that is identified as a main road on **Strategic Framework Map 5—Access, Mobility and Infrastructure**; and
- (e) The hierarchy designation and function of the road is maintained by appropriate adjacent land use.

3.9.3 Element— Public transport network

The dispersed settlement pattern and low population base of Somerset Region makes providing a viable frequent public transport service difficult. The promotion of a more compact urban form that incorporates urban development in the Glamorgan Vale Urban Investigation Area, may provide a better basis for future viable public transport that links Lowood and Fernvale with Ipswich City via Glamorgan Vale.

3.9.3.1 Specific outcomes

- (a) Towns are developed in a manner that is consistent with the specific outcomes expressed in **section 3.3.3—Element— Compact urban form**; and
- (b) Potential future public transport corridors are protected from inappropriate development.

3.9.4 Element— Active transport network

The active transport network provides a high quality transport option in the towns of Somerset Region that efficiently connects residential neighbourhoods to town centres, industrial development areas and other employment areas and contributes to active and healthy local communities and promotes affordable living.

3.9.4.1 Specific outcomes

- (a) The principal cycle network for Esk, Fernvale and Kilcoy identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure** and the pedestrian and cycle networks identified in **Part 4—Priority infrastructure plan** is implemented;
- (b) Greenfield development in town areas:
 - (a) contributes to the establishment of multi-modal transport corridors providing for road and active transport; and
 - (b) incorporate neighbourhood design principles that promotes a high level of connectivity, particularly for pedestrians and cyclists.

3.9.5 Element— Aviation facilities

The operational airspace of the Royal Australian Air Force ('RAAF') Amberley Air Base encroaches on the southern margins of Somerset Region. In addition, the Kilcoy Non-directional Beacon and Mt Glorious Air services Tower provide critical aircraft navigation services.

The operational efficiency of both facilities is protected from land use conflict.

3.9.5.1 Specific outcomes

- (a) The operational efficiency of navigation, communication and surveillance equipment provided to assist the safe and efficient movement of aircraft associated with the RAAF Amberley Air Base, Kilcoy Non-directional Beacon and Mt Glorious Airservices Tower identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure** are protected from land use conflict; and
- (b) Areas subject to significant levels of aircraft noise emanating from the RAAF Amberley Air Base as defined by the ANEF20+ contour identified on **Strategic Framework Map 5—Access, Mobility and Infrastructure** are protected from land use conflict.

4 Part 4 Local Government Infrastructure Plan

4.1 Preliminary

- (1) This local government infrastructure plan has been prepared in accordance with the requirements of the *Sustainable Planning Act 2009*.
- (2) The purpose of the local government infrastructure plan is to:
 - integrate infrastructure planning with the land use planning identified in the planning scheme;
 - provide transparency regarding a local government's intentions for the provision of trunk infrastructure;
 - enable a local government to estimate the cost of infrastructure provision to assist its long term financial planning;
 - ensure that trunk infrastructure is planned and provided in an efficient and orderly manner;
 - provide a basis for the imposition of conditions about infrastructure on development approvals.
- (3) The local government infrastructure plan:
 - (a) states in Section 4.2 (planning assumptions) the assumptions about future growth and urban development including the assumptions of demand for each trunk infrastructure network;
 - (b) identifies in Section 4.3 (priority infrastructure area) the prioritised area to accommodate urban growth up to 2026;
 - (c) states in Section 4.4 (desired standards of service) for each trunk infrastructure network the desired standard of performance;
 - (d) identifies in Section 4.5 (plans for trunk infrastructure) the existing and future trunk infrastructure for the following networks:
 - (i) transport
 - (ii) stormwater
 - (iii) public parks and community land.
 - (e) provides a list of supporting documents that assist in the interpretation of the local government infrastructure plan in the Editor's note – Extrinsic material at the end of Section 4.

4.2 Planning assumptions

- (1) The planning assumptions state the assumptions about:
 - (a) population and employment growth;
 - (b) the type, scale, location and timing of development including the demand for each trunk infrastructure network.
- (2) The planning assumptions together with the desired standards of service form a basis for the planning of the trunk infrastructure networks and the determination of the priority infrastructure area.
- (3) The planning assumptions have been prepared for:
 - (a) the base date (2011) and the following projection years to accord with future Australian Bureau of Statistics census years:
 - (i) mid 2016;
 - (ii) mid 2021;
 - (iii) mid 2026;
 - (iv) mid 2031;
 - (b) Ultimate (mid 2056);Table 4.2.1.1.
 - (c) the projection areas identified on Local Government Infrastructure Plan Priority Infrastructure Area (PIA) Maps 1 – 5 in Schedule 3—Local government infrastructure plan mapping and tables.

Table 4.2.1—Relationship between LGIP development categories, LGIP development types and uses

Column 1 LGIP development category	Column 2 LGIP development type	Column 3 Uses
Residential development	Single dwelling	Caretaker's accommodation, Dwelling house
	Multiple dwelling	Dual occupancy, Hostel, Multiple dwelling, Retirement facility, Short-term accommodation
	Other dwelling	Community residence, Home based business, Non-resident workforce accommodation, Relocatable home park, Residential care facility, Rural workers accommodation, Tourist park
Non-residential development	Retail	Adult store, Agricultural supplies store, Car park, Food and drink outlet, Garden centre, Hardware and trade supplies, Market, Outdoor sales, Sales office, Service station, Shop, Shopping Centre, Showroom
	Commercial	Club, Function facility, Hotel, Indoor sport and recreation, Nightclub entertainment facility, Office, Tourist attraction, Veterinary services
	Industry	Extractive Industry, High impact industry, Low impact industry, Medium impact industry, Service industry, Transport depot, Warehouse
	Community Purposes	Cemetery, Childcare centre, Community care centre, Crematorium, Community use, Educational establishment, Emergency services, Funeral parlour, Health care services, Hospital, Motor sport facility, Outdoor sport and recreation, Park, Place of Worship
	Rural and Other Uses	Air services, Animal Husbandry, Animal keeping, Aquaculture, Cropping, Intensive animal industry, Intensive horticulture, Major electrical infrastructure, Permanent plantation, Renewable energy facility, Roadside stall, Rural industry, Substation, Telecommunications facility, Utility installation, Winery

- (4) Details of the methodology used to prepare the planning assumptions are stated in the extrinsic material.

4.2.1 Population and employment growth

- (1) A summary of the assumptions about population and employment growth for the planning scheme area is stated in Table 4.2.1. Table 4.2.1.1—Population and employment assumptions summary.

Table 4.2.1.1—Population and employment assumptions summary

Column 1 Description	Column 2 Assumptions					
	Base date (2011)	2016	2021	2026	2031	Ultimate development
Population	22,616	25,616	28,726	31,616	34,416	46,883
Employment	5,029	5,541	6,073	6,566	9,174	5,029

- (2) Detailed assumptions about growth for each projection area and LGIP development type category are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:
 - (a) for population, Table SC3.1.1 – Existing and projected population
 - (b) for employment, Table SC3.1.1 – Existing and projected population

4.2.2 Development

- (1) The developable area is identified on Local Government Infrastructure Plan Priority Infrastructure Area (PIA) Maps 1 – 5 in Schedule 3—Local government infrastructure plan mapping and tables.
- (2) The planned density for future development is stated in Table SC3.1.3—Planned density and demand generation rate for a trunk infrastructure network in Schedule 3—Local government infrastructure plan mapping and tables.
- (3) A summary of the assumptions about future residential and non-residential development for the planning scheme area is stated in **Error! Reference source not found..** The assessment of the planning scheme capacity and the ‘ultimate’ development have taken into account the following constraints to development:
 - Catchment Management;
 - Flood hazards;
 - Biodiversity and natural features including remnant vegetation;
 - Scenic Amenity;
 - Odour Buffers;
 - Extractive Resources;
 - Parkland areas;
 - Agricultural Land Class A and Class B.

Table 4.2.2.1—Residential dwellings and non-residential floor space assumptions summary

Column 1 Description	Column 2 Assumptions					
	Base date (2011)	2016	2021	2026	2031	Ultimate development
Residential dwellings	8,802	10,133	11,496	12,857	14,219	19,830
Non-residential floor space (m ² GFA)	357,462	393,182	430,212	464,623	646,409	357,462

- (4) Detailed assumptions about future development for each projection area and LGIP development type are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:
- (a) for residential development, Table SC3.1.4—Existing and projected residential dwellings;
 - (b) for non-residential development, Table SC3.1.5—Existing and projected non-residential floor space.

4.2.3 Infrastructure demand

- (1) The demand generation rate for a trunk infrastructure network is stated in Column 4 of Table SC3.1.3—Planned density and demand generation rate for a trunk infrastructure network in Schedule 3 Local government infrastructure plan mapping and tables.
- (2) A summary of the projected infrastructure demand for each service catchment is stated in:
- (a) for the transport network, Table 4.2.3.1—Transport (Roads) network – assumed demand summary;
 - (b) for the public parks and community land network, Table 4.2.3.2—Public parks and community land – assumed demand summary.

Table 4.2.3.1 – Transport (Roads) network – assumed demand summary

Column 1 Service Catchment ⁵	Column 2 Existing and projected demand (EDU)					
	2011 (base date)	2016	2021	2026	2031	Ultimate
Toogoolawah (TR1)	800	871	948	1,018	1,136	1,568
Esk (TR2)	781	850	919	983	1,082	1,813
Lowood (TR3)	1,897	2,401	2,948	3,497	3,880	5,011
Fernvale (TR4)	1,542	2,073	2,713	3,337	3,947	5,798
Kilcoy (TR5)	1,482	1,729	1,946	2,134	2,425	4,565
Remainder Of Shire (TR6)	5,098	5,335	5,561	5,764	5,955	6,638
TOTAL	11,600	13,259	15,034	16,732	18,424	25,393

Table 4.2.3.2 – Public Parks and Community Land network – assumed demand summary

⁵ The service catchment for the transport network is identified on Local Government Infrastructure Plan Transport Catchment Map 1 in Schedule 3 (local government infrastructure mapping and tables).

Column 1 Service Catchment ⁶	Column 2					
	Existing and projected demand (EDU)					
	2011 (base date)	2016	2021	2026	2031	Ultimate
Toogoolawah (PPCL1)	415	440	465	487	558	808
Esk (PPCL2)	541	598	653	704	789	1,471
Lowood (PPCL3)	1,353	1,750	2,189	2,657	2,925	3,662
Fernvale (PPCL4)	1,212	1,653	2,194	2,725	3,244	4,744
Kilcoy (PPCL5)	822	923	1,015	1,098	1,284	2,613
Remainder of LGA (PPCL6)	4,422	4,682	4,928	5,129	5,363	6,155
TOTAL	8,766	10,045	11,444	12,800	14,163	19,454

⁶ The service catchments for the public parks and community land network are identified on Local Government Infrastructure Plan Parks Catchment Maps 1 – 6 in Schedule 3 (local government infrastructure mapping and tables).

4.3 Priority infrastructure area

- (1) The priority infrastructure area identifies the area prioritised for the provision of trunk infrastructure to service the existing and assumed future urban development up to 2026.
- (2) The priority infrastructure area is identified on Local Government Infrastructure Plan Priority Infrastructure Area (PIA) Maps 1 – 5 in Schedule 3—Local government infrastructure plan mapping and tables.

4.4 Desired standards of service

- (1) This section states the key standards of performance for a trunk infrastructure network.
- (2) Details of the standard of service for a trunk infrastructure network are identified in the extrinsic material.

4.4.1 Transport network

Planning Standard	Community Outcome
Road Network	
Define the road network as a functional road hierarchy of State Controlled Roads, Arterial Roads, Industrial Collector, Trunk Collector, Collector Street, Local Industry Street, Access Street and Access Place, which supports the LGA's urban and rural settlement patterns and commercial and economic activities.	- Protects the amenity of residential communities by removing non-local traffic. - Improves local safety by removing "through" traffic. - Reduces fuel consumption and emission levels by sustaining efficient operating speeds. - Maintains travel speeds in off-peak periods. - Reduces vehicle operating costs. - Improves public transport operation by improving travel speeds. - Supports economic growth by developing efficient and integrated transport networks. - Minimises through traffic and heavy vehicles in residential areas. - Limits community severance.
Pathway Network	
Provide safe and convenient walk/Cycle path network.	- Reduces fuel consumption and emission levels through the use of efficient transport modes. - Encouragement of cycling and walking has positive health outcomes. - Promotes health benefits. - Improves transport opportunities for local trips. - Ensures an acceptable level of amenity for users.
Design Standard	Community Outcome
Road Network	
Road network system is designed and provided in accordance with: - Planning Scheme Policy 4 - Design Standards; - Queensland Streets, Austroads, DTMR and Australian Standards as referenced in	- Reduce delays during peak periods. - Improve safety by reducing vehicle speed differentials. - Supports efficient and integrated freight movement network.

the Planning Scheme Policy 4 - Design Standards; and Plans for Trunk Infrastructure – Transport (Road) Network.	
Pathway Network	
Walk/Cycle path network is designed and provided in accordance with: - Planning Scheme Policy 4 - Design Standards; - Queensland Streets, Austroads, DTMR and Australian Standards as referenced in the Planning Scheme Policy 4 - Design Standards.	- Encourage cycling and walking as acceptable alternatives. - Infrastructure provided meets recognised standards.

4.4.2 Stormwater network

Planning Standard	Community Outcome
Provide system of shared stormwater infrastructure allowing free and safe drainage of urban land while maintaining or improving the quality of run-off.	- Minimises inundation of habitable areas. - Minimises the damage and risk associated with flooding. - Minimises the impact of development on the ecological health and water quality within waterway corridor.
Ensure the use of Water Sensitive Urban Design and other types of on-site infrastructure to minimise impact on trunk infrastructure	- Provides waterways infrastructure at least life cycle cost. - Reduces the scale of shared infrastructure by optimising on site solutions. - Improves water quality at the point of discharge to benefit the waterway corridor's health.
Ensure sufficient buffers from urban development along waterway corridors for ecological links (including rehabilitation of degraded waterway corridor banks, where required).	- Maintain or improves environment amenity such as scenic values and natural construction. - Erosion and sedimentation is minimised. - Negative impacts on adjoining and downstream properties are minimised. - Protects environmentally sensitive areas from development.
Ensure natural stream processes are maintained within waterway corridors.	- Reduces the need for costly structural treatments of waterway corridor banks. - Provides for natural processes of accretion, erosion and sedimentation and reduces environmental effects from pollution. - Increases regional water quality.
Design Standard	Community Outcome
Design stormwater infrastructure to comply with: - Planning Scheme Policy 4 - Design Standards; - Queensland Urban Drainage Manual (QUDM), TMR Road Drainage Manual,	- Detain and collect stormwater to prevent ponding for prolonged periods. - Ensure that existing downstream systems are not adversely affected. - Ensure stormwater infrastructure is accessible, durable, cost-effective and easily maintainable.

and SEQWater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments; • EPA requirements and guidelines; • Land Act (1994): and • Plans for Trunk Infrastructure – Stormwater.	• Prevent erosion and the accumulation of silt and blockages by debris • Direct all drainage to the front of all lots and discharged into the street gutters, unless the topography deems it necessary for others or there are more points of lawful discharge. • Allow for the safe passage of vehicles at reduced operating speeds on streets affected by run-off. • Maintain the safety of people and property. • Maintain or improve water quality and ecological health. • Provide stormwater infrastructure that is fit for purpose and has a viable whole of life cycle cost to the community.
Implement Water Sensitive Urban Design principles to achieve on site quantity and quality treatment and minimise offsite discharge.	• Maximise the water quality on site. • Negative impacts on adjoining and downstream properties are minimised.
Implement regional and on-site attenuation measures to minimise the impact of peak run-off for the full range of events (100% AEP to Council's Defined Flood Level (DFL)) from developments, taking into account safety and risk. Design attenuation measures to maintain pre-development peak flow levels from the development site for all flood events (100% AEP to Council's Defined Flood Level (DFL)). Design attenuation measures in the same catchment to ensure that the coincident peak discharge at downstream control points is not increased.	• Reduces the cumulative impact from existing and future developments on peak flow levels. • Reduces the need to increase the size of waterway corridors and underground drainage. • Increases active and passive recreation opportunities. • Minimises the impact on the environmental values of downstream waterway corridors by maintaining pre-development flows and velocities. • Reduces downstream sedimentation by slowing developed flow velocities.
Design bridges and culverts with appropriate flood protection and capacity to convey floodwater, taking into account the Council's road hierarchy. Construction of bridges and culverts must not adversely impact on the natural environment, such as through the loss of vegetation and undesirable impacts on bio-diversity. Design bridges and culverts to maintain fauna and recreational links.	• Ensures road crossings operate safely in times of inundation. • Reduces the risk of flooding for upstream properties. • Provides opportunities for extended pedestrian and bicycle links. • Enhances ecological links.

4.4.3 Public parks and community land network

Planning Standard	Community Outcome
Provide a connected and accessible network of parks, open space, and community facilities that meets the needs of the LGA's residents and visitors.	- Provides opportunities for access and increased usage of open space, recreational and community facilities. - Provides for an appropriate balance of land uses and ensures high levels of amenity in the urban form. - Provides a basis for a healthy and active community.
Ensure strong linkages and where possible co-location of existing and future parks, open space and community facilities in accordance with the Local Government Infrastructure Plan and Planning Scheme Policy 4 - Design Standards.	Ensures utilisation of existing and future assets while maintaining maximum access.
Provide embellishments to public parks, commensurate with the range of activities envisaged.	- Provides open space embellishments that meet the needs of the community by providing a range of facilities for social activities and/or fitness/recreational pursuits. - Ensures activities are met and contained within designated areas - reducing potential off site impacts to other more sensitive areas in the LGA.
Ensure that existing and future parks, open space and community facilities with significant environmental, waterway or cultural heritage value are managed appropriately.	- Protects and enhances items of cultural interest in the LGA for the benefit of current and future communities in the LGA. - Provides a basis for tourism opportunities. - Protection of the natural landscape ensures maintenance of quality of air, water and land resources reducing negative impacts requiring amelioration.
Design Standard	Community Outcome
Public parks and community land areas are provided in accordance with standard of provision (including area and indicative dimensions) defined in the Planning Scheme Policy 4 - Design Standards.	- Provides a standard of service for the LGA's communities as identified by the Local Government Infrastructure Plan and Planning Scheme Policy 4 - Design Standards. - Land and facilities are developed to optimise layout and use.
Flood protection for parks and community facilities are achieved in accordance with Planning Scheme Policy 4 - Design Standards.	Ensure adequate provision of safe, accessible and usable facilities.
Access to public parks and community facilities are to be in accordance with Planning Scheme Policy 4 - Design Standards.	Provides community access to a range of park, open space and community facilities.
Public park embellishments are provided in accordance with Planning Scheme Policy 4 - Design Standards.	Provides a range of park types that are suitability embellished to meeting their purpose within the park hierarchy.

4.5 Plans for trunk infrastructure

- (1) The plans for trunk infrastructure identify the trunk infrastructure networks intended to service the existing and assumed future urban development at the desired standard of service up to 2056.

4.5.1 Plans for trunk infrastructure maps

- (1) The existing and future trunk infrastructure networks are shown on the following maps in Schedule 3—Local government infrastructure plan mapping and tables:
 - (a) Local Government Infrastructure Plan Transport Maps 1 – 13
 - (b) Local Government Infrastructure Plan Stormwater Maps 1 – 5;
 - (c) Local Government Infrastructure Plan Existing Parks and Community Land Maps 1 to 19;
 - (d) Local Government Infrastructure Plan Future Public Parks and Community Land Maps 1 to 17.
- (2) The State infrastructure forming part of transport trunk infrastructure network has been identified using information provided by the relevant State infrastructure supplier.

4.5.2 Schedule of works

- (1) Details of the existing and future trunk infrastructure networks are identified in the electronic Excel schedule of works model which can be viewed here: www.somerset.qld.gov.au
- (2) The future trunk infrastructure is identified in the following tables in Schedule 3—Local government infrastructure plan mapping and tables:
 - (a) for the transport network, Table SC3.2.1A—Transport (Roads) schedule of works, Table SC3.2.1B—Transport (Intersections) schedule of works, and Table SC3.2.1C—Transport (Bridges / Structures) schedule of works;
 - (b) for the public parks and community land network, Table SC3.2.2—Public parks and community land schedule of works.

4.6 Extrinsic material

The below table identifies the documents that assist in the interpretation of the local government infrastructure plan and are extrinsic material under the *Statutory Instruments Act 1992*.

List of extrinsic material

Column 1 Title of document	Column 2 Date	Column 3 Author
Community Profiles and Population and Housing Data	2011	Australian Bureau of Statistics (ABS)
Local Government Area Profile	2010	Office of Economic and Statistical Research
Population and Housing Forecasts	2012	Planning Information Forecasting Unit
Somerset Regional Planning Project – Residential Land Study	2010	Urban Economics
Queensland Urban Drainage Manual	2013	Department of Energy and Water Supply
SEQ Regional Plan 2005-2026 Regulatory Provisions – Major Development Areas (Mapping) - Esk, Lowood and Fernvale	2006	Queensland government – Office of Urban Management
Existing and Future Parks Asset Valuation Register	2008	Somerset Regional Council (former Esk Shire)
Fernvale Master Plan	2007	Somerset Regional Council (former Esk Shire)
Roads Capital Works Funding and Scheduling Details	2008	Somerset Regional Council (former Esk Shire)
Esk Shire Council Parkland Strategy Final Report	2006	Somerset Regional Council (former Esk Shire)
Somerset Regional Council Parkland and Recreation Plan Kilcoy/Jimna Final Report	2009	Somerset Regional Council
Rural Road Valuation and Hierarchy Details	2008	Somerset Regional Council (former Esk Shire)
Somerset Regional Council - Extrinsic Material to the LGIP (and associated Spreadsheets)	2016	Integran

5 Part 5 Tables of assessment

5.1 Preliminary

The tables in this part identify the category of development, the category of assessment and assessment benchmarks for assessable development within the planning scheme area.

5.2 Reading the tables

The tables identify the following:

- (1) the category of development:
 - (a) prohibited;
 - (b) accepted including accepted development with requirements;
 - (c) assessable development that requires either code or impact assessment;
- (2) the category of assessment –code or impact- for assessable development in:
 - (a) a zone and, where used, a precinct of a zone;
 - (b) an overlay.
- (3) the assessment benchmarks for assessable development:
 - (a) whether a zone code or specific provisions in the zone code apply (shown in the ‘assessment benchmarks’ column);
 - (b) in an overlay:
 - (i) whether an overlay code applies (shown in the Tables 5.9.1 to 5.9.13 in Section 5.9); or
 - (ii) the assessment benchmarks as shown on the overlay map (noted in the “assessment benchmarks” column) applies;
 - (c) any other applicable code(s) (shown in the “assessment benchmarks” column).
- (4) any variation to the category of assessment (shown as an “if” in the “category of development and assessment” column) that applies to the development.

Note—Development will only be taken to be prohibited development under the planning scheme if it is identified as prohibited development in Schedule 10 of the Regulation

Editor’s note—Examples of matters that can vary the category of assessment are gross floor area, height, numbers of people or precinct provisions.

5.3 Categories of development and assessment

5.3.1 Process for determining the category of development and category of assessment for assessable development

The process for determining a category of development and category of assessment is:

- (1) for a material change of use, establish the use by reference to the use definitions in Schedule 1
- (2) for all development, identify the following:
 - (a) the zone or zone precinct that applies to the premises, by reference to the zone map in Schedule 2
 - (b) if an overlay applies to the premises, by reference to the overlay map in Schedule 2
- (3) determine if the development is accepted development under schedule 6 of the Regulation;

Editor’s note—Schedule 6 of the Regulation prescribes development that a planning scheme can not state is assessable development where the matters identified in the schedule are met.

- (4) determine if the development is assessable development under schedule 10 of the Regulation in section 5.4 Regulated categories of development and categories of assessment prescribed by the Regulation
- (5) if the development is not listed in the tables in section 5.4 Regulated categories of development and categories of assessment prescribed by the Regulation, determine the initial category of assessment by reference to the tables in:
 - section 5.5 Categories of development and assessment—Material change of use
 - section 5.6 Categories of development and assessment—Reconfiguring a lot

- section 5.7 Categories of development and assessment—Building work
 - section 5.8 Categories of development and assessment—Operational work
- (6) a precinct of a zone may change the categories of development or assessment and this will be shown in the 'Categories of development and assessment' column of the tables in sections 5.5, 5.6, 5.7 and 5.8
- (7) if an overlay applies refer to section 5.10 Category of assessment—Overlays, to determine if the overlay further changes the category of assessment.

5.3.2 Determining the category of development and categories of assessment

- (1) A material change of use is assessable development requiring impact assessment :
 - (a) unless the table of assessment states otherwise
 - (b) if a use is not listed or defined
 - (c) unless otherwise prescribed within the Act or the Regulation.
- (2) Reconfiguring a lot is assessable development requiring code assessment unless the tables of assessment state otherwise or unless otherwise prescribed within the Act or the Regulation.
- (3) Building work and operational work is accepted development, unless the tables of assessment state otherwise or unless otherwise prescribed within the Act or the Regulation.
- (4) Where an aspect of development is proposed on premises included in more than one zone or overlay, the category of development and assessment for that aspect is the highest category under each of the applicable zones or overlays.
- (5) Where development is proposed on premises partly affected by an overlay, the category of development or assessment for the overlay only relates to the part of the premises affected by the overlay.
- (6) For the purposes of Schedule 6, Part 2 Material change of use section (2)(2)(d) (i) or (ii) of the Regulation, an overlay does not apply to the premises if the development meets the acceptable outcomes that form the requirements for accepted development in the relevant overlay code.
- (7) If development is identified as having a different category of development and category of assessment under a zone than under an overlay, the highest category of development and assessment applies as follows—
 - (a) accepted development subject to requirements prevails over accepted development;
 - (b) code assessment prevails over accepted development subject to requirements and accepted development;
 - (c) impact assessment prevails over code assessment , accepted development subject to requirements and accepted development.

Note - Where a development is comprised of a number of defined uses (not in an activity group) the highest level of assessment applies.

- (8) The category of development for development identified in Part 5, section 5.4, Regulated categories of development and categories of assessment prescribed by the Regulation overrides all other categories of development or assessment for that development under the planning scheme to the extent of any inconsistency.

Editor's note—Schedule 7 of the Regulation also identifies development that the state categorises as accepted development. Some development in the schedule may still be made assessable under the planning scheme.

- (9) Despite all of the above, if development is listed as prohibited development under Schedule 10 of the Regulation, a development application cannot be made.

Note—Development is to be only taken to be prohibited development under the planning scheme only if it is identified in Schedule 10 of the Regulation.

5.3.3 Determining the requirements for accepted development and assessment benchmarks and other matters for assessable development

- (1) Accepted development does not require a development approval and is not subject to assessment benchmarks. However, certain requirements may apply to some types of development for it to be accepted development. Where nominated in the tables of assessment,

- accepted development must comply with the requirements identified as acceptable outcomes in the relevant parts of the applicable code(s) as identified in the relevant column.
- (2) Accepted development that does not comply with one or more of the nominated acceptable outcomes in the relevant parts of the applicable code(s) becomes code assessable development unless otherwise specified.
 - (3) The following rules apply in determining assessment benchmarks for each category of development and assessment.
 - (4) Code assessable development:
 - (a) is to be assessed against all the assessment benchmarks identified in the assessment benchmarks column
 - (b) that occurs as a result of the development becoming code assessable pursuant to sub-section 5.3.3(2), must:
 - (i) be assessed against the assessment benchmarks for the development application, limited to the subject matter of the required acceptable outcomes that were not complied with or were not capable of being complied with under sub-section 5.3.3(1)
 - (ii) comply with all required acceptable outcomes identified in sub-section 5.3.3(1) , other than those mentioned in sub-section 5.3.3(2) ;
 - (c) that complies with:
 - (i) the purpose and overall outcomes of the code complies with the code
 - (ii) the performance or acceptable outcomes complies with the purpose and overall outcomes of the code;
 - (d) is to be assessed against any assessment benchmarks for the development identified in section 26 of the Regulation.

Note—Section 27 of the Regulation also identifies the matters that code assessment must have regard to.

- (5) Impact assessable development:
 - (a) is to be assessed against the identified assessment benchmarks in the assessment benchmarks column (where relevant)
 - (b) assessment is to have regard to the whole of the planning scheme, to the extent relevant
 - (c) is to be assessed against any assessment benchmarks for the development identified in section 30 of the Regulation.

Note—The first row of each table of assessment is to be checked to confirm if there are assessment benchmarks that commonly apply to general scenarios in the zone or overlay.

Editor's note—Section 31 of the Regulation identifies the matters that impact assessment must have regard to.

5.4 Regulated categories of development and categories of assessment prescribed by the Regulation

For the development specified in the “use”, “zone” or “development” columns, the categories of development and assessment are prescribed.

Table 5.4.1—Development under schedules 6 and 7 of the Regulation: material change of use

Use	Categories of development and assessment	Assessment benchmarks and Requirements for Accepted development
Community residence	Accepted development subject to requirements	
	Editor's note – Refer to the material change of use tables for category of assessment for community residence that do not comply with the requirements for accepted development	Editor's note – requirements for community residence development that may not be made assessable under a planning scheme are set out in schedule 6, part 2 item 6 of the Regulation
Cropping where forestry for wood production	Accepted development subject to requirements	
	If in a Rural zone and complying with the acceptable outcomes of the applicable codes	As prescribed in schedule 13 of the Regulation
	Code assessment	
	If not Accepted development subject to requirements	- As prescribed in schedule 13 of the Regulation - Rural zone code - Transport, access and parking code

Table 5.4.2—Regulated categories of development and categories of assessment: reconfiguring a lot

Zone	Categories of development and assessment	Assessment benchmarks
Residential zone category or industry zone category (other than a rural residential zone)	Code assessment	
	Subdivision of one lot into two lots (and associated operational work) if code assessment is required under Schedule 10, part12 of the Regulation	Note – Assessment benchmarks for the reconfiguring a lot are set out in schedule 12 of the Regulation

Table 5.4.3— Regulated categories of development and categories of assessment: operational work

Zone	Level of assessment	Assessment benchmarks
Residential zone category or industry zone category	Code assessment	
	Operational work associated with reconfiguring a lot requiring code assessment under Schedule 10 part12 division2 of the Regulation	Note – Assessment benchmarks for the reconfiguring a lot are set out in schedule 12 of the Regulation.

5.5 Categories of development and assessment—Material change of use

The following tables identify the categories of development and assessment for development in a zone for making a material change of use.

Table 5.5.1—Centre zone

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
Agricultural supplies store	Accepted development	
	If: (a) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only minor building work; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Bar	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Car wash	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Caretaker's accommodation	Code assessment	
		- Centre zone code - Caretaker's accommodation code - Services, works and infrastructure code - Transport, access and parking code
Child care centre	Code assessment	
		- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
	Code assessment	

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
Community care centre		- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Community use	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Dwelling house	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone; Dwelling house; and Transport, access and parking codes.	Not applicable
	Impact assessment	
	If: (a) a <i>secondary dwelling</i> ; or (b) not Accepted development subject to requirements.	The planning scheme
Dwelling unit	Code assessment	
		- Centre zone code - Services, works and infrastructure code - Transport, access and parking code
Emergency services	Code assessment	
		- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Environment facility	Code assessment	
		- Centre zone code - Services, works and infrastructure code

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
		Transport, access and parking code
Food and drink outlet	Accepted development	
	If: (a) a <i>temporary use</i> ; or (b) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Function facility	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Funeral parlour	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Garden centre	Accepted development	
	If: (a) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Hardware and trade supplies	Accepted development	
	If: (a) involving no building work.	Not applicable

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Health care services	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Home based business	Accepted development	
	If: (a) <i>a home occupation</i> .	Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; and (b) complying with all the identified requirements in the Home based business code.	Not applicable
	Code assessment	
	If: (a) involving a <i>home based business</i> other than a <i>home occupation, bed and breakfast, home based child care or industrial home enterprise</i> .	- Centre zone code - Home based business code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) <i>a bed and breakfast</i> ; or (b) <i>industrial home enterprise</i> ; (c) <i>home based child care</i> where not complying with all the identified requirements	The planning scheme

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
	in the Home based business code.	
Hotel	Code assessment	
		- Centre zone code - Business activities code - Short-term accommodation code (if involving <i>short-term accommodation</i>) - Services, works and infrastructure code - Transport, access and parking code
Indoor sport and recreation	Code assessment	
		- Centre zone code - Recreation activities code - Services, works and infrastructure code - Transport, access and parking code
Market	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Multiple dwelling	Code assessment	
		- Centre zone code - Multiple dwelling and dual occupancy code - Services, works and infrastructure code - Transport, access and parking code
Nightclub entertainment facility	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Office	Accepted development	
	If: (a) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
		- Services, works and infrastructure code - Transport, access and parking code
Park	Accepted development	
		Not applicable
Parking station	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Place of worship	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Renewable energy facility	Accepted development	
	If: (a) A <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Rooming accommodation	Code assessment	
		- Centre zone code - Short-term accommodation code - Services, works and infrastructure code - Transport, access and parking code
Service industry	Accepted development	
	If: (a) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Service station	Impact assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Shop	Accepted development	
	If: (a) involving no building work.	Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Shopping centre	Code assessment	
		- Centre zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Short term accommodation	Code assessment	
		- Centre zone code - Short-term accommodation code - Services, works and infrastructure code - Transport, access and parking code
Substation	Code assessment	
		- Centre zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Telecommunications facility	Code assessment	
		Centre zone code

Centre zone		
Use	Categories of development and assessment	Assessment benchmarks
		• Telecommunications facilities code • Services, works and infrastructure code • Transport, access and parking code
Theatre	Code assessment	
		• Centre zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	• Not applicable
	Impact assessment	
	If: (a) not Accepted development.	• The planning scheme
Veterinary services	Accepted development	
	If: (a) involving no building work.	• Not applicable
	Accepted development subject to requirements	
	If: (a) involving only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Centre zone code.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Centre zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
Impact assessment		
Any other use not listed in this table. Any other undefined use.		• The planning scheme

Table 5.5.2—Community facilities zone

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
Caretaker's accommodation	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone; Caretaker's accommodation; Services, works and infrastructure; Transport, access and parking codes.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Community facilities zone code • Caretaker's accommodation code • Services, works and infrastructure code • Transport, access and parking code
Cemetery	Accepted development subject to requirements	
	If: (a) involving a material increase in the intensity or scale of an existing <i>cemetery</i> ; and (b) complying with all the identified requirements in the Community facilities zone; Services, works and infrastructure; Transport, access and parking codes.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Community facilities zone code • Community activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) involving a material change of use for a new <i>cemetery</i> .	• The planning scheme
Child care centre	Code assessment	
		• Community facilities zone code • Community activities code • Services, works and infrastructure code • Transport, access and parking code

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
Club	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the Community facilities zone; Community activities; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Community care centre	Code assessment	
		- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Community use	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Educational establishment	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying all the identified requirements in the Community facilities zone; Community activities; Services, works and	Not applicable

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
	infrastructure; Transport, access and parking codes.	
	Code assessment	
	If: not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Emergency services	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone; Community activities; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Food and drink outlet	Accepted development	
	If: (a) <i>a temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) <i>not a temporary use</i> .	The planning scheme
Health care services	Code assessment	
		- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Hospital	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone; Community activities; Services, works and	Not applicable

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
	infrastructure; Transport, access and parking codes.	
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Indoor sport and recreation	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Recreation activities code - Services, works and infrastructure code - Transport, access and parking code
Market	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Code assessment	
	If: (a) not Accepted development.	- Community facilities zone code - Services, works and infrastructure code - Transport, access and parking code
Outdoor sport and recreation	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Recreation activities code - Services, works and infrastructure code - Transport, access and parking code
Park	Accepted development	

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
		Not applicable
Place of worship	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Community facilities zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Community facilities zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Residential care facility	Code assessment	
		- Community facilities zone code - Retirement and residential care facility code - Services, works and infrastructure code - Transport, access and parking code
Substation	Code assessment	
		- Community facilities zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Code assessment	
	If: (a) not Accepted development.	Community facilities zone code

Communities facilities zone		
Use	Categories of development and assessment	Assessment benchmarks
		• Utility installation and substation code • Services, works and infrastructure code • Transport, access and parking code
Impact assessment		
Any other use not listed in this table. Any other undefined use.		• The planning scheme

Table 5.5.3—Emerging community zone

Emerging community zone		
Use	Categories of development and assessment	Assessment benchmarks
Animal husbandry	Accepted development subject to requirements	
	If: (a) the site is greater than one (1) hectares in area; and (b) complying all the identified requirements in the Emerging community zone; Services, works and infrastructure; Transport, access and parking codes.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Emerging community zone code • Services, works and infrastructure code • Transport, access and parking code
Animal keeping	Accepted development subject to requirements	
	If: (a) <i>apiculture</i> ; or (b) <i>horse keeping</i> on a site greater than one (1) hectare in area; and (c) complying with Rural zone and Animal keeping codes.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; or (b) Impact assessment; or (c) <i>aviary</i> .	• Rural zone code • Animal keeping code
	Impact assessment	
	If: (a) <i>horse keeping</i> on a site less than one (1) hectare in area; or (b) a <i>cattery</i> or <i>kennel</i> .	• The planning scheme
Cropping other than forestry for wood production	Accepted development	
	If: (a) the site is greater than two (2) hectares in area; and (b) cultivation is not undertaken within 20 metres of: (i) the <i>site boundary</i> of a lot located in the following zones: a. General residential zone (excluding the Park residential precinct) or b. the Township zone; (ii) a <i>sensitive land use</i> on an <i>adjoining premises</i> ; (iii) a <i>dwelling house</i> on the same site.	• Not applicable

Emerging community zone		
Use	Categories of development and assessment	Assessment benchmarks
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Emerging community zone code - Services, works and infrastructure code - Transport, access and parking code
Dwelling house	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Dwelling house; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) for a secondary dwelling; or (b) not Accepted development subject to requirements.	- Emerging community zone code - Dwelling house code - Transport, access and parking code
Home based business	Accepted development	
	If: (a) <i>a home occupation.</i>	Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; and (b) complying all the identified requirements in the Home based business code.	Not applicable
	Code assessment	
	If: (a) involving a <i>home based business</i> other than a <i>home occupation, home based child care or industrial home enterprise.</i>	- Emerging community zone code - Home based business code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) <i>industrial home enterprise</i> ; or (b) <i>home based child care</i> where not complying with all the identified requirements in the Home based business code.	The planning scheme
Intensive horticulture	Code assessment	
		- Emerging community zone code - Services, works and infrastructure code - Transport, access and parking code
Park	Accepted development	
		Not applicable
	Accepted development	

Emerging community zone		
Use	Categories of development and assessment	Assessment benchmarks
Renewable energy facility	If: (a) <i>A minor renewable energy facility.</i>	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility.</i>	The planning scheme
Roadside stall	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Roadside stall code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Emerging community zone code - Roadside stall code
Substation	Code assessment	
		- Emerging community zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.4—General residential zone

General residential zone		
Use	Categories of development and assessment	Assessment benchmarks
Dual occupancy	Code assessment	
		• General residential zone code • Multiple Dwelling and Dual Occupancy code • Services, works and infrastructure code • Transport, access and parking code
Dwelling house	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Dwelling house; Transport, access and parking codes.	• Not applicable
	Code assessment	
	If: (a) for a <i>secondary dwelling</i> ; or (b) not Accepted development subject to requirements.	• General residential zone code • Dwelling house code • Transport, access and parking code
Home based business	Accepted development	
	If: (a) a <i>home occupation</i> .	• Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; and (b) complying with all the identified requirements in the Home based business code.	• Home based business code
	Code assessment	
	If: (a) involving a <i>home based business</i> other than a <i>home occupation, bed and breakfast, home based child care or industrial home enterprise</i> ; or (b) not Accepted development subject to requirements or impact assessment.	• General residential zone code • Home based business code • Services, works and infrastructure code • Transport, access and parking code
Park	Impact assessment	
	If: (a) a <i>bed and breakfast</i> ; or (b) <i>industrial home enterprise</i> ; or (c) <i>home based child care</i> where not complying with all the identified requirements of the applicable codes.	• The planning scheme
Park	Accepted development	

General residential zone		
Use	Categories of development and assessment	Assessment benchmarks
		Not applicable
Renewable energy facility	Accepted development	
	If: (a) <i>a minor renewable energy facility.</i>	Not applicable
	Impact assessment	
	If: (a) <i>not a minor renewable energy facility.</i>	The planning scheme
Residential care facility	Code assessment	
	If: (a) not located in the Park residential precinct.	- General residential zone code - Retirement and residential care facility code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Retirement facility	Code assessment	
	If: not located in the Park residential precinct.	- General residential zone code - Retirement and residential care facility code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Sales office	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the General residential zone; Sales office; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- General residential zone code - Sales office code - Services, works and infrastructure code - Transport, access and parking code
Substation	Code assessment	
	If: (a) located in the Park residential precinct.	General residential zone code

General residential zone		
Use	Categories of development and assessment	Assessment benchmarks
		- Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Tourist park	Code assessment	
	If: (a) not located in the Park residential precinct ; and (b) involving a material increase in the intensity or scale of an existing <i>tourist park</i> .	- General residential zone code - Tourist park and relocatable home park code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
Utility installation	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.5—High impact industry zone

High impact industry zone		
Use	Categories of development and assessment	Assessment benchmarks
Caretaker's accommodation	Code assessment	
		- High impact industry zone code - Caretaker's accommodation code - Services, works and infrastructure code - Transport, access and parking code
High impact industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the high impact industry use thresholds in Schedule 1; and (c) complying with all the identified requirements in the High impact industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements and (b) complying with the high impact industry use thresholds in Schedule 1.	- High impact industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not complying with the high impact industry use thresholds in Schedule 1.	The planning scheme
Low impact industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the High impact industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- High impact industry zone code - Industrial activities code - Services, works and infrastructure code

High impact industry zone		
Use	Categories of development and assessment	Assessment benchmarks
		Transport, access and parking code
Medium impact industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the all the identified requirements in the High impact industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- High impact industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
Park	Accepted development	
		Not applicable
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Service industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the all the identified requirements in the High impact industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- High impact industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
Substation	Code assessment	
		- High impact industry zone code - Utility installation and substation code

High impact industry zone		
Use	Categories of development and assessment	Assessment benchmarks
		- Services, works and infrastructure code - Transport, access and parking code
Telecommunications facility	Code assessment	
		- High impact industry zone code - Telecommunications facilities code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Code assessment	
	If: (a) not accepted development.	- High impact industry zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Warehouse	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the all the identified requirements in the High impact industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- High impact industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.6—Industry zone

Industry zone		
Use	Categories of development and assessment	Assessment benchmarks
Agricultural supplies store	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone; Services, works and infrastructure code; and Transport, access and parking code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Industry zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Aquaculture	Code assessment	
	If: (a) <i>low impact aquaculture</i> .	- Industry zone code - Aquaculture code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not <i>low impact aquaculture</i> .	The planning scheme
Bulk landscape supplies	Code assessment	
		- Industry zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Caretaker's accommodation	Code assessment	
		- Industry zone code - Caretaker's accommodation code - Services, works and infrastructure code - Transport, access and parking code
Garden centre	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone; Services, works and	Not applicable

Industry zone		
Use	Categories of development and assessment	Assessment benchmarks
	infrastructure code; and Transport, access and parking code.	
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Industry zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
Hardware and trade supplies	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone; Services, works and infrastructure code; and Transport, access and parking codes.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Industry zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
Low impact industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with the low impact industry use thresholds in Schedule 1; and (c) complying with all the identified requirements in the Industry zone code.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements, and (b) complying with the low impact industry use thresholds in Schedule 1.	• Industry zone code • Industrial activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not complying with the low impact industry use thresholds in Schedule 1.	• The planning scheme
Outdoor sales	Accepted development subject to requirements	
	If:	• Not applicable

Industry zone		
Use	Categories of development and assessment	Assessment benchmarks
	(a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone; Services, works and infrastructure code; and Transport, access and parking code.	
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Industry zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
Park	Accepted development	
		• Not applicable
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	• Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	• The planning scheme
Research and technology industry	Code assessment	
		• Industry zone code • Industrial activities code • Services, works and infrastructure code • Transport, access and parking code
Service industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone code.	• Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Industry zone code • Industrial activities code • Services, works and infrastructure code • Transport, access and parking code
Service station	Code assessment	
		• Industry zone code • Business activities code • Services, works and infrastructure code

Industry zone		
Use	Categories of development and assessment	Assessment benchmarks
		Transport, access and parking code
Showroom	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (c) not Accepted development subject to requirements.	- Industry zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Substation	Code assessment	
		- Industry zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Telecommunications facility	Code assessment	
		- Industry zone code - Telecommunications facilities code - Services, works and infrastructure code - Transport, access and parking code
Transport depot	Code assessment	
		- Industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Code assessment	
	If: (a) not Accepted development.	- Industry zone code - Utility installation and substation code

Industry zone		
Use	Categories of development and assessment	Assessment benchmarks
		- Services, works and infrastructure code - Transport, access and parking code
Warehouse	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Industry zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Industry zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.7—Recreation and open space zone

Recreation and open space zone		
Use	Categories of development and assessment	Assessment benchmarks
Caretaker's accommodation	Code assessment	
		• Recreation and open space zone code • Caretaker's accommodation code • Services, works and infrastructure code • Transport, access and parking code
Club	Code assessment	
	If: (a) ancillary to a recreation activity operating on the same site.	• Recreation and open space zone code • Community activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme
Community use	Code assessment	
		• Recreation and open space zone code • Community activities code • Services, works and infrastructure code • Transport, access and parking code
Environment facility	Code assessment	
		• Recreation and open space zone code • Services, works and infrastructure code • Transport, access and parking code
Food and drink outlet	Accepted development	
	If: (a) <i>a temporary use</i> .	• Not applicable
	Code assessment	
	If: (a) ancillary to a recreation activity operating on the same site; and (b) having a <i>gross floor area</i> equal to or less than 50 square metres.	• Recreation and open space zone code • Business activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme

Recreation and open space zone		
Use	Categories of development and assessment	Assessment benchmarks
Indoor sport and recreation	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Recreation and open space zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Recreation and open space zone code - Recreation activities code - Services, works and infrastructure code - Transport, access and parking code
Landing	Code assessment	
		- Recreation and open space zone code - Services, works and infrastructure code - Transport, access and parking code
Major sport, recreation and entertainment facility	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Market	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Motor sport facility	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Outdoor sport and recreation	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in	Not applicable

Recreation and open space zone		
Use	Categories of development and assessment	Assessment benchmarks
	the Recreation and open space zone code.	
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Recreation and open space zone code - Recreation activities code - Services, works and infrastructure code - Transport, access and parking code
Park	Accepted development	
		Not applicable
Parking station	Code assessment	
	If: (a) a Council-owned facility.	- Recreation and open space zone code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not a Council-owned facility.	The planning scheme
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Substation	Code assessment	
		- Recreation and open space zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Theatre	Code assessment	
		- Recreation and open space zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Tourist attraction	Accepted development	

Recreation and open space zone		
Use	Categories of development and assessment	Assessment benchmarks
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Tourist Park	Code assessment	
	If: (a) involving a material increase in the intensity or scale of an existing <i>tourist park</i> .	- Recreation and open space zone code - Tourist park and relocatable home park code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.8—Rural residential zone

Rural residential zone		
Use	Categories of development and assessment	Assessment benchmarks
Animal husbandry	Accepted development subject to requirements	
	If: (a) the site is greater than one (1) hectare in area; and (b) complying with all the identified requirements in the Rural residential zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Rural residential zone code - Services, works and infrastructure code - Transport, access and parking code
Dwelling house	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Dwelling house; and Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) for a <i>secondary dwelling</i> ; or (b) not Accepted development subject to requirements.	- Rural residential zone code - Dwelling house code - Transport, access and parking code
Home based business	Accepted development	
	If: (a) a <i>home occupation</i> .	Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; and (b) complying with all the identified requirements in the Home based business code.	Not applicable
	Code assessment	
	If: (a) involving a <i>home based business</i> other than a <i>home occupation, bed and breakfast, home based child care or industrial home enterprise</i> .	- Rural residential zone code - Home based business code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) a <i>bed and breakfast</i> ; or (b) <i>industrial home enterprise</i> ; or (c) <i>home based child care</i> where not Accepted development subject to requirements.	The planning scheme
Park	Accepted development	
		Not applicable

Rural residential zone		
Use	Categories of development and assessment	Assessment benchmarks
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Substation	Code assessment	
		- Rural residential zone code - Utility installation and substation code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

Table 5.5.9—Rural zone

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
Animal husbandry	Accepted development subject to requirements	
	If: (a) the site is greater than one (1) hectare in area; and (b) complying with all the identified requirements in the Rural zone; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: not Accepted development subject to requirements.	- Rural zone code - Services, works and infrastructure code - Transport, access and parking code
Animal keeping	Accepted development subject to requirements	
	If: (a) <i>apiculture</i> ; or (b) <i>horse keeping</i> on a site greater than one (1) hectare in area; and (c) complying with all the identified requirements in the Rural zone; Animal keeping codes.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements or Impact assessment; or (b) <i>aviary</i> .	- Rural zone code - Animal keeping code
	Impact assessment	
	If: (c) <i>horse keeping</i> on a site less than one (1) hectare in area; or (d) a <i>cattery</i> or <i>kennel</i> .	The planning scheme
Aquaculture	Code assessment	
	If: (a) low impact <i>aquaculture</i> .	- Rural zone code - Aquaculture code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not <i>low impact aquaculture</i> .	The planning scheme
Bulk landscape supplies	Code assessment	
		- Rural zone code - Business activities code - Services, works and infrastructure code

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
		Transport, access and parking code
Caretaker's accommodation	Code assessment	
		- Rural zone code - Caretaker's accommodation code - Services, works and infrastructure code - Transport, access and parking code
Cropping other than forestry for wood production	Accepted development	
	If: (a) the site is greater than two (2) hectares in area; and (b) cultivation is not undertaken within 20 metres of: (i) the <i>site boundary</i> of a lot located in the following zones: a. General residential zone (excluding the Park residential precinct); or b. Township zone; (ii) a <i>sensitive land use</i> on an <i>adjoining premises</i>; (iii) a <i>dwelling house</i> on the same site.	Not applicable
	Code assessment	
	If: (a) not Accepted development.	Rural zone code
Dwelling house	Accepted development subject to requirements	
	If: (a) the lot: (i) is equal to or greater than 4,000 square metres in area; and (ii) has frontage to and access from a road identified as a formed road in Council's road register; and (b) complying with all the identified requirements in the Dwelling house; and Transport, access and parking codes; or (c) not for a secondary dwelling.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; or (b) for a <i>secondary dwelling</i>.	- Rural zone code - Dwelling house code - Transport, access and parking code
Environment facility	Code assessment	

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
		- Rural zone code - Services, works and infrastructure code - Transport, access and parking code
Food and drink outlet	Code assessment	
	If: (a) ancillary to a <i>nature-based tourism, short-term accommodation, tourist park or winery</i> use; and (b) has a <i>gross floor area</i> that is equal to or less than 250 square metres.	- Rural zone code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Function Facility	Code assessment	
		- Rural zone code - Services, works and infrastructure code - Transport, access and parking code
Home based business	Accepted development	
	If: (a) a <i>home occupation</i> .	Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; or (b) a <i>bed and breakfast</i> with up to three (3) rooms accommodating guests; and (c) complying with all the identified requirements in the Home based business code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; and (b) not involving a <i>home occupation</i> or <i>home based child care</i> ; and (c) not involving a <i>bed and breakfast</i> with more than three (3) rooms accommodating guests.	- Rural zone code - Home based business code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Intensive animal industry	Accepted development subject to requirements	
	If keeping poultry in <i>free range</i> standards:	Rural zone code

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
	(a) Site has a minimum area of 20 hectares; and (b) Not involving more than nine (9) hens and one (1) rooster per hectare.	
	Code assessment	
	If for: (c) 150 or less standard cattle units; or (d) 1000 or less standard sheep units; or (e) 400 or less standard pig units; or (f) 1000 or less birds.	- Rural zone code - Intensive Animal Industry Code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Intensive horticulture	Accepted development subject to requirements	
	If: (a) the site is greater than two (2) hectares in area; and (b) intensive horticulture is not undertaken within 20 metres of: (i) the <i>site boundary</i> of a lot located in the following zones: a. General residential zone (excluding the Park residential precinct); or b. Township zone; (ii) a <i>sensitive land use</i> on an <i>adjoining premises</i> ; (iii) a <i>dwelling house</i> on the same site; and (c) complying with all the identified requirements in the Rural zone codes	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	Rural zone code
Landing	Code assessment	
		- Rural zone code - Services, works and infrastructure code - Transport, access and parking code
Outdoor sport and recreation	Accepted development subject to requirements	
	If: (a) Involving no building works or only <i>minor building works</i> ;	Rural zone code

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
	(b) On land adjacent to the Brisbane Valley Rail Trail; (c) Involving <i>Rail Trail activities</i> ; and (d) complying with all the identified requirements in the Rural zone codes	
	Code assessment	
	If: (a) Not accepted development subject to requirements; (b) On land adjacent to the Brisbane Valley Rail Trail; and (c) Involving <i>Rail Trail activities</i> ;	• Rural zone code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) Not code assessable	• The planning scheme
Outstation	Code assessment	
		• Rural zone code • Services, works and infrastructure code • Transport, access and parking code
Major sport, recreation and entertainment facility	Accepted development	
	If: (a) <i>a temporary use.</i>	• Not applicable
	Impact assessment	
	If: (a) <i>not a temporary use.</i>	• The planning scheme
Medium impact industry	Code assessment	
	If: (a) involving a concrete batching plant; and (b) located on land used for <i>extractive industry.</i>	• Rural zone code • Industrial activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme
Motor sport facility	Accepted development	
	If: <i>a temporary use.</i>	• Not applicable
	Impact assessment	
	If: (a) <i>not a temporary use.</i>	• The planning scheme
Nature-based tourism	Accepted development subject to requirements	
	If : (a) no short term accommodation is provided; and (b) complying with all the identified requirements in the Rural zone; Services,	• Not applicable

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
	works and infrastructure; and Transport, access and parking codes.	
	Code assessment	
	If: (a) not Accepted development subject to requirements; (b) providing up to six (6) accommodation units; and (c) having a <i>gross floor area</i> that is equal to or less than 500 square metres.	- Rural zone code - Short-term accommodation code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Park	Accepted development	
		Not applicable
Permanent plantation	Accepted development	
		Not applicable
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Code assessment	
	If: (a) a solar panel array covering an area that is equal to or less than 500 square metres.	- Rural zone code - Renewable energy facility code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) a <i>renewable energy facility</i> other than a solar panel array; or (b) not Code assessment.	The planning scheme
Resort complex	Impact assessment	
		The planning scheme
Roadside stall	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Roadside stall code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Rural zone code - Roadside stall code
Rural industry	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Rural zone; Rural industry; Services, works and infrastructure;	Not applicable

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
	Transport, access and parking code.	
	Code assessment	
	If: (a) not Accepted development subject to requirements.	• Rural zone code • Rural industry code • Services, works and infrastructure code • Transport, access and parking code
Rural workers accommodation	Code assessment	
		• Rural zone code • Rural workers accommodation code • Services, works and infrastructure code • Transport, access and parking code
Shop	Code assessment	
	If: (a) ancillary to a <i>nature-based tourism, short-term accommodation, tourist park or winery</i> use; and (b) has a <i>gross floor area</i> that is equal to or less than 250 square metres.	• Rural zone code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme
Short-term accommodation	Accepted development subject to requirements	
	If: (d) Providing up to six (6) accommodation units.	• Short term accommodation code • Transport, access and parking code
	Code assessment	
	If: (a) not Accepted development subject to requirements; (b) providing up to 10 accommodation units; (c) having a gross floor area this is equal to or less than 1000m ² .	• Rural zone code • Short-term accommodation code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme
Substation	Code assessment	
		• Rural zone code • Utility installation and substation code • Services, works and infrastructure code • Transport, access and parking code
	Code assessment	

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
Telecommunications facility		- Rural zone code - Telecommunications facilities code - Services, works and infrastructure code - Transport, access and parking code
Tourist attraction	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>temporary use</i> .	The planning scheme
Tourist park	Accepted development subject to requirements	
	If: (a) involving up to 10 sites; and (b) complying with all the identified requirements in the Rural zone; Tourist park and relocatable home park; Services, works and infrastructure; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; and (b) involving a material increase in the intensity or scale of an existing <i>tourist park</i> ; or (c) for a new <i>tourist park</i> of up to 50 sites.	- Rural zone code - Tourist park and relocatable home park code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or (b) not involving the storage or treatment of water, sewage or waste.	Not applicable
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Wholesale nursery	Code assessment	
		- Rural zone code - Rural industry code - Services, works and infrastructure code - Transport, access and parking code

Rural zone		
Use	Categories of development and assessment	Assessment benchmarks
Winery	Code assessment	
		• Rural zone code • Rural industry code • Services, works and infrastructure code • Transport, access and parking code
Impact assessment		
Any other use not listed in this table. Any other undefined use.		• The planning scheme

Table 5.5.10—Township zone

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
Agricultural supplies store	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Bar	Code assessment	
		- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Bulk landscape supplies	Code assessment	
		- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Caretaker's accommodation	Code assessment	
		- Township zone code - Caretaker's accommodation code - Services, works and infrastructure code - Transport, access and parking code
Community use	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Township zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
Dwelling house	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Dwelling house; Transport, access and parking codes.	Not applicable
	Code assessment	
	If: (a) a <i>secondary dwelling</i> ; or (b) not Accepted development subject to requirements.	- Township zone code - Dwelling house code - Transport, access and parking code
Educational establishment	Code assessment	
		- Township zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Emergency services	Code assessment	
		- Township zone code - Community activities code - Services, works and infrastructure code - Transport, access and parking code
Food and drink outlet	Accepted development	
	If: (a) a <i>temporary use</i> .	Not applicable
	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; and (b) having a <i>gross floor area</i> 250 square metres or less.	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Hardware trade and supplies	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	Not applicable

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
	Code assessment	
	If: (a) not Accepted development subject to requirements.	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Home based business	Accepted development	
	If: (a) a <i>home occupation</i> .	Not applicable
	Accepted development subject to requirements	
	If: (a) <i>home based child care</i> ; (b) a ' <i>bed and breakfast</i> ' with up to three (3) rooms accommodating guests; and (c) complying with all the identified requirements in the Home based business code.	Not applicable
	Code assessment	
	If: (a) involving a <i>home based business</i> other than a <i>home occupation</i> , <i>home based child care</i> , <i>bed and breakfast</i> or <i>industrial home enterprise</i> ; and (b) not Accepted development subject to requirements.	- Township zone code - Home based business code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) <i>industrial home enterprise</i> ; or (b) <i>home based child care</i> where not complying with all the identified requirements in the Home based business code.	The planning scheme
Hotel	Code assessment	
	If: (a) involving a material increase in the intensity or scale of an existing <i>hotel</i> .	- Township zone code - Business activities code - Short-term accommodation code (if involving <i>short-term accommodation</i>) - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
	Accepted development subject to requirements	
Low impact industry	If:	Not applicable

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
	(a) involving no building work or only <i>minor building work</i> ; and (b) complying with the low impact industry use thresholds in Schedule 1; and (c) complying with all the identified requirements in the Township zone code	
	Code assessment	
	If: (a) involving building work other than <i>minor building work</i> ; and (b) having a <i>gross floor area</i> equal to or less than 250 square metres; and (c) complying with the low impact industry use thresholds in Schedule 1; and (d) not Accepted development subject to requirements	• Township zone code • Industrial activities code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	• The planning scheme
Market	Accepted development	
	If: (a) a <i>temporary use</i> .	• Not applicable
	Impact assessment	
Nature-based tourism	If: (a) not a <i>temporary use</i> .	• The planning scheme
	Code assessment	
	If: (a) providing up to six (6) accommodation units; and (b) having a <i>gross floor area</i> that is equal to or less than 500 square metres.	• Township zone code • Short-term accommodation code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
Office	If: (a) not Code assessment	• The planning scheme
	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	• Not applicable
	Code assessment	
	If:	• Township zone code • Business activities code

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
	(a) not Accepted development subject to requirements; and (b) having a <i>gross floor area</i> 250 square metres or less.	- Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Park	Accepted development	
		Not applicable
Renewable energy facility	Accepted development	
	If: (a) a <i>minor renewable energy facility</i> .	Not applicable
	Impact assessment	
	If: (a) not a <i>minor renewable energy facility</i> .	The planning scheme
Service industry	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; and (b) having a <i>gross floor area</i> 250 square metres or less.	- Township zone code - Industrial activities code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Service station	Code assessment	
	If: (a) involving a material increase in the intensity or scale of an existing <i>service station</i> .	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
Shop	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) complying with all the identified requirements in the Township zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; and (b) having a <i>gross floor area</i> 250 square metres or less	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
Short-term accommodation	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
	Code assessment	
	If: (a) providing up to six (6) accommodation units; and (b) having a <i>gross floor area</i> that is equal to or less than 500 square metres.	- Township zone code - Short-term accommodation code - Services, works and infrastructure code - Transport, access and parking code
Theatre	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Tourist park	Code assessment	
	If: (a) involving up to 50 sites.	- Township zone code - Tourist park and relocatable home park code - Services, works and infrastructure code - Transport, access and parking code
Utility installation	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Utility installation	Accepted development	
	If: (a) not involving the generation of electricity; or	Not applicable

Township zone		
Use	Categories of development and assessment	Assessment benchmarks
	(b) not involving the storage or treatment of water, sewage or waste.	
	Impact assessment	
	If: (a) not Accepted development.	The planning scheme
Veterinary services	Accepted development subject to requirements	
	If: (a) involving no building work or only <i>minor building work</i> ; and (b) involving no overnight boarding of animals; and (c) complying with all the identified requirements in the Township zone code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements; or (b) involving the overnight boarding of a maximum three animals; and (c) involving no building work or only <i>minor building work</i>	- Township zone code - Business activities code - Services, works and infrastructure code - Transport, access and parking code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Impact assessment		
Any other use not listed in this table. Any other undefined use.		The planning scheme

5.6 Categories of development and assessment—Reconfiguring a lot

The following table identifies the categories of development and assessment for reconfiguring a lot.

Table 5.6.1—Reconfiguring a lot

Zone	Categories of development and assessment	Assessment benchmarks
All zones	Code assessment	
	If: (a) for an easement giving access to a lot from a constructed road; or (b) for a boundary realignment.	• Reconfiguring a lot code • Services, works and infrastructure code • Transport, access and parking code
Centre zone Community facilities zone General residential zone High impact industry zone Industry zone Township zone	Code assessment	
		• Reconfiguring a lot code • Services, works and infrastructure code • Transport, access and parking code
Emerging community zone Recreation and open space zone Rural residential zone Rural zone	Code assessment	
	If: (a) complying with the minimum lot size and dimensions provided for the zone in Table 8.3.4.3.B—Minimum lot sizes and dimensions .	• Reconfiguring a lot code • Services, works and infrastructure code • Transport, access and parking code
	Impact assessment	
	If: (a) not code assessment.	• The planning scheme
Code assessment		
Any other reconfiguring a lot not listed in this table.		

Editor's note—The above categories of development and assessment apply unless otherwise prescribed within the Act or the Regulation.

5.7 Categories of development and assessment—Building work

The following table identifies the categories of development and assessment for building work regulated under the planning scheme.

Table 5.7.1—Building work

Zone	Categories of development and assessment	Assessment benchmarks
Domestic outbuilding (Class 10a)		
All zones	Accepted development subject to requirements	
	If: (a) complying with all the identified requirements in the Dwelling house code.	Not applicable
	Code assessment	
	If: (a) not Accepted development subject to requirements	Dwelling house code
Outbuilding (Class 10a)		
General residential zone	Code assessment	
		General residential zone code
Emerging Community zone	Code assessment	
		Emerging Community zone code
Rural zone	Code assessment	
		Rural zone code
Rural Residential zone	Code assessment	
		Rural Residential zone code
Township zone	Code assessment	
		Township zone code
Accepted development		
Any other building work not listed in this table.		

Note—Refer also to Part 5.9 where building work in respect to the Air transport overlay code, Local heritage overlay code and Flood hazard overlay code is regulated under the planning scheme.

Editor's note—The above categories of development and assessment apply unless otherwise prescribed within the Regulation.

5.8 Categories of development and assessment—Operational work

The following table identifies the categories of development and assessment for operational work.

Table 5.8.1—Operational work

Zone	Categories of development and assessment	Assessment benchmarks
Advertising devices⁷		
All zones	Accepted development	
	If: (a) <i>minor operational work</i> .	Not applicable
	Code assessment	
	If: (a) for a <i>billboard</i> ; and (b) located in the following zones: (i) Centre zone; (ii) Industry zone; (iii) High impact industry zone; or (iv) Township zone.	Advertising devices code
	Impact assessment	
	If: (a) not Code assessment.	The planning scheme
Filling and excavation		
All zones	Accepted development	
	If: (a) <i>minor filling and excavation</i> .	Not applicable
	Code assessment	
	If: (a) filling and excavation other than <i>minor filling and excavation</i> .	Filling and excavation code
Landscape works		
All zones	Accepted development	
	If: (a) associated with a material change of use that is Accepted development; or (b) <i>minor operational work</i> .	Not applicable
	Code assessment	
	If: (a) not Accepted development; or (b) associated with reconfiguring a lot.	Landscaping code
Vegetation clearing		
All zones	Accepted development	
	If: (a) <i>minor operational work</i>	Not applicable

⁷Advertising devices, other than for *billboards*, are administered in accordance with *Subordinate Local Law No. 1.4 (Installation of Advertising Devices) 2011*.

Zone	Categories of development and assessment	Assessment benchmarks
	Code assessment	
	If: (a) not Accepted development.	• Services, Works and Infrastructure Code • Applicable Zone Code • Applicable Overlay Code
	Other operational work	
All zones	Accepted development	
	If: (a) <i>minor operational work</i>	• Not applicable
	Code assessment	
	If: (a) not Accepted development	• Services, Works and Infrastructure Code • Applicable Zone Code • Applicable Overlay Code
Accepted development		
Any other operational work not listed in this table.		

Editor's note—The above categories of development and assessment apply unless otherwise prescribed within the Regulation.

5.9 Category of development and assessment—Overlays

The following tables identify where an overlay changes the category of development and assessment from that stated in a zone and the relevant requirements and assessment benchmarks.

Table 5.9.1—Assessment benchmarks for Agricultural land overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	Accepted development if: (a) <i>animal husbandry</i> ; or (b) <i>animal keeping</i> ; or (c) <i>caretaker's accommodation</i> ; (d) <i>cropping other than forestry for wood production</i> ; or (e) <i>dwelling house</i> ; or (f) <i>home based business</i> ; (g) <i>intensive horticulture</i> ; or (h) <i>park</i> ; or (i) <i>roadside stall</i> ; or (j) <i>rural industry</i> where a winery; (k) <i>short term accommodation</i> ; (l) <i>tourist park</i> ; and (m) not identified as assessable development in part 5.5 Categories of development and assessment – Material Change of Use.	Not applicable
	Code assessment if: (a) located within Agricultural land Class A or Class B or an Important Agricultural Area identified on the Agricultural land overlay maps OM01a-b where not Accepted development; or (b) a <i>sensitive land use</i> other than Accepted development, located within 500 metres of Agricultural land Class A or Important Agricultural Areas identified on the Agricultural land overlay maps OM01a-b ; or (c) a <i>sensitive land use</i> other than Accepted development, located within 300 metres of Agricultural land Class B identified on the Agricultural land overlay maps OM01a-b ; or (d) not identified as impact assessment in part 5.5	Agricultural land overlay code

Development	Category of development and assessment	Assessment benchmarks
	Categories of development and assessment – Material Change of Use.	
	Impact assessment if: (a) identified as impact assessment in part 5.5 Categories of development and assessment – Material Change of Use.	The planning scheme
Reconfiguring a lot	Code assessment if: (a) located within Agricultural land Class A or Class B or an Important Agricultural Area identified on the Agricultural land overlay maps OM01a-b ; or (b) located within 500 metres of Agricultural land Class A or an Important Agricultural Area identified on the Agricultural land overlay maps OM01a-b ; or (c) located within 300 metres of Agricultural land Class B identified on the Agricultural land overlay maps OM01a-b ; and (d) not identified as impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	Agricultural land overlay code
	Impact assessment if: (a) identified as impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	The planning scheme

Table 5.9.2—Assessment benchmarks and requirements for Air transport overlay

Development	Category of development and assessment	Assessment benchmarks
Building work	No change if: (a) a <i>swimming pool</i>	Not applicable
	Accepted development subject to requirements if: (e) a <i>verandah, patio, domestic outbuilding or outbuilding</i> ; and (f) complying with the requirements of the Air transport overlay code.	Air transport overlay code
	Code assessment if: (a) located within the Kilcoy non-directional beacon buffer identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or (b) located within the Mt Glorious Airservices Tower buffer identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or (c) located within the RAAF Amberley Air Base Building height restriction area identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or (d) located within the RAAF Amberley Air Base 20—25 ANEF contour identified on the Air transport overlay map OM002 ; and not complying with all the identified requirements of the applicable codes for Accepted development or (e) located within the RAAF Amberley Air Base Operational airspace—wildlife attraction restriction area identified on the Air transport overlay map OM002 ; and not complying	Air transport overlay code

Development	Category of development and assessment	Assessment benchmarks
	with all the identified requirements of the applicable codes for Accepted development.	
Material change of use	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>animal keeping</i> ; (c) <i>cropping other than forestry for wood production</i> ; (d) <i>park</i> ; or (e) <i>roadside stall</i> ; and (f) not identified as assessable development in part 5.5 Categories of development and assessment– Material Change of Use.	Not applicable
	Accepted development subject to requirements if: (a) a <i>dwelling house</i> ; and (b) complying with the requirements of the Air transport overlay code.	Not applicable
	Code assessment if not Accepted development subject to requirements and: (a) located within the Kilcoy non-directional beacon buffer identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or (b) located within the Mt Glorious Airservices Tower buffer identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or (c) located within the RAAF Amberley Air Base Building height restriction area identified on the Air transport overlay map OM002 and not complying with all the identified requirements of the applicable codes for Accepted development; or	Air transport overlay code

Development	Category of development and assessment	Assessment benchmarks
	(d) located within the RAAF Amberley Air Base 20—25 ANEF contour identified on the Air transport overlay map OM002; or (e) located within the RAAF Amberley Air Base Operational airspace—wildlife attraction restriction area identified on the Air transport overlay map OM002; and not complying with all the identified requirements of the applicable codes for Accepted development; and (f) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	• The planning scheme

Table 5.9.3—Assessment benchmarks for Biodiversity overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	No change if: (a) located within one or more of the following areas: (i) a biodiversity corridor, a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity overlay maps OM003a-b; or (ii) bushland koala habitat - primary habitat area or bushland habitat area - secondary habitat area identified on Biodiversity overlay—Koala conservation maps OM003c-d; or (iii) a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay—wetlands maps OM003e-f; or (iv) a buffer to a watercourse identified on the Catchment management overlay maps OM005a-b; and (b) complying with the acceptable outcomes of the Biodiversity overlay code.	• Biodiversity overlay code
	Code assessment if: (a) located within one or more of the following areas: (i) a biodiversity corridor, a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity overlay maps OM003a-b; or (ii) bushland koala habitat - primary habitat area or bushland habitat area - secondary habitat area identified on Biodiversity overlay—Koala conservation maps OM003c-d; or (iii) a <i>wetland</i> or wetland buffer area identified on the Biodiversity	• Biodiversity overlay code

Development	Category of development and assessment	Assessment benchmarks
	overlay—wetlands maps OM003e-f; or (iv) a buffer to a watercourse identified on the Catchment management overlay maps OM005a-b; and (b) accepted development subject to requirements where not complying with the acceptable outcomes of the Biodiversity Overlay Code; and (c) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	1. The planning scheme
Operational work	Accepted development if: (a) <i>minor operational work</i>; or (b) operational work associated with <i>cropping for forest practice</i> where on private land within one or more of the following areas: (i) a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity overlay maps OM003a-b; or (ii) bushland koala habitat - primary habitat area or bushland habitat area - secondary habitat area identified on Biodiversity overlay—Koala conservation maps OM003c-d; or (iii) a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay—wetlands maps OM003e-f; or (iv) a buffer to a watercourse identified on the Catchment management overlay maps OM005a-b.	Not applicable

Development	Category of development and assessment	Assessment benchmarks
	Code assessment if: (a) not Accepted development; and (b) not for operational work associated with <i>cropping</i> for <i>forest practice</i>; and (c) within one or more of the following areas: (i) a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity overlay maps OM003a-b; or (ii) bushland koala habitat - primary habitat area or bushland habitat area - secondary habitat area identified on Biodiversity overlay—Koala conservation maps OM003c-d; or (iii) a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay—wetlands maps OM003e-f; or (iv) a buffer to a watercourse identified on the Catchment management overlay maps OM005a-b.	• Biodiversity overlay code
Reconfiguring a lot	Code assessment if: (a) within one or more of the following areas: (i) a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity overlay maps OM003a-b; or (ii) bushland koala habitat - primary habitat area or bushland habitat area - secondary habitat area identified on Biodiversity overlay—Koala conservation maps OM003c-d; or (iii) a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay—wetlands maps OM003e-f; or	• Biodiversity overlay code

Development	Category of development and assessment	Assessment benchmarks
	(iv) a buffer to a watercourse identified on the Catchment management overlay maps OM005a-b ; and (b) not identified as Impact assessment in part 5.6 Categories of development and assessment—Reconfiguring a Lot.	
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment—Reconfiguring a Lot	• The planning scheme

Table 5.9.4—Assessment benchmarks for Bushfire hazard overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	No change if: (a) located within a Potential impact buffer, Medium (potential intensity), High (potential intensity) or Very high (potential intensity) bushfire hazard area identified on the Bushfire hazard overlay maps OM004a-b ; and (b) not Accepted development; and (c) complying with the acceptable outcomes of the Bushfire hazard overlay code.	• Bushfire hazard overlay code
	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>animal keeping</i> ; (c) <i>cropping other than forestry for wood production</i> ; (d) <i>cropping where forestry for wood production</i> ; (e) <i>park</i> ; (f) <i>permanent plantation</i> ; or (g) <i>roadside stall</i> ; and (h) not identified as assessable development in part 5.5 Categories of development and assessment– Material Change of Use.	• Not applicable
	Code assessment if: (a) located within a Potential impact buffer, Medium (potential intensity), High (potential intensity) or Very high (potential intensity) bushfire hazard area identified on the Bushfire hazard overlay maps OM004a-b ; and (b) not Accepted development; and (c) Accepted development subject to requirements where not complying with the acceptable outcomes of the Bushfire hazard overlay code; and (d) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	• Bushfire hazard overlay code

Development	Category of development and assessment	Assessment benchmarks
	Impact assessment if: (a) where identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme
Reconfiguring a lot	No change if: (a) located within a Potential impact buffer, Medium (potential intensity), High (potential intensity) or Very high (potential intensity) bushfire hazard area identified on the Bushfire hazard overlay maps OM004a-b ; and (b) not Accepted development; and (c) complying with the acceptable outcomes of the Bushfire hazard overlay code.	Bushfire hazard overlay code
	Code assessment if: (a) located within a Potential impact buffer, Medium (potential intensity), High (potential intensity) or Very high (potential intensity) bushfire hazard area identified on the Bushfire hazard overlay maps OM004a-b ; and (b) Accepted development subject to requirements where not complying with the acceptable outcomes of the Bushfire hazard overlay code; and (c) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	Bushfire hazard overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	The planning scheme

Table 5.9.5—Assessment benchmarks for Catchment management overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	No change if: (a) located within a buffer area to a waterbody or watercourse in the Higher or Lower Risk Catchment Area as identified on Catchment management overlay maps OM005a-b; and (b) not Accepted development; and (c) not comprising: (i) <i>aquaculture</i> other than <i>low-impact aquaculture</i>; or (ii) <i>cemetery</i>; or (iii) <i>intensive horticulture</i>; or (iv) <i>industry activities</i>; or (v) <i>rural industry</i>; or (vi) <i>extractive industry</i>; or (vii) <i>intensive animal industry</i>; or (viii) <i>motorsport facility</i>; and (d) complying with the acceptable outcomes of the Catchment management overlay code.	Catchment management overlay code
	Accepted development if: (a) <i>animal husbandry</i>; or (b) <i>animal keeping</i>; or (c) <i>cropping other than forestry for wood production</i>; or (d) <i>cropping where forestry for wood production</i>; or (e) <i>park</i>; or (f) <i>permanent plantation</i>; or (g) <i>roadside stall</i>; and (h) not identified as assessable development in part 5.5 Categories of development and assessment – Material Change of Use.	Not applicable

Development	Category of development and assessment	Assessment benchmarks
	Code assessment if: (a) located within a buffer area to a waterbody or watercourse in the Higher or Lower Risk Catchment Area as identified on Catchment management overlay maps OM005a-b; and (b) not Accepted development; and (c) Accepted development subject to requirements where not complying with the acceptable outcomes of the Catchment management overlay code; or (d) comprising: (e) <i>aquaculture</i> other than <i>low-impact aquaculture</i>; or (f) <i>cemetery</i>; or (g) <i>intensive horticulture</i>; or (h) <i>industry activities</i>; or (i) <i>rural industry</i>; and (j) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	Catchment management overlay code
	Impact assessment if: (a) <i>extractive industry</i>; or (b) <i>intensive animal industry</i>; or (c) <i>motorsport facility</i>; or (d) where identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme
Operational work	Accepted development if: (a) <i>minor operational work</i>.	Not applicable
	Code assessment if: (a) not Accepted development; and (b) located within a buffer area to a waterbody or watercourse in the Higher or Lower Risk Catchment Area as area identified on Catchment management overlay maps OM005a-b.	Catchment management overlay code

Development	Category of development and assessment	Assessment benchmarks
Reconfiguring a lot	Code assessment if: (a) located in the Rural zone; and (b) located within a buffer area to a waterbody or watercourse in the Higher Risk Catchment Area as area identified on Catchment management overlay maps OM005a-b. (c) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	• Catchment management overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	• The planning scheme

Table 5.9.6—Assessment benchmarks for Extractive resources overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>animal keeping</i> ; (c) <i>caretaker's accommodation</i> where ancillary to an <i>extractive industry</i> ; (d) <i>cropping</i> ; (e) <i>park</i> ; or (f) <i>roadside stall</i> ; and (g) not identified as assessable development in part 5.5 Categories of development and assessment— Material Change of Use.	Not applicable
	Code assessment if: (a) located within a Resource/processing area or Potential resource/processing area identified on the Extractive resources overlay maps OM006a-b ; and/or (b) located within a Separation area or Potential separation area identified on the Extractive resources overlay maps OM006a-b ; and/or (c) located within a Transport route separation area or Transport investigation area on the Extractive resources overlay maps OM006a-b ; and (d) not identified as Impact assessment in part 5.5 Categories of development and assessment— Material Change of Use.	Extractive resources overlay code
	Code assessment if: (a) <i>cropping where forestry for wood production or permanent plantation</i> located within one of the following areas identified on the Extractive resources overlay maps OM006a-b : (i) Resource/processing area; (ii) Potential resource/processing area; (iii) Separation area; or (iv) Potential separation area; and (b) not identified as Impact assessment in part 5.5	Extractive resources overlay code

Development	Category of development and assessment	Assessment benchmarks
	Categories of development and assessment– Material Change of Use.	
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme
Reconfiguring a lot	Code assessment if: (a) located within a Resource/processing area or Potential resource/processing area identified on the Extractive resources overlay maps OM006a-b ; and/or (b) located within a Separation area or Potential separation area identified on the Extractive resources overlay maps OM006a-b ; and/or (c) located within a Transport route separation area or Transport investigation area identified on the Extractive resources overlay maps OM006a-b ; and (d) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	Extractive resources overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	The planning scheme

Table 5.9.7—Assessment benchmarks for Flood hazard overlay

Development	Category of development and assessment	Assessment benchmarks
Building work	Accepted development if: (a) a <i>swimming pool, outbuilding, domestic outbuilding and patio</i> .	Not applicable
	No change if: (a) on a site located in an Extreme, High, Significant, Low or Potential flood hazard area on Flood hazard overlay maps OM007a-g ; and (b) not Accepted development; and (c) accepted development subject to requirements where complying with the acceptable outcomes of the Flood hazard overlay code.	Flood hazard overlay code
	Code assessment if: (a) on a site located in an Extreme, High, Significant, Low or Potential flood hazard area on Flood hazard overlay maps OM007a-g ; and (b) accepted development subject to requirements where not complying with the acceptable outcomes of the Flood hazard overlay code.	Flood hazard overlay code
Material Change of Use	No change if: (a) on a site located in a Significant, Low, Potential, High or Extreme flood hazard area on Flood hazard overlay maps OM007a-g ; and (b) accepted development subject to requirements where complying with the acceptable outcomes of the Flood hazard overlay code.	Flood hazard overlay code
	Code assessment if: (a) on a site located in a Significant, Low, Potential, High or Extreme flood hazard area on Flood hazard overlay maps OM007a-g ; and (b) accepted development subject to requirements where not complying with the acceptable outcomes	Flood hazard overlay code

Development	Category of development and assessment	Assessment benchmarks
	of the Flood hazard overlay code; and (c) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Levels of Assessment – Material Change of Use.	The planning scheme
Reconfiguring a Lot	Code assessment if: (a) on a site located in a Significant, Low, Potential, High or Extreme Flood hazard area on Flood hazard overlay maps OM007a-g ; and (b) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	Flood hazard overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Levels of Assessment – Reconfiguring a Lot	The planning scheme
Operational Work	Accepted development if: (a) <i>minor operational work</i> .	Not applicable
	Code assessment if: (a) not Accepted development; and (b) on a site located in an Extreme, High, Medium, Low or Potential flood hazard area on Flood hazard overlay maps OM007a-g .	Flood hazard overlay code

Table 5.9.8—Assessment benchmarks for High impact activities management area overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	Impact assessment if: (a) <i>A high impact activity</i> located within the High impact activities management area identified on the High impact activities management area overlay maps OM008a-b.	• The planning scheme

Table 5.9.9—Assessment criteria for Infrastructure overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	No change if: (a) <i>A home based business</i> where for a <i>Bed and breakfast</i> and adjoining the Brisbane Valley Rail Trail identified on Infrastructure overlay maps OM009a-g .	Not applicable
	Accepted development subject to requirements if: (a) A <i>dwelling house</i> within the Wastewater treatment plant buffer or waste station buffer identified on the Infrastructure overlay maps OM009a-g ; and (b) complying with the acceptable outcomes of the Infrastructure overlay code.	Infrastructure overlay code
	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>animal keeping</i> ; (c) <i>cropping other than forestry for wood production</i> ; or (d) <i>major electricity infrastructure</i> located within a High voltage electricity transmission line identified on the Infrastructure overlay maps OM009a-g ; or (e) adjoining a Highway or Main road located in a Town – Kilcoy, Esk, Fernvale, Toogoolawah, Lowood; or a Small township – Jimna, Linville, Moore; Harlin, Somerset Dam, Coominya, Tarampa, Glamorgan Vale or Minden, identified on the Infrastructure overlay maps OM009a-g ; or (f) <i>park</i> ; or (g) <i>roadside stall</i> ; or (h) <i>substation</i> where a Substation identified on the Infrastructure overlay maps OM009a-g ; or (i) <i>utility installation</i> for the purposes of power generation where a Power station identified on the Infrastructure overlay maps OM009a-g ; (j) Gas pipeline; or (k) Water pipeline; or (l) Water treatment plant; or (m) Water pump station; or (n) Water reservoir; or (o) Waste station; or (p) Sewage treatment plant; and (q) not identified as assessable development in part 5.5 Categories of development and assessment—Material Change of Use.	Not applicable

Development	Category of development and assessment	Assessment benchmarks
	Code assessment if: (a) within a buffer area of the following items identified on the Infrastructure overlay maps OM009a-g: (i) Gas pipeline; or (ii) High voltage electricity transmission line; or (iii) a Highway or Main road not located in a Town – Kilcoy, Esk, Fernvale, Toogoolawah, Lowood; or a Small township – Jimna, Linville, Moore; Harlin, Somerset Dam, Coominya, Tarampa, Glamorgan Vale or Minden, identified on the Infrastructure overlay maps OM009a-g; or (iv) Power station; or (v) Substation; or (vi) Water pipeline; or (b) introducing a new <i>sensitive land use</i> located within a Wastewater treatment plant buffer or Waste station buffer identified on the Infrastructure overlay maps OM009a-g; or (c) the site adjoins the Kilcoy Bypass alignment identified on the Infrastructure overlay map OM009g; and (d) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	Infrastructure overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme
Reconfiguring a lot	Code assessment if: (a) within a buffer area of the following items identified on the Infrastructure overlay maps OM009a-g: (i) Gas pipeline; or (ii) High voltage electricity transmission line; or (iii) a Highway or Main road not located in a Town or Small township identified on the Settlement pattern strategic framework map SFM-001; or (iv) Power station; or (v) Substation; or (vi) Water pipeline; and (b) not identified as Impact assessment in part 5.6 Categories of	Infrastructure overlay code

Development	Category of development and assessment	Assessment benchmarks
	development and assessment– Reconfiguring a Lot.	
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	• The planning scheme

Table 5.9.10—Assessment benchmarks for Landslide hazard overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>animal keeping</i> ; (c) <i>cropping where forestry for wood production</i> ; (d) <i>park</i> ; (e) <i>permanent plantation</i> ; or (f) <i>roadside stall</i> ; and (g) not identified as assessable development in part 5.5 Categories of development and assessment– Material Change of Use.	• Landslide hazard overlay code
	No change if: (a) within the Landslide hazard area identified on the Landslide hazard overlay maps OM0010a-b ; and (b) not Accepted development; and (c) complying with the acceptable outcomes of the Landslide hazard overlay code.	• Landslide hazard overlay code
	Code assessment if: (a) within the Landslide hazard area identified on the Landslide hazard overlay maps OM0010a-b ; and (b) not Accepted development; and (c) not complying with the acceptable outcomes of the Landslide hazard overlay code; and (d) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	• Landslide hazard overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	• The planning scheme
Operational work	Code assessment if: (a) for <i>filling and excavation</i> or vegetation clearing located within a Landslide hazard area identified on the Landslide hazard overlay maps OM0010a-b .	• Landslide hazard overlay code

Development	Category of development and assessment	Assessment benchmarks
Reconfiguring a lot	Code assessment if: (a) located within a Landslide hazard area identified on the Landslide hazard overlay maps OM0010a-b ; and (b) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	• Landslide hazard overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	• The planning scheme

Table 5.9.11—Assessment benchmarks for Local heritage overlay

Development	Category of development and assessment	Assessment benchmarks
Building work	Code assessment if: (a) <i>minor building work</i> or building work located on a Local heritage place identified on the Local heritage register overlay maps OM011a-d ; or (b) building work located on a site adjoining a Local heritage place identified on the Local heritage register overlay maps OM011a-d .	Local heritage overlay code
	Impact assessment if: (a) building work not associated with a material change of use that involves the demolition (including partial demolition), relocation or removal of a Local heritage place identified on the Local heritage register overlay maps OM011a-d .	The planning scheme
Material change of use	Code assessment if: (a) located on a Local heritage place identified on the Local heritage register overlay maps OM011a-d ; or (b) located on a lot adjoining a Local heritage place identified on the Local heritage register overlay maps OM011a-d ; and (c) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	Local heritage overlay code
	Impact assessment if: (a) the material change of use will result in building work that involves the demolition, relocation or removal of a Local heritage place identified on the Local heritage register overlay maps OM011a-d ; or (b) where identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme

Development	Category of development and assessment	Assessment benchmarks
Operational work	Code assessment if: (a) for operational work or minor operational work on a Local heritage place identified on the Local heritage register overlay maps OM011a-d .	Local heritage overlay code
Reconfiguring a lot	Code assessment if: (a) located on a Local heritage place identified on the Local heritage register overlay maps OM011a-d ; and (b) not identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot.	Local heritage overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	The planning scheme

Table 5.9.12—Assessment benchmarks for Scenic amenity overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	No change if: (a) The site is within a High Scenic Amenity Area, Other scenic mountains or Scenic route buffer section identified on the Scenic amenity overlay maps OM012a-b; and (b) Not Accepted development; and (c) Comprising: i. Dwelling house ii. Home based business where for a <i>home based child care, home occupation or bed and breakfast</i>; iii. <i>Short term accommodation</i>; iv. <i>Tourist park</i>; and (d) Accepted development subject to requirements complying with the acceptable outcomes of the Scenic amenity overlay code.	• Scenic amenity overlay code
	Accepted development if: (a) <i>animal husbandry</i>; or; (b) <i>cropping other than forestry for wood production</i>; or (c) <i>cropping where forestry for wood production</i>; or (d) <i>park</i>; or (e) <i>permanent plantation</i>; and (f) not identified as assessable development in part 5.5 Categories of development and assessment– Material Change of Use.	• Not applicable
	Code assessment if: (a) not Accepted development; and (b) the site is within a High Scenic Amenity Area, Other scenic mountains or Scenic route buffer section identified on the Scenic amenity overlay maps OM012a-b; and (c) Accepted development where subject to requirements where not complying with the accepted	• Scenic amenity overlay code

Development	Category of development and assessment	Assessment benchmarks
	outcomes of the Scenic amenity code ;and (d) not identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Categories of development and assessment– Material Change of Use.	The planning scheme
Operational work	Code assessment if: (a) for clearing of vegetation or filling and excavation located within a High scenic amenity area, Other scenic mountains or Scenic route section identified on the Scenic amenity overlay maps OM012a-b.	Scenic amenity overlay code
	Impact assessment if: (a) for erection of a <i>billboard</i> located within a High scenic amenity area, Other scenic mountains or Scenic route buffer section identified on the Scenic amenity overlay maps OM012a-b.	Scenic amenity overlay code

Table 5.9.13—Assessment benchmarks for Stock route management overlay

Development	Category of development and assessment	Assessment benchmarks
Material change of use	Accepted development if: (a) <i>animal husbandry</i> ; (b) <i>cropping other than forestry for wood production</i> ; (c) <i>park</i> ; or (d) <i>roadside stall</i> ; and (e) not identified as assessable development in part 5.5 Categories of development and assessment— Material Change of Use.	Not applicable
	Code assessment if within the Rural zone and: (a) located on or within a buffer area to a Stock route identified on the Stock route management overlay maps OM013a-b ; and (b) not identified as Impact assessment in part 5.5 Categories of development and assessment— Material Change of Use.	Stock route management overlay code
	Impact assessment if: (a) identified as Impact assessment in part 5.5 Levels of Assessment – Material Change of Use.	The planning scheme
Operational work	Code assessment if within the Rural zone and: (a) for operational work other than advertising devices, <i>filling and excavation</i> , <i>minor operational work</i> or vegetation clearing; and (b) located in a Stock route buffer area identified on the Stock route management overlay maps OM013a-b .	Stock route management overlay code
Reconfiguring a lot	Code assessment if within the Rural zone and: (a) located on or adjoining a Stock route identified on the Stock route management overlay maps OM013a-b ; and (b) not identified as Impact assessment in part 5.6 Categories of development and assessment— Reconfiguring a Lot.	Stock route management overlay code

Development	Category of development and assessment	Assessment benchmarks
	Impact assessment if: (a) identified as Impact assessment in part 5.6 Categories of development and assessment– Reconfiguring a Lot	• The planning scheme

Note—Some overlays may only be included for information purposes. This should not change the category of development and assessment or assessment benchmarks under the planning scheme

6 Part 6 Zones

6.1 Preliminary

- (1) Zones organise the planning scheme area in a way that facilitates the location of preferred or acceptable land uses.
- (2) Zones are mapped and included in Schedule 2.
- (3) The categories of development and assessment for development in a zone are in Part 5.
- (4) Assessment benchmarks for zones are contained in a zone code.
- (5) A precinct may be identified for part of a zone.
- (6) Precinct provisions are contained in the zone code.
- (7) Each zone code identifies the following:
 - (a) the purpose of the code;
 - (b) the overall outcomes that achieve the purpose of the code;
 - (c) the performance outcomes that achieve the overall outcomes and the purpose of the code;
 - (d) the acceptable outcomes that achieve the performance and overall outcomes and the purpose of the code;
 - (e) the performance and acceptable outcomes for the precinct.
- (8) The following are the zone codes for the planning scheme:
 - (a) Centre zone code;
 - (b) Community facilities zone code;
 - (c) Emerging community zone code;
 - (d) General residential zone code;
 - (i) Park residential precinct code;
 - (e) High impact industry zone code;
 - (f) Industry zone code;
 - (g) Recreation and open space zone code;
 - (h) Rural residential zone code;
 - (i) Rural zone code;
 - (j) Township zone code.

6.2 Zone codes

6.2.1 Centre zone code

6.2.1.1 Application

This code applies to assessing a material change of use and building work in the Centre zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.1.2 Purpose

- (1) The **purpose** of the Centre zone is to provide for a variety of uses and activities to service all or part of the local government area, including, for example, administrative, business, community, cultural, entertainment, professional, residential or retail uses or activities.
- (2) The **local government purpose** of the code is to:
 - a) reinforce the Esk, Fernvale, Kilcoy, Lowood and Toogoolawah town centres as the focus for the location of centre activities and appropriate business activities in the Somerset Region, where the town centres service their immediate urban areas and sub-regional catchments; and
 - b) facilitate the location of a range of accommodation, community, entertainment and recreation activities that are complementary to the predominant business and service function of the town centres.
- (3) The purpose of the Centre zone code will be achieved through the following **overall outcomes**:
 - a) The Centre zone is the focus and location for shopping uses and other centre, business and community activities and administrative and government services in each of the sub-regional catchments of the Somerset Region;
 - b) The development of business activities is of a scale and intensity that is consistent with the intended role and function of each town centre in the Somerset Region town centres network⁸;
 - c) A mix of accommodation, community, entertainment and recreation activities that assist in the creation of a vibrant mixed-use centre are established where complementary to the primary business and service function of each centre;
 - d) Uses that strengthen the function of the town centres as destinations in their own right and gateways to tourism focus areas in the greater Somerset Region are promoted;
 - e) A predominantly low rise built form is maintained, consistent with the established scale and character of existing buildings in the town centre;
 - f) The design and layout of development contributes to a vibrant and visually attractive town centre streetscape with buildings orientated towards the primary street frontage, built to the front boundary and with awnings over the footpath for an enhanced pedestrian experience and a high level of amenity;
 - g) Development reinforces a pedestrian-oriented and active streetscape, and uses that have car-oriented frontages or activities such as services stations are located on the periphery of town centres;
 - h) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - i) Development is serviced by the full range of urban infrastructure networks, including the reticulated water supply, sewerage and stormwater drainage networks, road transport networks and electricity and telecommunications infrastructure;
 - j) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
 - k) Areas of ecological significance, including watercourses, are retained, enhanced and buffered from the impacts of development; and
 - l) Development responds to flooding constraints.

⁸ Refer to 3.7.2—Town centres network of the Part 3—Strategic framework.

6.2.1.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.1.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes												
For accepted development subject to requirements and assessable development													
Building height													
PO1 <i>Building height:</i> (a) exhibits a low rise character; (b) contributes to a continuous streetscape character in the town centre; and (c) does not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .												
Building setbacks													
PO2 <i>Building setbacks:</i> (a) contribute to the establishment of a continuous 'main street' character; (b) assist in the provision of active frontages and the engagement of development with the public realm; (c) facilitate the establishment of awnings on main streets; (d) do not detract from the amenity of <i>adjoining premises</i> , in terms of privacy, access to natural light, and ventilation; and (e) provide for the efficient use of the site.	AO2.1 New buildings and structures are built to the <i>primary street frontage</i> boundary of the site, including the following main streets: <table border="1"> <thead> <tr> <th>Centre</th><th>Main street/s</th></tr> </thead> <tbody> <tr> <td>Esk</td><td>Ipswich Street</td></tr> <tr> <td>Fernvale</td><td>Brisbane Valley Hwy Main Street</td></tr> <tr> <td>Kilcoy</td><td>Hope Street Mary Street William Street</td></tr> <tr> <td>Lowood</td><td>Main Street Railway Street</td></tr> <tr> <td>Toogoolawah</td><td>Cressbrook Street</td></tr> </tbody> </table> AO2.2 Where an <i>adjoining premises</i> is located in the General residential zone , buildings and structures are setback a minimum 3 metres from the common side boundary. AO2.3 New buildings and structures are setback a minimum 3 metres from the rear boundary.	Centre	Main street/s	Esk	Ipswich Street	Fernvale	Brisbane Valley Hwy Main Street	Kilcoy	Hope Street Mary Street William Street	Lowood	Main Street Railway Street	Toogoolawah	Cressbrook Street
Centre	Main street/s												
Esk	Ipswich Street												
Fernvale	Brisbane Valley Hwy Main Street												
Kilcoy	Hope Street Mary Street William Street												
Lowood	Main Street Railway Street												
Toogoolawah	Cressbrook Street												
For assessable development													
Building scale													
PO3 <i>Building scale:</i> (a) complements the predominant scale and intensity built form of the centre; and (b) provides for the on-site provision of car parking, servicing, landscaping and building setbacks consistent with the	AO3 <i>Site cover</i> does not exceed 80 percent.												

Performance outcomes	Acceptable outcomes
general built form character of the centre.	
Centre design	
PO4 Development contributes to an attractive, vibrant and well-designed town centre where: (a) development addresses the public realm; (b) building design, layout, and tenancy mix activates the street and pedestrian thoroughfares; (c) building services do not dominate the streetscape; and (d) conflict between pedestrians and vehicles is minimized.	AO4.1 Commercial tenancies address the <i>primary street frontage</i> of the site. AO4.2 Building entrances are clearly recognisable from the <i>primary street frontage</i> of the site. AO4.3 Ground level facades which address the <i>primary street frontage</i> incorporate a glassed area of not less than 25 percent of the total area of the external wall. AO4.4 The following building elements are not visible from the <i>primary street frontage</i>: (a) building plant equipment (e.g. air conditioning units); (b) refuse storage areas; and (c) vehicle servicing areas. AO4.5 Car parking is provided behind the building alignment to the <i>primary street frontage</i>. AO4.6 Vehicle crossovers are provided as follows: (a) common access is established with <i>adjoining premises</i> via access easements; or (b) access is taken from a minor street or rear lane; or (c) a single crossover is provided that is at least 3 metres from a crossover located on an <i>adjoining premises</i>. AO4.7 Development is not for a service station.

Performance outcomes	Acceptable outcomes												
Awnings													
PO5 The main street/s of each town centre are provided with continuous awnings. Awnings contribute to a human scale streetscape character, and promote pedestrian movement, comfort and safety.	AO5 Awnings are provided to the following main streets: <table border="1"> <thead> <tr> <th>Centre</th><th>Main street/s</th></tr> </thead> <tbody> <tr> <td>Esk</td><td>Ipswich Street</td></tr> <tr> <td>Fernvale</td><td>Brisbane Valley Hwy Main Street</td></tr> <tr> <td>Kilcoy</td><td>Hope Street Mary Street William Street</td></tr> <tr> <td>Lowood</td><td>Main Street Railway Street</td></tr> <tr> <td>Toogoolawah</td><td>Cressbrook Street</td></tr> </tbody> </table>	Centre	Main street/s	Esk	Ipswich Street	Fernvale	Brisbane Valley Hwy Main Street	Kilcoy	Hope Street Mary Street William Street	Lowood	Main Street Railway Street	Toogoolawah	Cressbrook Street
Centre	Main street/s												
Esk	Ipswich Street												
Fernvale	Brisbane Valley Hwy Main Street												
Kilcoy	Hope Street Mary Street William Street												
Lowood	Main Street Railway Street												
Toogoolawah	Cressbrook Street												
Building character													
PO6 The visual appearance of development contributes to the existing or emerging built form character of the town centre, with respect to the use of: (a) materials and colours; (b) patterns and textures; (c) roof form and pitch; (d) eaves and awnings; (e) horizontal and vertical detailing; and (f) fenestration.	Where located in Lowood in the Centre zone: AO6.1 Buildings are predominantly: (a) constructed of timber; and (b) exhibit pitched roofs made of iron. OR Where otherwise located: AO6.2 No acceptable outcome provided.												
Amenity													
PO7 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i>; (h) visual amenity; and (i) overlooking and privacy.	AO7 No acceptable outcome provided.												
PO8 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i>; (f) visual amenity; (g) privacy;	AO8 No acceptable outcome provided.												

Performance outcomes	Acceptable outcomes
(h) odour; or (i) emissions.	
PO9 <i>Development</i> involving a residential activity ensures that an appropriate level of residential amenity and privacy is achieved.	AO9 No acceptable outcome provided.

6.2.2 Community facilities zone code

6.2.2.1 Application

This code applies to assessing material change of use and building work for development in the Community facilities zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.2.2 Purpose

- (1) The **purpose** of the Community facilities zone is to provide for community-related uses, activities and facilities, whether publicly or privately owned, including, for example—
 - a) educational establishments; and
 - b) hospitals; and
 - c) transport and telecommunication networks; and
 - d) utility installations.
- (2) The **local government purpose** of the code is to:
 - a) recognise the provision of a wide range of community activities and other specified uses which provide essential services that meet the social, cultural, spiritual, health, educational and lifestyle needs of the Somerset Region community;
 - b) protect land designated for community facilities from inappropriate development to ensure the ongoing provision of these services; and
 - c) manage the provision of services to the community in a manner that is complementary to the amenity of adjacent development.
- (3) The purpose of the Community facilities zone code will be achieved through the following **overall outcomes**:
 - a) Development in the zone primarily accommodates the following community facilities:
 - (i) land used for the provision of *cemeteries, clubs, community uses, educational establishments, emergency services, hospitals and health care services*, transport networks, *substations* and *utility installations*;
 - (ii) private community activities including *community uses, education establishments and places of worship* and other uses that provide a community service such as *residential care facilities*; and
 - (iii) limited development for recreational activities.
 - b) A predominantly low rise and low intensity scale of development is maintained in the zone, which balances the particular operational requirements of the community facility with the management of potential off-site amenity impacts in the locality;
 - c) Ancillary uses that are required to support the functional operation of community facilities are limited in scale;
 - d) Community facilities and ancillary uses are protected from development that has the potential to create land use conflict and/or limit the operational viability of the facility;
 - e) The Brisbane Valley Rail Trail is integrated into the town centres of Fernvale, Lowood, Esk and Toogoolawah and provides opportunities for the development of appropriate low-scale community facilities that are consistent with its predominant tourism and recreation focus;
 - f) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - g) Development is serviced by the full range of urban infrastructure networks, including the reticulated water supply, sewerage and stormwater drainage networks, road transport networks and electricity and telecommunications infrastructure, as required by the facility;
 - h) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
 - i) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development; and

- j) Development responds to land constraints, including but not limited to topography, bushfire and flooding.

6.2.2.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.2.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) maintains the established low rise built form character of the town; (b) is comparable with adjacent low density residential development in the locality; and (c) does not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Building setbacks	
PO2 <i>Building setbacks:</i> (a) maintain a coherent streetscape; (b) make efficient use of the site for access, car parking and servicing requirements; and (c) manage potential adverse impacts on the amenity enjoyed by <i>adjoining premises</i> .	AO2.1 Buildings and structures are setback a minimum 6 metres from the <i>primary street frontage</i> of the site. AO2.2 Buildings and structures are setback 2.5 metres from each side boundary of the site. AO2.3 Buildings and structures are setback 3 metres from the rear boundary of the site. Where the site adjoins the General residential zone (excluding the Park residential precinct): AO2.4 Buildings and structures are setback 3 metres from the common boundary. AO2.5 Car parking and servicing areas incorporate a minimum 2 metre wide landscaped buffer to the common boundary.
For assessable development	
Building scale	
PO3 <i>Building scale:</i> (a) recognises the unique and varied design requirements of community facilities; and	AO3 <i>Site cover</i> does not exceed 40 percent.

Performance outcomes	Acceptable outcomes
(b) is comparable with adjacent low density residential development in the locality.	
Amenity	
PO4 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	AO4 No acceptable outcome provided.
PO5 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i> ; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO5 No acceptable outcome provided.

6.2.3 Emerging community zone code

6.2.3.1 Application

This code applies to assessing material change of use and building work for development in the Emerging community zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.3.2 Purpose

- (1) The **purpose** of the Emerging community zone is to:
 - a) identify land that is intended for an urban purpose in the future; and
 - b) protect land that is identified for an urban purpose in the future from incompatible uses; and
 - c) provide for the timely conversion of non-urban land to land for urban purposes.
- (2) The **local government purpose** of the code is to:
 - a) identify land located in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah that is considered to be generally suitable for urban development in the future;
 - b) establish the suitability of the land for development for urban purposes; and
 - c) protect this land from inappropriate development that has the potential to compromise future urban development opportunities and/or create future land use conflict.
- (3) The purpose of the Emerging community zone code will be achieved through the following **overall outcomes**:
 - a) The use of land in the zone maintains a high level of amenity consistent with its development potential for urban purposes;
 - b) The reconfiguring of a lot does not create additional small lots that compromise the efficient and orderly future development of land for urban purposes;
 - c) *Dwelling houses* are the predominant accommodation activity provided and may be supported by *home based business*;
 - d) Specific rural uses such as *animal husbandry*, *cropping where not forestry for wood production* and *intensive horticulture* that can manage their off-site amenity impacts represent appropriate transitional uses of land in the zone until it is required for urban purposes;
 - e) A predominant low rise built form and very low intensity scale of development is maintained;
 - f) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - g) Development that is not for urban purposes is serviced by the following infrastructure:
 - (i) either the reticulated water supply network or an adequate and self-sufficient potable water supply; and
 - (ii) either the reticulated sewerage network or a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (iii) stormwater drainage, electricity, gas and telecommunications services as appropriate;
 - h) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
 - i) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development;
 - j) Not all land is suitable for urban purposes. Development responds to land constraints, including but not limited to topography, bushfire and flooding.

Overall outcomes for development for urban purposes

- k) Land is developed for urban purposes in a logical and orderly sequence that addresses:
 - (i) the strategic framework, including the desired settlement pattern for the town;

- (ii) the mitigation of:
 - (A) amenity impacts generated by the possible adjacent location of *high impact activities*; and
 - (B) potential reverse amenity impacts that may interfere with the existing or ongoing use of adjacent rural land for productive rural activities;
- (iii) the achievement of affordable living opportunities, through the delivery of a variety of housing types and sizes that meet varied needs and lifestyle choices;
- (iv) infrastructure provision and sequencing detailed in **Part 4—Priority infrastructure plan**;
- (v) the provision of urban infrastructure and services, including water supply, sewerage, stormwater drainage, electricity, gas and telecommunications;
- (vi) the provision of road and active transport networks that integrate with established and proposed networks beyond the site;
- (vii) the provision of recreation and open space opportunities that can integrate with established and proposed networks beyond the site and other community facilities and infrastructure;
- (viii) the protection of significant historical, cultural, social, recreational, topographic, landscape, and scenic amenity features;
- (ix) the protection of natural habitat areas, wildlife corridors, watercourses and wetlands; and
- (x) the identification of land that is unsuitable for development for urban purposes due to risks to development from flooding, bushfire and landslide.

6.2.3.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.3.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height</i> maintains the established low rise built form character of the town.	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Outbuildings (Class 10a)	
PO2 <i>Outbuildings</i> are not used for habitable or domestic purposes.	AO2 <i>Outbuildings</i> are used for non-habitable purposes only.
Building setbacks	
PO3 Building setbacks: (a) maintain a coherent streetscape; and (a) assist in the protection of the amenity of existing and future residential development.	AO3.1 Buildings and structures are setback a minimum 6 metres from the <i>primary street frontage</i> of the site, unless varied by a development code . AO3.2 Buildings and structures are setback a minimum 10 metres from the side and rear boundaries of the site, unless varied by a development code.

Performance outcomes	Acceptable outcomes
Animal husbandry	
PO4 Development for <i>animal husbandry</i> does not compromise the: (a) amenity enjoyed by <i>sensitive land uses</i> located on <i>adjoining premises</i> ; and (b) water quality values of local receiving environments.	AO4.1 <i>Animal enclosures</i> and associated structures (other than fences) are not located within: (a) 100 metres of a lot located in the General residential zone (excluding the Park residential precinct); (b) 100 metres of a <i>sensitive land use</i> on an <i>adjoining premises</i> ; and (c) 15 metres of a <i>dwelling house</i> on the same site.
For assessable development	
Building scale	
PO5 Building scale maintains a very low intensity consistent with the residential activities and specific rural uses expected in the zone.	AO5 <i>Site cover</i> does not exceed 5 percent.
Environmental management	
PO6 Rural uses operate in accordance with contemporary best practice environmental management principles and do not result in any adverse impacts on the following environmental values: (a) air quality; (b) water quality; and (c) soil quality.	AO6 No acceptable outcome provided.
PO7 Liquid and solid waste disposal, including carcass disposal, and emissions of contaminants to surface or groundwater (including contaminated stormwater) do not result in environmental harm or nuisance.	AO7 No acceptable outcome provided.
Amenity	
PO8 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	AO8 No acceptable outcome provided.
PO9	AO9 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i>; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	
Development for urban purposes	
PO10 Development for urban purposes achieves: (a) the mitigation of amenity impacts generated by the possible adjacent location of <i>high impact activities</i> and potential reverse amenity impacts that may interfere with the existing or ongoing use of adjacent rural land for productive rural activities; (b) affordable living opportunities through the delivery of a variety of housing types and sizes that meet varied needs and lifestyle choices; (c) the provision of urban infrastructure and services, including water supply, sewerage, stormwater drainage, electricity, gas and telecommunications; (d) the provision of road and active transport networks that integrate with established and proposed networks beyond the site; (e) the provision of recreation and open space opportunities that can integrate with established and proposed networks beyond the site and other community facilities and infrastructure; (f) the protection of significant historical, cultural, social, recreational, topographic, landscape, and scenic amenity features; (g) the protection of natural habitat areas, wildlife corridors, watercourses and wetlands; and (h) the identification of land that is unsuitable for development for urban purposes due to risks to development from flooding, bushfire and landslide	AO10 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes

6.2.4 General residential zone code

6.2.4.1 Application

This code applies to assessing material change of use and building work for development in the General residential zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.4.2 Purpose

- (1) The **purpose** of the General residential zone is to provide for :
 - a) residential uses; and
 - b) community uses, and small-scale services, facilities and infrastructure, to support local residents.
- (2) The **local government purpose** of the code is to provide for low density residential development, predominantly *dwelling houses* on a range of lot sizes serviced by appropriate urban infrastructure, in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah.

A mix of other residential and non-residential activities may also be established where consistent with the predominant residential character, scale and amenity of the zone.

- (3) The purpose of the General residential zone code will be achieved through the following **overall outcomes**:
 - a) *Dwelling houses* and *dual occupancies* are the predominant accommodation activities provided in the General residential zone, on a variety of lot sizes;
 - b) The predominant low rise and low intensity scale of development provided by *dwelling houses* and *dual occupancies* in the zone is maintained;
 - c) *Residential care facilities* and *retirement facilities* may provide complementary accommodation activities where well-located in relation to the town centre;
 - d) Other accommodation activities such as *multiple dwellings* and *short-term accommodation*, *home based business* and community activities may be established where the use:
 - (i) is of a limited scale and intensity that maintains the predominant low density residential scale of development and amenity in the zone;
 - (ii) directly supports the day to day needs of the local community; and
 - (iii) is not more appropriately located in the Somerset Region town centres network;
 - e) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - f) Development is connected to the full range of urban infrastructure networks, including the reticulated water supply, sewerage and stormwater drainage networks, road transport networks and electricity and telecommunications infrastructure;
 - g) Development is supported by necessary transport infrastructure and delivers safe and walkable neighbourhoods that integrate with active transport networks that connect with the town centre;
 - h) Development is supported by necessary community facilities, open space and recreational areas that supports the needs of the local community;
 - i) Development proceeds in a logical and orderly sequence that makes efficient use of existing and planned extensions to urban infrastructure networks;
 - j) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
 - k) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development;
 - l) Development responds to land constraints, including but not limited to topography, bushfire and flooding;
 - m) Development is designed to avoid or otherwise minimise adverse impacts from industrial development that will affect the health and safety, wellbeing and amenity of communities and individuals;

- n) Development does not compromise the viability of existing or future land uses on adjoining and nearby properties, including industrial activities, rural activities and business activities;
- o) The **Park residential precinct** provides very low density residential living opportunities on lots generally greater than 4,000 square metres with good access to the infrastructure and services provided in the Esk, Fernvale, Kilcoy and Lowood town centres;
 - (i) *Dwelling houses* are the predominant accommodation activities provided;
 - (ii) The intensity of development:
 - (A) is compatible with the semi-rural character of the precinct and the dominance of natural features and vegetation over built form; and
 - (B) reflects the different levels of service provided by the reticulated sewerage network within and across the towns;
 - (iii) Appropriate *home based business* uses complement the semi-rural character and amenity of the precinct;
 - (iv) The existing subdivision pattern in established areas of the precinct is largely retained;
 - (v) Lots created by further subdivision in the precinct are generally greater than 4,000 square metres in area;
 - (vi) Development is serviced by the following infrastructure:
 - (A) either the reticulated water supply network or an adequate and self-sufficient potable water supply;
 - (B) a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (C) stormwater drainage, electricity, gas and telecommunications services as appropriate.

6.2.4.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.4.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) exhibits a low rise character consistent with the predominant built form of the zone; and (b) does not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Outbuildings (Class 10a)	
PO2 <i>Outbuildings</i> are not used for habitable or domestic purposes.	AO2 <i>Outbuildings</i> are used for non-habitable purposes only.

Performance outcomes	Acceptable outcomes
For assessable development	
Building scale	
PO3 Building scale: (a) complements the predominant low scale and intensity character of development in the zone; (b) does not dominate the premises; and (c) provides for generous landscaping and private open space opportunities.	AO3 Site cover does not exceed 50 percent.
Building setbacks	
PO4 Building setbacks: (a) maintain a coherent streetscape character in the zone; and (b) do not detract from the amenity enjoyed by <i>adjoining premises</i> .	For development other than a <i>dwelling house</i> or <i>dual occupancy</i>: AO4.1 Buildings and structures are setback a minimum 6 metres from the <i>primary street frontage</i> of the site. AO4.2 Buildings and structures are setback a minimum 3 metres from each side boundary of the site. AO4.3 Buildings and structures are setback a minimum 3 metres from the rear boundary of the site.
Amenity	
PO5 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	AO5 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
PO6 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i>; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO6 No acceptable outcome provided.

Table 6.2.4.3.B—Requirements for accepted development and assessment benchmarks for assessable development—Park residential precinct

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) exhibits a low rise character consistent with the predominant built form of the zone; and (b) does not detract from the amenity enjoyed by <i>adjoining premises</i>.	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Outbuildings (Class 10a)	
PO2 <i>Outbuildings</i> are not used for habitable or domestic purposes.	AO2 <i>Outbuildings</i> are used for non-habitable purposes only.
Animal husbandry	
PO3 Development for <i>animal husbandry</i> does not compromise the: (a) amenity enjoyed by <i>sensitive land uses</i> located on <i>adjoining premises</i>; and (b) water quality values of local receiving environments.	AO3.1 <i>Animal enclosures</i> and associated structures (other than fences) are not located within: (a) 100 metres of a lot located in the General residential zone that is not located in the Park residential precinct; (b) 100 metres of a <i>sensitive land use</i> on an <i>adjoining premises</i>; and (c) 15 metres of a <i>dwelling house</i> on the same site.

Performance outcomes	Acceptable outcomes
For assessable development	
Building scale	
PO4 Building scale: (a) maintains the predominant low intensity scale of development in the precinct; and (b) reinforces the semi-rural character of the precinct and the dominance of natural features over built form.	AO4 Site cover does not exceed 20 percent.
Building setbacks	
PO5 Building setbacks: (a) provide a well-defined separation of built form between <i>adjoining premises</i> consistent with the semi-rural character of the precinct; and (b) do not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO5.1 Buildings and structures are setback a minimum 10 metres from the <i>primary street frontage</i> of the site. AO5.2 Buildings and structures are setback a minimum 10 metres from the side and rear boundaries of the site.
Amenity	
PO6 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality and must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	AO6 No acceptable outcome provided.
PO7 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i> ; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO7 No acceptable outcome provided.
PO8 Development does not result in exposure of a <i>sensitive land use</i> to industrial air, noise	AO8.1 Development is designed to ensure that:

Performance outcomes	Acceptable outcomes
and odour emission that impact on human health, amenity and well-being.	(a) the indoor noise objectives set out in the <i>Environment Protection (Noise) Policy 2008</i> are met; and (b) the air quality objectives in the <i>Environmental Protection (Air) Policy 2008</i> are met. Note – Design measures to address the Policies in AO7.1 could include: • landscaping; • setting back sensitive land uses from existing and future industrial noise sources; • positioning buildings in the most appropriate geographic locations; • using barriers, mounds and fences; • screening sensitive land uses from industrial uses. AO8.2 Noxious and offensive odours are not experienced at the location of <i>sensitive land uses</i>. Note – The Queensland Odour Impact Assessment Guideline provides a methodology for assessing odour impacts.

6.2.5 High impact industry zone code

6.2.5.1 Application

This code applies to assessing material change of use and building work for development in the High impact industry zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.5.2 Purpose

- (1) The **purpose** of the High impact industry zone is to provide for :
 - a) high impact industry; and
 - b) other uses and activities that—
 - (i) support industry activities; and
 - (ii) do not compromise the future use of premises for industry activities.
- (2) The **local government purpose** of the code is to:
 - a) recognise established high impact industry uses located to the east of the Kilcoy *urban area*; and
 - b) appropriately manage the possible future redevelopment of these high impact industry uses.
- (3) The purpose of the High impact industry zone code will be achieved through the following **overall outcomes**:
 - a) The zone accommodates two existing large scale high impact industries, more specifically, an abattoir and soil conditioning manufacturing operation⁹ which have the potential to generate significant impacts on *sensitive land uses* due from their offsite emissions;
 - b) *Low impact industry, medium impact industry, service industry and warehouse* uses that are compatible with the predominant use of the zone for high impact industry uses are appropriate;
 - c) Non-industrial uses that support the predominant industrial activities operating on the site such as *caretaker's accommodation* are appropriately located and designed to ensure that they do not compromise the ongoing operation and viability of industrial uses;
 - d) Uses and works for industrial purposes are located, designed and managed to maintain public health and safety, avoid significant adverse effects on the natural environment, and minimise off-site impacts on non-industrial premises and *sensitive land uses*;
 - e) A predominant medium rise built form and scale of development is maintained consistent with existing *high impact industry* development in the zone;
 - f) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - g) Development is serviced by the following infrastructure:
 - (i) the reticulated water supply network; and
 - (ii) a sustainable on-site effluent treatment and disposal system that maintains downstream environmental and water quality values; and
 - (iii) stormwater drainage, electricity, gas and telecommunications services as appropriate;
 - h) Development is located, designed and operated and minimises the consumption of energy and water;
 - i) Development does not interfere with the safe and efficient operation of the surrounding road network and maintains an appropriate level of direct access to the D'Aguiar Highway;
 - j) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development; and
 - k) Development responds to land constraints, including but not limited to topography, bushfire and flooding.

⁹ Refer to high impact industry additional examples (19) and (24) in **Schedule 1**.

6.2.5.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.5.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height</i> maintains a predominant medium rise built form across the site.	AO1 <i>Building height</i> does not exceed 11.5 metres above <i>ground level</i> .
Building setbacks	
PO2 Building setbacks: (a) provide for the efficient use of site; (b) adequate separation to major road frontages; and (c) assist in managing the impacts on the amenity of <i>adjoining premises</i> .	AO2 Buildings and structures are setback a minimum 10 metres from any street frontage or <i>site boundary</i> .
For assessable development	
Building scale	
PO3 Building scale maintains a predominant medium scale of development across the zone consistent with the requirements of <i>high impact industry</i> development.	AO3 <i>Site cover</i> does not exceed 50 percent.
Environmental management	
PO4 Industrial activities operate in accordance with contemporary best practice environmental management principles and do not result in any adverse impacts on the following environmental values: (a) air quality; (b) water quality	AO4 Development complies with the applicable requirements of: (a) the <i>Environmental Protection (Air) Policy 2008</i> ; and (b) the <i>Environmental Protection (Water) Policy 2009</i> .

Performance outcomes	Acceptable outcomes
Amenity	
PO5 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality and must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i>; (h) visual amenity; (i) soil quality and (j) overlooking and privacy.	AO5 No acceptable outcome provided

6.2.6 Industry zone code

6.2.6.1 Application

This code applies to assessing material change of use and building work for development in the Industry zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.6.2 Purpose

- (1) The **purpose** of the Industry zone code is to provide for :
 - a) a variety of industry activities; and
 - b) other uses and activities that—
 - (i) support industry activities; and
 - (ii) do not compromise the future use of premises for industry activities.
- (2) The **local government purpose** of the code is to provide opportunities for the development of industry uses and compatible non-industrial uses that meet local needs in the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah.
- (3) The purpose of the Industry zone code will be achieved through the following **overall outcomes**:
 - a) A range of industry activities, including *low impact industry*, *service industry* and *warehouse* uses are established in the zone;
 - b) Some *medium impact industry* uses may be located in the zone where those uses directly service local needs and their impacts are appropriately managed from adjoining and surrounding land, including *sensitive land uses* and other industry uses;
 - c) A predominant low-medium rise built form and scale of development is maintained across the zone;
 - d) Uses and works for industrial purposes are located, designed and managed to maintain public health and safety, avoid significant adverse effects on the natural environment, and minimise off-site impacts on non-industrial premises and *sensitive land uses*;
 - e) *High impact industry* uses are not located in the zone due to their likely significant adverse impacts on adjacent non-industrial land and *sensitive land uses* that cannot be contained on-site;
 - f) Non-industrial uses which are allied and compatible with industrial activities, including *caretaker's accommodation* and *transport depot* are accommodated;
 - g) *Aquaculture* where for *low impact aquaculture* is accommodated where designed and operated in a manner compatible with the predominant industrial activities;
 - h) Specific business activities that are not appropriately located in the Centre zone because of development scale, character or amenity considerations such as *agricultural supplies stores*, *garden centres*, *hardware and trade supplies*, *outdoor sales*, *service stations* and *showrooms*, may also be established. These uses are appropriately located and designed to ensure that they do not compromise the ongoing operation and viability of industrial activities operating in the zone;
 - i) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - j) Development is serviced by the following infrastructure:
 - (i) the reticulated water supply network;
 - (ii) either the reticulated sewerage network or a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (i) stormwater drainage, electricity, gas and telecommunications services as appropriate;
 - k) Development is located, designed and operated to minimise the consumption of energy and water;
 - l) Development does not interfere with the safe and efficient operation of the surrounding road network and maintains the amenity of adjacent non-industrial land through an appropriate level of direct access to the Brisbane Valley Highway, D'Aguilar Highway and/or other major roads in Somerset Region;

- m) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development; and
- n) Development responds to land constraints, including but not limited to topography, bushfire and flooding.

6.2.6.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.6.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) maintains a predominant low-medium rise built form; and (b) complements development in the surrounding locality.	AO1 <i>Building height</i> does not exceed two storeys and 11.5 metres above <i>ground level</i> .
Building setbacks	
PO2 <i>Building setbacks:</i> (a) maintain a coherent streetscape; (b) make efficient use of the site for access and servicing requirements; and (c) assist in managing the impacts of air, noise and odour emissions on <i>adjoining premises</i> .	AO2.1 Buildings and structures are setback a minimum 6 metres from the <i>primary street frontage</i> of the site. AO2.2 Buildings and structures are setback a minimum 3 metres from each side boundary of the site. AO2.3 Buildings and structures are setback a minimum 3 metres from the rear boundary of the site.
For assessable development	
Building scale	
PO3 <i>Building scale:</i> (a) reflects the predominant medium-high intensity scale of development in the zone; and (b) provides for the efficient use of the site and the on-site provision of landscaping and access, car parking and servicing areas.	AO3 <i>Site cover</i> does not exceed 75 per cent.
Environmental management	
PO4 Industrial activities operate in accordance with contemporary best practice environmental management principles and do not result in any adverse impacts on the following environmental values:	AO4 Development complies with the applicable requirements of: (a) the <i>Environmental Protection (Air) Policy 2008</i> ; and

Performance outcomes	Acceptable outcomes
(a) air quality; (b) water quality; and (c) soil quality.	(b) the <i>Environmental Protection (Water) Policy 2009</i> .
Amenity	
PO5 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) traffic generation; (f) the use of <i>advertising devices</i> ; (g) visual amenity; and (h) overlooking and privacy.	AO5 Development complies with the applicable requirements of: (a) the <i>Environmental Protection (Air) Policy 2008</i> ; and (b) the <i>Environmental Protection (Noise) Policy 2008</i> .
PO6 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i> ; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO6 Development complies with the applicable requirements of: (a) the <i>Environmental Protection (Air) Policy 2008</i> ; and (b) the <i>Environmental Protection (Noise) Policy 2008</i> .

6.2.7 Recreation and open space zone code

6.2.7.1 Application

This code applies to assessing material change of use and building work for development in the Recreation and open space zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.7.2 Purpose

- (1) The **purpose** of the Recreation and open space zone is to provide for —
 - (a) a variety of cultural, educational, leisure, recreation and sporting uses and activities, including, for example—
 - (i) parks, playgrounds or playing fields for the use of residents and visitors; and
 - (ii) parks, or other areas, for the conservation of natural areas; and
 - (b) facilities and infrastructure to support the uses and activities stated in paragraph (a).
- (2) The **local government purpose** of the code is to establish a publicly accessible network of open space in the towns of Somerset Region that provides for:
 - a) active and passive recreation areas;
 - b) recreation activities and limited community facilities; and
 - c) the conservation of important natural features and processes.
- (3) The purpose of the Recreation and open space zone will be achieved through the following **overall outcomes**:
 - a) A range of publicly accessible recreation activities, including *indoor sport and recreation, outdoor sport and recreation, park* and other low-intensity uses that meet the needs of the Somerset Region community are provided;
 - b) Uses such as *caretaker's accommodation, clubs and community uses and food and drink outlets* may be established in the zone where demonstrated to be:
 - (i) ancillary to recreation activities and, where centre activities, consistent with the development of the Somerset Region town centres network; and
 - (ii) subordinate in scale to the predominant use of the site;
 - c) Temporary uses such as markets or outdoor entertainment events are of a scale that can be reasonably accommodated by the existing open space facilities;
 - d) The predominant low rise built form and very low intensity scale of development in the zone is maintained, which assists in providing a visual contrast to the more intensively developed parts of the town;
 - e) The design and siting of recreation activities mitigates potential impacts on the amenity of *adjoining premises* and the character of the surrounding locality;
 - f) Important natural features and processes, including habitat for flora and fauna and riparian corridors and natural drainage functions are conserved and protected from inappropriate development;
 - g) Land included in the zone is generally subject to a higher level of flooding risk and is protected from inappropriate development that increases the numbers of people or structures from this risk. Development also responds to other land constraints, including landslide and bushfire risks;
 - h) Connections to the broader open space network, including local and regional parks and corridors are facilitated for the use and enjoyment of residents and visitors;
 - i) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - j) Development is serviced by the following infrastructure:
 - (i) the reticulated water supply network;
 - (ii) either the reticulated sewerage network or a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (iii) stormwater drainage, electricity, gas and telecommunications services as appropriate; and

- k) Development is designed to incorporate sustainable practices including maximising energy efficiency, water conservation and active transport.

6.2.7.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.7.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) maintains a predominant low-medium rise built form; and (b) complements development in the surrounding locality.	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Building setbacks	
PO2 <i>Building setbacks:</i> (a) maintain a coherent streetscape; and (b) manage potential impacts on the amenity enjoyed by development on <i>adjoining premises</i> .	AO2.1 Buildings and structures are setback a minimum 10 metres from the <i>primary street frontage</i> of the site. AO2.2 Buildings and structures are setback a minimum 6 metres from side and rear boundaries of the site.
For assessable development	
Building scale	
PO3 <i>Building scale:</i> (a) maintains a very low intensity scale of development; and (b) remains subordinate to the predominant open space character of the zone.	AO3 <i>Site cover</i> does not exceed 20 percent.
Natural environment and hazards	
PO4 The ecological values of the site are protected and risks to development from natural hazards are minimised through the appropriate siting and design of all buildings and structures, having regard to: (a) regulated or remnant vegetation; (b) biodiversity corridors and networks; (c) bushfire risk; and (d) flooding risk.	AO4 No acceptable outcome provided.
Amenity	
PO5 The design, location and operation of development does not result in any undue	AO5 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i>; (h) visual amenity; and (i) overlooking and privacy.	
PO6 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i>; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO6 No acceptable outcome provided.

6.2.8 Rural residential zone code

6.2.8.1 Application

This code applies to assessing material change of use and building work for development in the Rural residential zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.8.2 Purpose

- (1) The purpose of the rural residential zone is to provide for residential uses and activities on large lots, including lots for which the local government has not provided infrastructure and services..
- (2) The **local government purpose** of the code is to provide rural residential development opportunities in the Minden North locality in a semi-rural setting that provides limited access to urban infrastructure networks and local services.
- (3) The purpose of the Rural residential zone code will be achieved through the following **overall outcomes**:
 - a) The Rural residential zone provides very low density residential living opportunities in a semi-rural environment on large lots generally greater than 4,000 square metres;
 - b) *Dwelling houses* are the predominant accommodation activities provided;
 - c) The predominant low rise, low intensity scale of development in the zone provided by dwelling houses is maintained, consistent with the semi-rural character of the precinct and the dominance of natural features and vegetation over built form;
 - d) Appropriate *home based business* uses complement the semi-rural character and amenity of the zone;
 - e) The existing subdivision pattern is retained, with lots generally greater than 4,000 square metres in area;
 - f) Development for residential uses adjacent to rural areas does not interfere with the existing or ongoing use of the rural land for productive rural activities;
 - g) Development is serviced by the following infrastructure:
 - (i) the reticulated water supply network;
 - (ii) a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (iii) stormwater drainage, electricity, gas and telecommunications services as appropriate; and
 - h) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
 - i) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
 - j) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development;
 - k) Development responds to land constraints, including but not limited to topography, bushfire and flooding.

6.2.8.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.8.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:-</i> (a) exhibits a low rise character consistent with the predominant built form of the zone; and (b) does not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i> .
Outbuildings (Class 10a)	
PO2 <i>Outbuildings</i> are not used for habitable or domestic purposes.	AO2 <i>Outbuildings</i> are used for non-habitable purposes only.
Building setbacks	
PO3 <i>Building setbacks:</i> (a) provide a well-defined separation of built form between <i>adjoining premises</i> that is consistent with the semi-rural character of the zone; and (b) do not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO3.1 Buildings and structures are setback a minimum 10 metres from the <i>primary street frontage</i> of the site. AO3.2 Buildings and structures are setback a minimum 10 metres from the side and rear boundaries of the site.
Animal husbandry	
PO4 Development for <i>animal husbandry</i> does not compromise the: (a) amenity enjoyed by <i>sensitive land uses</i> located on <i>adjoining premises</i> ; and (b) water quality values of local receiving environments.	AO4 <i>Animal enclosures</i> and associated structures (other than fences) are not located within: (a) 100 metres of a <i>sensitive land use</i> on an <i>adjoining premises</i> ; and (b) 15 metres of a <i>dwelling house</i> on the same site.
For assessable development	
Building scale	
PO5 <i>Building scale:</i> (a) maintains the predominant low intensity scale of development in the zone; and (b) reinforces the semi-rural character of the precinct and the dominance of natural features over built form.	AO5 <i>Site cover</i> does not exceed 20 percent.

Performance outcomes	Acceptable outcomes
Amenity	
PO6 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i>; (h) visual amenity; and (i) overlooking and privacy.	AO6 No acceptable outcome provided.
PO7 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i>; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO7 No acceptable outcome provided.

6.2.9 Rural zone code

6.2.9.1 Application

This code applies to assessing material change of use and building work for development in the Rural zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.9.2 Purpose

- (1) The **purpose** of the Rural zone is to:
 - a) provide for rural uses and activities; and
 - b) provide for other uses and activities that are compatible with—
 - (i) existing and future rural uses and activities; and
 - (ii) the character and environmental features of the zone; and
 - c) maintain the capacity of land for rural uses and activities by protecting and managing significant natural resources and processes.
- (2) The **local government purpose** of the code is to:
 - a) facilitate the establishment of a wide range of productive rural activities in Somerset Region;
 - b) protect the productive natural resources and environmental and scenic values of the rural landscape from inappropriate development; and
 - c) provide for the establishment of a limited range of complementary non-rural uses that promote sustainable economic diversification or which provide a service to rural areas of Somerset Region.
- (3) The purpose of the Rural zone code will be achieved through the following **overall outcomes**:
 - a) A mix of rural uses predominate in the zone, including *animal husbandry, animal keeping, aquaculture, cropping* (including *forestry for wood production*), *intensive animal industries, intensive horticulture, permanent plantations, roadside stalls, rural industry* and other uses;
 - b) Permanent accommodation activities are limited to the establishment of *dwelling houses, caretaker's accommodation* and *rural workers accommodation* on existing lots;
 - c) *Home based business* may be established where the scale, intensity and nature of the use is compatible with the character and amenity of the surrounding locality;
 - d) *High impact activities* are appropriately separated from towns, small townships, rural residential settlements, the Glamorgan Vale Urban Investigation Area, the regional water storages of Lake Somerset and Lake Wivenhoe and tourism focus areas to protect the existing and future amenity and environmental values of these areas;
 - e) Tourism development, including short-term *accommodation activities*, is focused in the Principal Future Strategic Tourism Focus Area and the Lake Somerset Water-based Recreation Focus Area. Non-tourism related development in these two tourism focus areas does not adversely affect the rural, natural and environmental values of the locality and maintains the possibility for future tourism-based opportunities to leverage off these values;
 - f) Non-rural uses such as *renewable energy facilities, utility installations* or tourism development such as *short-term accommodation, nature-based tourism, tourist park* and *function facility* may be established where the use is:
 - (i) compatible with the landscape and scenic amenity values of Somerset Region and consistent with the amenity of the locality;
 - (ii) supported by an appropriate level of infrastructure; and
 - (iii) located, designed and operated to minimise conflicts with rural activities on *adjoining premises*;

- g) The operational viability of existing rural activities, including *high impact activities*, are protected from the encroachment of incompatible development such as *sensitive land uses* and tourism development;
- h) A general low rise and low intensity scale of development is maintained consistent with the predominant rural character of the zone and visual prominence of environmental and landscape features in the rural landscape;
- i) Agricultural land is retained for productive rural activities and is protected from fragmentation and alienation by inappropriate development;
- j) Identified hard rock, sand and gravel resources located on and adjacent to the alluvial terraces of the Brisbane River and its tributaries are protected from inappropriate development;
- k) Extractive industry operations are not prejudiced by the encroachment of incompatible development;
- l) Identified mineral resources are protected from encroachment by incompatible development;
- m) Downstream water quality values in the receiving environments of Lake Somerset, Lake Wivenhoe and the Mid-Brisbane River are maintained and enhanced;
- n) The scenic amenity and landscape values of Somerset Region are maintained and enhanced by development;
- o) Development is generally self-sufficient as far as servicing by utilities infrastructure is concerned, and is provided with:
 - (i) an adequate on-site supply of potable water;
 - (ii) a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values; and
 - (iii) electricity and telecommunications services as appropriate;
- p) Development is designed to incorporate sustainable practices including maximising energy efficiency and water conservation;
- q) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
- r) Areas of ecological significance, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development;
- s) Development responds to land constraints, including but not limited to topography, bushfire and flooding;
- t) Historical clusters of small vacant allotments are not expected to be developed with houses given the lack of suitable physical and social infrastructure.

6.2.9.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.9.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) maintains a low rise built form; and (b) is subordinate to the predominant character and environment and features values of the locality.	AO1 <i>Building height</i> does not exceed two storeys and 11.5 metres above <i>ground level</i> .
Building setbacks	
PO2 <i>Building setbacks:</i> (a) contribute to the maintenance of the rural character of the zone; and	AO2 Buildings and structures are setback a minimum 15 metres from all boundaries of the site.

Performance outcomes	Acceptable outcomes
(b) manage potential amenity impacts on <i>sensitive land uses on adjoining premises</i> .	
Animal husbandry	
PO3 Development for <i>animal husbandry</i> does not result in: (a) environmental harm and nuisance on <i>sensitive land uses</i> located on <i>adjoining premises</i> ; and (b) adverse impacts on water quality values of local receiving environments.	AO3.1 <i>Animal enclosures</i> and associated structures (other than fences) are not located within: (a) 100 metres of a lot located in the following zones: (i) General residential zone (excluding the Park residential precinct); or (ii) Township zone; (b) 100 metres of a <i>sensitive land use</i> on an <i>adjoining premises</i> ; and (c) 15 metres of a <i>dwelling house</i> on the same site.
Outbuildings (Class 10a)	
PO4 <i>Outbuildings</i> are not used for habitable or domestic purposes.	AO4 <i>Outbuildings</i> are used for non-habitable purposes only.
Outdoor sport and recreation	
PO5 Development ensures that the amenity of the area is maintained.	AO5 Development operates within the hours of 6am and 6pm.
PO6 Development ensures that the nature and type of lighting for outdoor sport and recreation activities is intended for lower level infrequent use.	AO6 Development provides outdoor lighting which is in compliance with Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting.
PO7 Development is compatible with scale, bulk, design and character of the surrounding area.	AO7 All facilities are located a minimum distance of 15 metres from all boundaries.
PO8 The site is accessed via a road that is of a standard to adequately cater for the traffic generated by the use without causing traffic hazards, damage to the road or traffic or dust nuisance to persons or property not connected with the use.	AO8 Access is to be provided in accordance with Planning Scheme Policy 4 – Design Standards.
PO9 Waste does not have an adverse effect on the amenity of the surrounding area or environment.	AO09 Refuse is collected and stored in a screened area and is removed from the site by approved contractor.
Car parking	
PO10 No degradation of the natural environment occurs through loss of vegetation, disturbance or destruction of wildlife corridors or important stands of remnant vegetation.	AO10 Facilities do not result in the removal of remnant vegetation or disturb or redirect any natural watercourse.
	Buildings and storage areas and parking and loading areas are located at least 20m

Performance outcomes	Acceptable outcomes
	from any natural features such as creeks, gullies, waterways and wetlands.
For assessable development	
Environmental management	
PO11 Rural activities operate in accordance with contemporary best practice environmental management principles and do not result in any adverse impacts on the following environmental values: (a) air quality; and (b) water quality.	AO11.1 The use is operated in accordance with the <i>Environmental Protection (Air) Policy 2008</i> . AO11.2 The use is operated in accordance with the <i>Environmental Protection (Noise) Policy 2008</i> . AO11.3 The use is operated in accordance with the <i>Environmental Protection (Water) Policy 2009</i> .
PO12 Liquid and solid waste disposal, including carcass disposal, and emissions of contaminants to surface or groundwater (including contaminated stormwater) do not result in environmental harm or nuisance.	AO12 No acceptable outcome provided.
Amenity	
PO13 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise; (d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	AO13 No acceptable outcome provided.
PO14 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i> ; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO14 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
Tourism Development	
PO15 Tourism development is separated from rural activities so that it does not result in: (a) adverse impacts on the ongoing operation of existing rural activities or the potential operation of future rural activities; (b) adverse impacts on rural amenity; and (c) inability for a tourism development to operate as intended having regard to the nature of rural activities. Note – Tourism development in the Rural zone includes any use that attracts visitors for entertainment, functions, recreation or short-term stays, including <i>nature based tourism, short-term accommodation, tourist park, winery, tourist attraction or function facility</i>.	AO16 <i>Buildings and structures</i> associated with tourism development are set back a minimum of: (a) 50 metres from a public <i>road</i>. (b) 100 metres from the boundary of the site.
PO16 Building siting, spacing, scale, bulk, height, design, form, colours and materials is sympathetic to the character of the <i>site</i> and locality.	AO16No acceptable outcomes provided.
PO17 Development for <i>shop or food and drink outlet</i> is: (a) ancillary to a tourism development; (b) low key in scale, nature and employment; (c) of a size that only serves the needs of the associated tourism development; (d) does not generate traffic on roads in the Rural zone that is additional to traffic otherwise generated by the associated tourism development; and (e) does not create impacts on centres or townships through clustering of small-scale <i>business activities</i>.	AO17 Development for <i>shop or food and drink outlet</i> is: (a) ancillary to a tourism development such as a <i>function facility, nature-based tourism, short-term accommodation, tourist park</i> or <i>winery</i> use; and (b) has a <i>gross floor area</i> that is equal to or less than 250 square metres

6.2.10 Township zone code

6.2.10.1 Application

This code applies to assessing material change of use and building work for development in the Township zone.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in Part 5.

6.2.10.2 Purpose

- (1) The **purpose** of the Township zone is to provide for :
 - a) small to medium urban areas in a rural or coastal area; and
 - b) a variety of uses and activities to service local residents, including, for example, business, community, education, industrial, open space, recreation, residential or retail uses or activities; and
 - c) tourist attractions and short-term accommodation, if appropriate for the area.
- (2) The **local government purpose** of the code is to:
 - a) accommodate an appropriate mix of uses in the small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore, Somerset Dam and Tarampa that directly service local residents and surrounding rural areas, tourists and/or travellers; and
 - b) maintain the amenity and character of these small townships, having regard to the nature and scale of the mix of uses accommodated.
- (3) The purpose of the Township zone code will be achieved through the following **overall outcomes**:
 - a) Dwelling houses are the predominant use provided in the small townships;
 - b) A predominant low rise built form and low intensity scale of development is maintained, consistent with the semi-rural development character of the small townships;
 - c) The accommodation of non-residential activities is limited to those uses that service local residents and surrounding rural areas and tourists. The following uses may be established whereof a scale that is consistent with the amenity and low density character of the small township:
 - (i) business activities (including *agricultural supplies stores, food and drink outlets, hardware and trade supplies, offices, service stations, shops and veterinary services*);
 - (ii) community activities (*community uses and educational establishments [state schools]*);
 - (iii) entertainment activities (*hotels*);
 - (iv) industry activities (*low impact industry and service industry*); and
 - (v) tourist related uses such as *bed and breakfast, nature based tourism, short-term accommodation and tourist park*.
 - d) The development or expansion of business activities is limited in scale to satisfy only local needs and reinforce the primacy of the Somerset Region town centres network;
 - e) Industrial development is limited to *low impact industry and service industry* uses that are of a limited scale to mitigate potential amenity impacts on *adjoining premises*;
 - f) In the small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Linville, Minden, Moore and Tarampa, the existing subdivision pattern is largely retained consistent with the low density residential character of the zone and level of service by reticulated sewerage infrastructure. In those parts of the zone that are:
 - (i) serviced by the reticulated sewerage network, lots are generally greater than 1,000 square metres in area; and
 - (ii) not serviced by the reticulated sewerage network, lots are generally greater than 1,500 square metres in area, with any intensification of development required to demonstrate adequate arrangements to facilitate on-site effluent treatment and disposal;

- g) In the small township of Somerset Dam, the characteristic small lot subdivision pattern in the small township is largely retained, with lots generally greater than 400 square metres in area;
- h) Residential development adjacent to rural areas does not interfere with the existing or ongoing use of the rural land for productive rural activities;
- i) Development is serviced by the following infrastructure:
 - (i) the reticulated water supply network in the small townships of Linville, Somerset Dam and Tarampa;
 - (ii) an adequate on-site supply of potable water in the small townships of Coominya, Glamorgan Vale, Harlin, Jimna, Minden and Moore;
 - (iii) the reticulated sewerage network in the small township of Somerset Dam;
 - (iv) a sustainable on-site effluent treatment and disposal system that maintains environmental and water quality values in the small townships of Coominya, Glamorgan Vale, Linville, Harlin, Jimna, Minden, Moore and Tarampa; and
 - (v) stormwater drainage, electricity, gas and telecommunications services as appropriate; and
- j) Development design promotes ecological sustainability through the incorporation of measures to achieve energy efficiency, water conservation;
- k) Development conserves and sensitively integrates with historic places or items of cultural heritage significance;
- l) The natural environment, including watercourses, wetlands, habitats, vegetation and bushland are retained, enhanced and buffered from the impacts of development;
- m) The downstream water quality values in the receiving environments of Lake Somerset, Lake Wivenhoe and the Mid-Brisbane River are maintained and enhanced; and
- n) Development responds to land constraints, including but not limited to topography, bushfire and flooding.

6.2.10.3 Assessment benchmarks

Part A—Requirements for accepted development and assessment benchmarks for assessable development

Table 6.2.10.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Building height	
PO1 <i>Building height:</i> (a) maintains the established low rise built form character of the small township; (b) is comparable with adjacent low density residential development in the locality; and (c) does not detract from the amenity enjoyed by <i>adjoining premises</i> .	AO1 <i>Building height</i> does not exceed two storeys and 8.5 metres above <i>ground level</i>
Building setbacks	
PO2 <i>Building setbacks:</i> (a) present a coherent streetscape; and (b) manage potential adverse impacts of non-residential development on the amenity enjoyed by <i>adjoining premises</i> .	AO2 <i>Buildings and structures</i> have a: (a) minimum side boundary clearance of 2.5 metres; and (b) minimum rear boundary clearance of 6 metres.
Outbuildings (Class 10a)	
PO3	AO3

Performance outcomes	Acceptable outcomes																				
<i>Outbuildings</i> are not used for habitable or domestic purposes.	<i>Outbuildings</i> are used for non-habitable purposes only.																				
For assessable development																					
Building scale																					
PO4 Building scale: (a) is consistent with the predominant low intensity scale of development in the small township; and (b) allows for generous landscaping and open space opportunities.	AO4 <i>Site cover</i> does not exceed 50 percent.																				
Non-residential development																					
PO5 The provision of non-residential floor space balances the following needs: (a) adequate service of local residents and surrounding rural areas; (b) the delivery of an appropriate built form that is consistent with the character and amenity of the small township; and (c) the maintenance of the primacy of the Somerset Region town centres network.	AO5 The maximum <i>gross floor area</i> for <i>business activities</i> does not exceed 250 square metres.																				
PO6 Non-residential development is consolidated on the main streets of small townships to: (a) increase their visibility; (b) assist in promoting tourism development opportunities on tourist routes; (c) make efficient use of available urban infrastructure; and (d) minimise intrusion into predominantly residential areas.	AO6 Non-residential development locates on the following main streets: <table border="1"> <thead> <tr> <th>Small township</th><th>Main street/s</th></tr> </thead> <tbody> <tr> <td>Coominya</td><td>Coominya Connection Road</td></tr> <tr> <td>Glamorgan Vale</td><td>Glamorgan Vale-Lowood Road Marburg Road</td></tr> <tr> <td>Harlin</td><td>Brisbane Valley Highway</td></tr> <tr> <td>Jimna</td><td>Bellbird Road School Road</td></tr> <tr> <td>Linville</td><td>Linville Road</td></tr> <tr> <td>Minden</td><td>Lowood-Minden Road Talleghalla Road</td></tr> <tr> <td>Moore</td><td>D'Aguilar Highway</td></tr> <tr> <td>Somerset Dam</td><td>Main Street (Esk-Kilcoy Road)</td></tr> <tr> <td>Tarampa</td><td>Lowood-Minden Road</td></tr> </tbody> </table>	Small township	Main street/s	Coominya	Coominya Connection Road	Glamorgan Vale	Glamorgan Vale-Lowood Road Marburg Road	Harlin	Brisbane Valley Highway	Jimna	Bellbird Road School Road	Linville	Linville Road	Minden	Lowood-Minden Road Talleghalla Road	Moore	D'Aguilar Highway	Somerset Dam	Main Street (Esk-Kilcoy Road)	Tarampa	Lowood-Minden Road
Small township	Main street/s																				
Coominya	Coominya Connection Road																				
Glamorgan Vale	Glamorgan Vale-Lowood Road Marburg Road																				
Harlin	Brisbane Valley Highway																				
Jimna	Bellbird Road School Road																				
Linville	Linville Road																				
Minden	Lowood-Minden Road Talleghalla Road																				
Moore	D'Aguilar Highway																				
Somerset Dam	Main Street (Esk-Kilcoy Road)																				
Tarampa	Lowood-Minden Road																				
Amenity																					
PO7 The design, location and operation of development does not result in any undue adverse impact on the amenity of the locality, having regard to: (a) hours of operation; (b) lighting; (c) noise;	AO7 No acceptable outcome provided.																				

Performance outcomes	Acceptable outcomes
(d) dust, odour and other airborne emissions; (e) public health and safety; (f) traffic generation; (g) the use of <i>advertising devices</i> ; (h) visual amenity; and (i) overlooking and privacy.	
PO8 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) lighting; (e) <i>advertising devices</i> ; (f) visual amenity; (g) privacy; (h) odour; or (i) emissions.	AO8 No acceptable outcome provided.

7 Part 7 Overlays

7.1 Preliminary

- (1) Overlays identify areas within the planning scheme that reflect state and local level interests and that have one or more of the following characteristics:
 - (a) there is a particular sensitivity to the effects of development
 - (b) there is a constraint on land use or development
 - (c) there is the presence of valuable resources
 - (d) there are particular opportunities for development.
- (2) Overlays are mapped and included in Schedule 2.
- (3) The changed category of development and assessment, if applicable, for development affected by an overlay are in Part 5.
- (4) Some overlays may be included for information purposes only. This should not result in a change to the category of development and assessment or any additional assessment benchmarks.
- (5) Assessment benchmarks for an overlay may be contained in one or more of the following:
 - (a) a map for an overlay
 - (b) a code for an overlay
 - (c) a zone code
 - (d) a local plan code
 - (e) a development code
- (6) Where development is proposed on *premises* partly affected by an overlay, the assessment benchmarks for the overlay only relates to the part of the *premises* affected by the overlay.
- (7) The overlays for the planning scheme are:
 - (a) Agricultural land overlay;
 - (b) Air transport overlay;
 - (c) Biodiversity overlay;
 - (d) Bushfire hazard overlay;
 - (e) Catchment management overlay;
 - (f) Extractive resources overlay;
 - (g) Flood hazard overlay;
 - (h) High impact activities management area overlay;
 - (i) Infrastructure overlay;
 - (j) Landslide hazard overlay;
 - (k) Local heritage overlay;
 - (l) Scenic amenity overlay;
 - (m) Stock route management overlay.

7.2 Overlay codes

7.2.1 Agricultural land overlay code

7.2.1.1 Application

This code applies to assessable development:

- (1) subject to the Agricultural land overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the Agricultural land overlay code by the tables of assessment in Part 5.

7.2.1.2 Purpose and overall outcomes

- (1) The purpose of the code is to protect agricultural land from any incompatible development that may adversely impact on its productive use by present and future generations.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the alienation, loss or fragmentation of agricultural land is avoided, except where an overriding need exists for the *development* in terms of public benefit, where no suitable alternative *site* exists, and the loss or fragmentation of agricultural land is minimised; and
 - (b) the use of agricultural land for increased and efficient agricultural production and agricultural development is promoted.

7.2.1.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 7.2.1.3.A—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
PO1 Loss, fragmentation, alienation or diminished capacity of agricultural land is avoided unless: (a) an overriding need exists for the development in terms of public benefit; (b) no suitable alternative site exists; (c) loss or fragmentation is minimised to the extent possible.	Where for a material change of use in the Rural zone AO1.1 Development (inclusive of the <i>development footprint</i>) is not located on land identified as Agricultural land Class A or Class B or Important Agricultural Areas on the Agricultural land overlay maps OM01a-b unless identified in Table 7.2.1.3.B . AO1.2 The <i>development footprint</i> for development other than <i>rural activities</i> identified in Table 7.2.1.3.B is equal to or less than 750m ² on land identified as Agricultural land Class A or Class B or Important Agricultural Areas on the Agricultural land overlay maps OM01a-b . Where for Reconfiguring a Lot in the Rural zone AO1.3 Reconfiguring a lot does not result in the creation of a lot with an area less than 100 hectares on land identified as Agricultural Land

Performance outcomes	Acceptable outcomes
	Class A or Class B or Important Agricultural Areas on the Agricultural land overlay maps OM01a-b .
PO2 <i>Sensitive land uses</i> in proximity to Agricultural land Class A or Class B or Important Agricultural Areas are located and designed in a manner that: (a) avoids land use conflict; (b) avoids the alienation of the resource; (c) manages impacts from agricultural activities, including chemical spray drift, odour, noise, dust, smoke and ash; and (d) does not adversely affect public health, safety and amenity; unless it is demonstrated that the area does not support Agricultural land Class A or Class B or Important Agricultural Areas as mapped. Note- Note where Reconfiguring a lot occurs within land identified as <i>Agricultural land Class A or Class B</i> or Important Agricultural Areas for <i>urban purposes</i> within a <i>Future urban area</i> or <i>Urban investigation area</i> and is otherwise consistent with the Planning Scheme (including Part 4 - Strategic Framework) and other relevant State planning policy, State planning regulatory provisions or State legislation a buffer to <i>sensitive land uses</i>, dedicated as public open space may be provided in accordance with a structure plan.	Where for Reconfiguring a Lot in the Rural zone or a Residential Zone Category on land that adjoins the Rural zone AO2 Lots created for <i>sensitive land uses</i> within land identified as agricultural land Class A or Class B identified on Agricultural land overlay maps OM01a-b provide a public open space buffer area with a minimum width of: (a) 300 metres where open ground conditions apply; or (b) 50 metres minimum width where vegetated in accordance with a detailed landscape plan and maintained in accordance with a public open space management plan.

Table 7.2.1.3.B—Compatible development within Agricultural Land Class A or Class B

(a) <i>animal husbandry</i>; (b) <i>animal keeping</i>; (c) <i>cropping</i> including a <i>building</i>, structure or activity supporting <i>cropping</i>; (d) <i>dwelling house</i>; (e) <i>home based business</i>; (f) <i>intensive animal industry</i>; (g) <i>intensive horticulture</i>; (h) <i>landing</i>; (i) <i>outdoor lighting</i>; (j) <i>roadside stalls</i>; (k) <i>winery</i>.

7.2.2 Air transport overlay code

7.2.2.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the air transport overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the air transport overlay code by the tables of assessment in Part 5.

7.2.2.2 Purpose and overall outcomes

- (1) The purpose of the air transport overlay code is to protect and maintain the operational efficiency and safety of *aviation facilities* and avoid land use conflicts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the safety of aircraft operating within an airport's operational airspace is maintained and enhanced;
Note -Operational airspace includes the areas and vertical dimensions of an airport's building height restriction area.
 - (b) *aviation facilities* including navigation, communication and surveillance facilities are protected from incompatible *development* to maintain their efficient functioning; and
 - (c) *sensitive land uses* and other incompatible activities are not adversely impacted by aircraft noise.

7.2.2.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.2.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Kilcoy non-directional beacon and Mt Glorious Airservices Tower	
PO1 <i>Development</i> does not interfere with the safe and continued functioning of <i>aviation facilities</i> through: (a) the temporary or permanent intrusion of physical <i>structures</i> that enter an aviation facility's sensitive area; or (b) the introduction of <i>structures</i> or devices that emit electrical or electromagnetic radiation or incorporate reflective surfaces that adversely impact on the functioning of navigation or communication facilities.	AO1.1 Where located within the <i>Kilcoy non-directional beacon buffer</i> identified on the Air transport overlay map OM-002 : (a) <i>buildings</i> and <i>structures</i> are setback 60 metres from the facility; (b) metallic <i>buildings</i> or <i>structures</i> are setback 150 metres from the facility; (c) <i>buildings</i> or <i>structures</i> do not exceed 2.5 metres in height or 2.5m³ where located within 60 metres and 150 metres of the facility; (d) <i>buildings</i> and <i>structures</i> do not exceed 8.0 metres in height where located within 150 metres and 500 metres of the facility. AO1.2 Where located within the <i>Mount Glorious air services tower</i> identified on the Air transport overlay map OM-002 :

Performance outcomes	Acceptable outcomes
	(e) <i>buildings and structures</i> are setback 60 metres from the facility; (f) <i>metallic buildings or structures</i> are setback 100 metres from the facility; (g) <i>buildings or structures</i> do not exceed 2.5 metres in height or 2.5m³ where located within 60 metres and 100 metres of the facility; (h) <i>buildings and structures</i> do not exceed 8.0 metres in height where located within 100 metres and 600 metres of the facility.
Noise and amenity	
PO2 <i>Sensitive land uses</i> either: (a) avoid airport noise sensitive areas; or (b) are sited, designed and constructed to mitigate noise nuisance to acceptable standards. Note - Sensitive land uses must achieve compliance with AS2021-2000 Acoustics- Aircraft noise intrusion- Building siting and construction.	AO2.1 <i>Sensitive land uses</i> are not located on land identified subject to the <i>RAAF Amberley Air Base 20—25 ANEF contour</i> as identified on the Air transport overlay map OM-001.
Building height	
PO3 <i>Development</i> does not cause an obstruction or hazard to the safe movement of aircraft within an airport's operational airspace through the temporary or permanent intrusion of physical <i>structures</i> into an airport's operational airspace, particularly take-off and approach flight paths.	AO3.1 <i>Buildings and structures</i> (both freestanding and attached to <i>buildings</i>, including signs, masts, antennae or temporary structures such as cranes) and vegetation at its mature height do not penetrate the <i>building height restriction area</i> as identified on the Air transport overlay map OM-002.
For assessable development	
Obstructions and hazards	
PO4 <i>Development</i> does not cause an obstruction or hazard to the safe movement of aircraft within an airport's operational airspace through any of the following: (a) the attracting of wildlife, in particular flying vertebrates such as birds or bats, in significant numbers; or (b) the emission of particulates, gasses or other materials that may cause air turbulence, reduce visibility or affect aircraft engine performance.	AO4.1 Uses involving the bulk handling or disposal of putrescibles, such as landfill and waste transfer facilities, are not located within the <i>operational airspace - wildlife attraction restriction area</i> as identified on the Air transport overlay map OM-002. AO4.2 <i>Development</i> does not release the following emissions into operational airspace: (a) gaseous plumes with a velocity exceeding 4.3 metres per second; (b) smoke, dust, ash or steam; or (c) emissions with depleted oxygen content.

Editor's note—The *Defence (Areas Control) Regulation [D(AC)R]* is a Commonwealth regulation under the *Defence Act 1903*. Development in the area covered by this regulation which exceeds certain heights will require a separate approval from the Department of Defence under Regulation 8 of the D(AC)R. The Department of Defence also requires that all tall structures (30m high within 30km of the airport and 45m high elsewhere) are registered with RAAF Aeronautical Information Services

7.2.3 Biodiversity overlay code

7.2.3.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the biodiversity overlay shown on the overlay maps contained within Schedule 2 or on *premises* otherwise determined to contain matters of environmental significance; and
- (2) identified as requiring assessment against the biodiversity overlay code by the tables of assessment in Part 5.

7.2.3.2 Purpose and overall outcomes

- (1) The purpose of the biodiversity overlay code is to ensure that:
 - (a) environmentally significant areas are identified and protected;
 - (b) ecological connectivity is maintained or improved, habitat extent is maintained or enhanced and degraded areas are rehabilitated; and
 - (c) watercourses and wetlands are maintained, rehabilitated and enhanced;
 - (d) koalas and other significant species are appropriately protected.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *development* conserves and enhances the Somerset Region's biodiversity values and associated ecosystems;
 - (b) *development* protects and establishes appropriate *buffers* to *native vegetation* and significant fauna habitat;
 - (c) *development* protects known populations and supporting habitat of rare and threatened flora and fauna species;
 - (d) the biodiversity values, ecosystem services and climate change resilience of matters of environmental significance are protected and enhanced;
 - (e) the biodiversity values of matters of environmental significance and bushland koala habitat – primary habitat areas are protected from development ;
 - (f) development is located, designed and managed to minimise the edge effects of development on matters of environmental significance;
 - (g) development maintains, protects and enhances the state and regional network of biodiversity corridors that assist in wildlife movement and contribute to the maintenance of habitat and biological diversity;
 - (h) development minimises adverse impacts on koalas and koala habitat;
 - (i) development is appropriately setback from *watercourses* and *wetlands* to avoids or minimise direct and indirect impacts on water quality and biodiversity; and
 - (j) vegetation associated with *wetlands* and *watercourses* is protected and enhanced to improve water quality and natural ecosystem function.

7.2.3.3 Assessment benchmarks

Part A Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.3.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Matters of Local Environmental Significance	
Where within a Rural zone or Rural residential zone PO1 The biodiversity values of areas mapped as Matters of Local Environmental Significance (MLES) on the Biodiversity overlay maps OM003a-b are maintained or enhanced or are managed to ensure any significant residual impacts to MLES are offset in accordance with the <i>Environmental Offsets Act 2014</i>. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	Where within the Rural zone or Rural residential zone AO1.1 <i>Buildings and structures</i> are not located within areas mapped as having Matters of Local Environmental Significance (MLES) on the Biodiversity overlay maps OM003a-b. AND AO1.2 No clearing of <i>native vegetation</i> unless defined as <i>minor operational work</i> is undertaken within areas mapped as having MLES on the Biodiversity overlay maps OM003a-b. OR AO1.3 Development is located, designed and operated to mitigate significant impacts on the environmental values of the areas mapped as MLES on the Biodiversity overlay maps OM003a-b, as identified through provision of a report prepared by an appropriately qualified person that demonstrates how the proposed development mitigates the impacts. AND AO1.4 An environmental offset is provided in accordance with the requirements of the <i>Environmental Offsets Act 2014</i> for impacts to matters of local environmental significance, Note – A report prepared by a suitably qualified person should anticipated losses, and outline what actions are proposed to be undertaken to offset the loss of matters of local environmental significance in accordance with the Queensland Environmental Offsets Policy.
Matters of State Environmental Significance	
PO2	AO2.1 <i>Buildings and structures</i> are not located within areas mapped as containing Matters of

Performance outcomes	Acceptable outcomes
Vegetation clearing in areas mapped as containing Matters of State Environmental Significance (MSES) is avoided unless: (a) it is demonstrated that the area does not support MSES as mapped; or (b) the loss or reduction in MSES is for <i>community infrastructure</i>, or any purpose associated with an Airport, or extractive resources in a key resource area Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	State Environmental Significance (MSES) on the Biodiversity overlay maps OM003a-b. AND AO2.2 No clearing of <i>native vegetation</i> unless defined as <i>minor operational work</i> is undertaken within areas mapped as containing MSES on the Biodiversity overlay maps OM003a-b. OR AO2.3 Development is located, designed and operated to mitigate significant impacts on the environmental values of the areas mapped as containing MSES on the Biodiversity overlay maps OM003a-b, as identified through provision of a report prepared by an appropriately qualified person that demonstrates how the proposed development mitigates the impacts.
Where in an Urban Area PO3 Management arrangements facilitate the ongoing conservation and protection of nature conservation and biodiversity areas within <i>Urban Areas</i>. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	Where in an Urban Area AO3.1 Areas that are mapped as containing MSES on Biodiversity overlay maps OM003a-b are dedicated as public open space for purposes consistent with the ecological values and functions of the area.
PO4 Development is designed and constructed to minimise adverse impacts on matters of environmental significance. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO4.1 The design, layout and construction of the development minimises adverse impacts on matters of environmental significance by: • focusing development in existing cleared areas and minimising the development footprint • aligning new property boundaries to maintain ecologically important areas • ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect matters of environmental significance • maximising the ecological connectivity between environmental areas by retaining continuous vegetated corridors • ensuring that wildlife habitat is protected in its environmental context • minimising fragmentation of matters of environmental significance.
Biodiversity Corridors -rehabilitation and revegetation	

Performance outcomes	Acceptable outcomes
PO5 Development provides for land identified as containing a Biodiversity Corridor on Biodiversity overlay maps OM003a-b to be restored and enhanced so as to contribute towards a functional and connected network of viable habitat areas. Note – where an environmental offset applies, restoration and enhancement activities are to be included as a requirement of a Direct Benefit Management Plan under the Queensland Environmental Offsets Policy.	AO5.1 Development provides for cleared, degraded or disturbed areas identified as containing a Biodiversity Corridor on Biodiversity overlay maps OM003a-b to be rehabilitated or allowed to regenerate naturally. AO5.2 Development provides for locally native plant species to be predominantly used in the revegetation and landscape planting on the <i>site</i>. AO5.3 Development provides for revegetation and landscape planting that does not use declared or environmental weeds.
Biodiversity Corridors –unimpeded movement for wildlife	
PO6 Unimpeded movement of fauna within and through the site via Biodiversity Corridors identified on Biodiversity overlay maps OM003a-b are maintained. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO6.1 Where within a Biodiversity Corridor identified on Biodiversity overlay maps OM003a-b, fauna movement is maintained by: (a) retaining bands of vegetation at least 200 metres wide on a site; and (b) <i>buildings, structures</i> are not located within retained vegetation bands.
Wetlands	
Note –Applies to Wetlands that are identified as matters of state environmental significance -as “High Ecological Significance Wetlands” or “High Ecological Value Waters (wetlands)”- on the Biodiversity overlay maps OM003e-f .	
PO7 <i>Wetlands</i> are protected by: (a) maintaining adequate separation distances between <i>wetlands</i> and development; (b) maintaining and enhancing aquatic and terrestrial habitat including vegetated corridors to allow for native fauna (terrestrial and aquatic) movement; (c) maintaining water quality by providing buffers to allow filtering of sediments, nutrients and other pollutants; and (d) retaining and improving existing <i>wetland</i> associated vegetation. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO7.1 No clearing of <i>native vegetation</i> is undertaken within wetland buffer areas identified on the Biodiversity overlay maps OM003e-f. Where for Material Change of Use AO7.2 A minimum setback is provided between <i>buildings</i> and <i>structures</i> and the edge of a <i>wetland</i> as identified on the Biodiversity overlay maps OM003e-f by a distance not less than 100 metres. Where for Reconfiguring a Lot AO7.3 A minimum setback is provided between a new boundary created by <i>reconfiguring a lot</i> and the edge of a <i>wetland</i> as identified on the Biodiversity overlay maps OM003e-f by a distance not less than 100 metres. Where for Operational Works (comprising works for infrastructure or excavating or filling or landscape works)

Performance outcomes	Acceptable outcomes
	AO7.4 A minimum setback is provided between <i>operational works</i> and the edge of a <i>wetland</i> as identified on the Biodiversity overlay maps OM003e-f by a distance not less than 100 metres.
PO7 Stormwater and wastewater discharges are treated prior to entering a <i>wetland</i> or associated buffer area to ensure the biological integrity of terrestrial and aquatic ecosystems. Note - A performance outcome must be supported by: - an Ecological Site Assessment prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines; and - a Site Based Stormwater Management Plan.	AO8.1 No stormwater is discharged to a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay maps OM003e-f. AO8.2 No wastewater (treated or untreated) is discharged to a <i>wetland</i> or wetland buffer area identified on the Biodiversity overlay maps OM003e-f.
PO9 Wetland buffer areas identified in accordance with AO6.1 to AO6.4 which are cleared, degraded or disturbed as a consequence of the development are rehabilitated to contribute to the establishment of a functional and connected habitat area having regard to: - the use of native plant species of local provenance that support habitat needs; and - replication of the species and structure of adjacent remnant habitats. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO9 No acceptable outcome provided.
Watercourses	
PO10 <i>Watercourses</i> are protected by: - maintaining adequate separation distances between <i>watercourses</i> and development; - maintaining and enhancing aquatic and terrestrial habitat including vegetated corridors to allow for native fauna (terrestrial and aquatic) movement; - maintaining bank stability by minimising bank erosion and slumping; - maintaining water quality by providing buffers to allow filtering of sediments, nutrients and other pollutants; and - retaining and improving existing riparian vegetation. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO10.1 No clearing of <i>native vegetation</i> is undertaken within <i>watercourses</i> or <i>watercourse</i> buffer areas identified on the Catchment management overlay maps OM005a-b. Where for Material Change of Use AO10.2 A minimum setback is provided between <i>buildings</i> and <i>structures</i> and the top of the <i>high bank</i> of a <i>watercourse</i> as identified on the Catchment management overlay maps OM005a-b by a distance not less than identified in Table 7.2.3.3.B. Where for Reconfiguring a Lot AO10.3 A minimum setback is provided between a new boundary created by <i>reconfiguring a lot</i> and the top of the <i>high bank</i> of a <i>watercourse</i> as identified on the Catchment management

Performance outcomes	Acceptable outcomes
	overlay maps OM005a-b by a distance not less than identified in Table 7.2.3.3.B. Where for Operational Works (comprising works for infrastructure or excavating or filling or landscape works) AO10.4 A minimum setback is provided between <i>operational works</i> and the top of the <i>high bank</i> of a <i>watercourse</i> as identified on the Catchment management overlay maps OM005a-b by a distance not less than identified in Table 7.2.3.3.B.
PO11 Stormwater and wastewater discharges are treated prior to entering a <i>watercourse</i> or associated buffer area to ensure the biological integrity of aquatic ecosystems. Note - A performance outcome must be supported by: • an Ecological Site Assessment prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines; and • a Site Based Stormwater Management Plan.	AO11.1 No stormwater is discharged to a <i>watercourse</i> or <i>watercourse</i> buffer area identified on the Catchment management overlay maps OM005a-b. AO11.2 No wastewater (treated or untreated) is discharged to a <i>watercourse</i> or <i>watercourse</i> buffer area identified on the Catchment management overlay maps OM005a-b.
PO12 Areas of <i>watercourse</i> buffer identified in accordance with AO10.1 to AO10.4 which are cleared, degraded or disturbed as a consequence of the development are rehabilitated to contribute to the establishment of a functional and connected habitat network having regard to the use of native vegetation that is endemic to the area and replicates the pre-clearing remnant vegetation composition and structure, including understorey vegetation. Note - A supporting Ecological Site Assessment is prepared in accordance with SC6.1 - Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO12 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
PO13 Management arrangements facilitate the ongoing conservation and protection of nature conservation and biodiversity areas within <i>Urban Areas</i>.	AO13 <i>Watercourses</i> identified on Catchment management overlay maps OM005a-b and associated buffer areas identified in accordance with AO10.2 to AO10.4 are: (a) dedicated as public open space for purposes consistent with the ecological values and functions of the area where for <i>Reconfiguring a Lot</i>; or (b) included within a voluntary statutory covenant for purposes consistent with the ecological values and functions of the area where for <i>Material Change of Use</i>.
Koalas	
PO14 <i>Development</i> is sufficiently setback and minimises impacts on koalas, koala habitat values, and koala habitat connectivity and employs measures to manage impacts on koala biodiversity values. Note - Koalas are listed as vulnerable under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). Referral under the EPBC is required for certain actions. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines. Note - Where a suitably qualified person demonstrates that the mapped koala habitat values attributed to the site are not present on the site the above performance outcome may not apply (subject to Council discretion).	AO14 The design and layout of development minimises adverse impacts on koalas, koala habitat values and habitat connectivity by: (a) locating development in existing cleared areas and minimising the development footprint; (b) aligning new property boundaries to maintain important koala habitat areas; (c) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not adversely impact on koala habitat; (d) maximising the ecological connectivity between koala habitat areas by retaining continuous vegetated corridors; (e) ensuring that koala habitat is protected in its environmental context; (f) minimising fragmentation of koala habitat. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.
PO15 During construction phases: (a) measures are taken in construction practices to not increase the risk of death or injury to koalas; and (b) <i>native vegetation</i> that is cleared and in an area intended to be retained for safe koala movement opportunities is progressively restored and rehabilitated. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO15 No acceptable outcome provided.
PO16	AO16

Performance outcomes	Acceptable outcomes
Fencing design provides safe koala movement opportunities appropriate to the type of the <i>development</i> and habitat connectivity values of the <i>site</i>. Note - Koala exclusion fencing is only to be used where it can be demonstrated that it will prevent koalas from entering an area that poses a direct threat to their safety. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	Where within bushland koala habitat on Biodiversity overlay maps OM-003c-d and within the Rural Zone or Rural residential zone, fencing: (a) consists of post and rail with a minimum gap of 300 millimetres between rails, or (b) other fencing material that has holes or gaps of a minimum of 300 millimetres in diameter, and the first gap is flush with the ground or no more than 400 millimetres from the ground.
PO17 Significant habitat areas are not dissected or further fragmented by <i>roads</i> and <i>road</i> siting and design facilitates safe koala movement by taking into account: (a) the number of vehicles likely to use the proposed <i>road</i>; (b) anticipated vehicle speeds; and (c) the likely volumes of traffic between 6pm and 6am. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO17.1 New <i>roads</i> near identified bushland koala habitat: (a) are designed to limit traffic speeds by incorporating the following ‘go slow’ features: (i) narrowing <i>roads</i>; and/or (ii) curving <i>roads</i>; and/or (iii) incorporating structures to slow vehicles, such as speed bumps. (b) include minor deviations in <i>roads</i> and driveways to retain important <i>koala habitat trees</i>; (c) include lighting at identified or potential koala crossing points to reduce koala and vehicle collisions; (d) provide vegetation and landscaping to increase the visibility of koalas entering the road within verges and median strips; (e) incorporates trees within traffic islands and <i>streetscapes</i>; (f) retains or provides interlocking tree canopies over <i>roads</i>; and (g) includes koala crossing warning signs. Where for Reconfiguring a Lot AO17.2 No new roads are created within bushland koala habitat on Biodiversity overlay maps OM-003c-d.
PO18 Landscaping enhances koala habitat values through the development <i>site</i> and assists in providing for unimpeded koala movement within and across the <i>site</i>. Note – A supporting Ecological Site Assessment is prepared in accordance with SC6.1 – Planning Scheme Policy 1 – Ecological Site Assessment Guidelines.	AO18.1 Landscaping incorporates locally endemic <i>koala habitat trees</i>, and replicates the preclearing remnant vegetation composition and structure, including understorey vegetation.

Table 7.2.3.3.B—Watercourse setbacks

Watercourse stream order	Minimum Setback (m)
Watercourse (Lower Risk Catchment Area)	25

Watercourse (Higher Risk Catchment Area)	50

7.2.4 Bushfire hazard overlay code

7.2.4.1 Application

This code applies to accepted development subject to requirements and assessable development, which are:

- (1) subject to the Bushfire Hazard Area shown on the Bushfire hazard overlay maps **OM004a-b** contained within Schedule 2; and
- (2) identified as requiring assessment against the Bushfire hazard overlay code by the tables of assessment in Part 5.

Note - The Building Code of Australia (BCA) contains provisions applying to building in bushfire prone areas. "Designated bushfire prone areas" for the purposes of the Building Regulation 2006 (section 12) and the BCA are identified as medium (potential intensity), high (potential intensity) or very high (potential intensity) bushfire hazard areas and the potential impact buffer on the **Bushfire hazard overlay maps OM004a-b** in Schedule 2.

7.2.4.2 Purpose and overall outcomes

- (1) The purpose of the Bushfire hazard overlay code is to ensure that development avoids or mitigates the potential adverse impacts of bushfire on people, property, economic activity and the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *development* in areas at risk from bushfire hazard is compatible with the nature of the hazard;
 - (b) the risk to people, property and the natural environment from bushfire hazard is avoided, or where not possible to avoid, that *development* mitigates the risk to an acceptable or tolerable level;
 - (c) *development* does not result in a material increase in the exposure to, extent or severity of bushfire hazard;
 - (d) the loss of vegetation through inappropriately located *development* is minimised;
 - (e) *development* is sited and designed to assist emergency services in responding to bushfire threats or events; and
 - (f) community infrastructure is located and designed to maintain the necessary level of functionality to support affected persons while avoiding risks to public safety during and immediately after a bushfire event.

7.2.4.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Note- The requirements and assessment benchmarks applicable to a potential impact area identified on the Bushfire hazard overlay maps OM004a-b in Schedule 2; shall be those requirements and assessment benchmarks which are applicable to the nominated potential bushfire intensity which adjoins the recognised potential impact buffer.

Table 7.2.4.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Bushfire hazard	
PO1 Development avoids being sited and does not increase the number of persons living or working on land subject to Very High (potential intensity) Bushfire Hazard or High (potential intensity) Bushfire Hazard identified on	AO1.1 Uses within the following <i>Activity groups</i> are located outside of a Very High (potential intensity) Bushfire Hazard or High (potential intensity) Bushfire Hazard identified on Bushfire hazard overlay map OM-004a-b: (a) <i>Accommodation activities group</i> ;

Performance outcomes	Acceptable outcomes
Bushfire hazard overlay map OM-004a-b; unless it is demonstrated that: (a) the subject land or the proposed siting of the development is in an area of the subject land that is a Medium (potential intensity) Bushfire Hazard (or lesser); or bushfire mitigation measures are adequate for the potential bushfire intensity level of the site, being supported by a bushfire hazard risk assessment and bushfire management plan which has been prepared by a suitably qualified person(s). Note- A bushfire management plan is prepared in accordance with SC6.6 Planning Scheme Policy 6 –	(b) <i>Business activities group</i>; (c) <i>Community activities group</i>; and (d) <i>Entertainment activities group</i>; OR AO1.2 A site specific bushfire hazard and risk assessment is prepared to confirm that the subject land or proposed development site is not in a Bushfire Hazard Area or is in a Medium (potential intensity) Bushfire Hazard Area or lesser. Note- A bushfire hazard and risk assessment is prepared in accordance with SC6.6 Planning Scheme Policy 6 – OR AO1.3 The development is sited, designed and operated in accordance with a bushfire management plan prepared by a suitably qualified person(s) which demonstrates that appropriate measures will be put in place to mitigate risks to life and property and/or lessen the bushfire (potential intensity) hazard level to the site. Note- A bushfire management plan is prepared in accordance with SC6.6 Planning Scheme Policy 6 – OR AO1.4 New lots are designed with a size and shape: (a) capable of accommodating efficient emergency access to building for fire fighting vehicles through avoiding rear lot configurations and long narrow lots with long accessways to buildings on site; and (b) to ensure the buildings and structures are sited in the area of lowest potential intensity bushfire hazard on the lot and in accordance with a bushfire management plan to be conditioned on the Reconfiguring a Lot approval. Note- A bushfire management plan is prepared in accordance with SC6.6 Planning Scheme Policy 6 –
PO2 Essential community infrastructure and facilities are able to function effectively during and immediately after a bushfire event and are located and designed to minimise susceptibility to bushfire events.	AO2.1 Development involving essential community infrastructure or facilities are not located within a confirmed a Bushfire Hazard Area. OR

Performance outcomes	Acceptable outcomes
	AO2.2 Where it is not possible to avoid locating in a Bushfire Hazard Area, development involving essential community infrastructure or facilities is to be designed to function effectively during and after bushfire events in accordance with a bushfire hazard and risk assessment and a bushfire management plan. Note- A bushfire hazard and risk assessment and a bushfire management plan are prepared in accordance with SC6.6 Planning Scheme Policy 6
Bushfire mitigation measures on ecological and landscape values	
PO3 In Medium (potential intensity) Bushfire Hazard Areas as identified on Bushfire hazard overlay map OM-004a-b, the development layout (including <i>buildings</i> and <i>structures</i>) is sited: (a) in cleared areas where the environmental impacts of vegetation clearing are minimised; (b) on the area of the site which is least prone to bushfire hazard and /or where the measures taken to reduce the bushfire hazard risk do not adversely impact on biodiversity values and functionality due to the need to address aspect, slope and vegetation cover; (c) to provide that adequate cleared setbacks between buildings, structures and areas of identified potential intensity bushfire hazards take into consideration the existence and retention of significant vegetation, where practical.	AO3.1 <i>Buildings</i> and <i>structures</i> in areas of Medium Bushfire (potential intensity) Hazard as identified on Bushfire hazard overlay map OM-004a-b: (a) are located 100 metres from ridgelines; (b) are not located on north to west facing slopes; (c) have a firebreak with a minimum dimension of 20 metres. OR AO3.2 A bushfire management plan details the required extent of vegetation clearing and landscaping and where required, a modified development design and/or lot layout will minimise clearing of significant vegetation. Note- A bushfire management plan is prepared in accordance with SC6.6 Planning Scheme Policy 6 –
Water supply for fire fighting purposes	
PO4 In Medium (potential intensity) Bushfire Hazard Areas as identified on Bushfire hazard overlay map OM-004a-b, development maintains the safety of people and property by providing an adequate (with sufficient flow), accessible and reliable water supply for fire-fighting purposes.	AO4 For uses involving new or existing development (including buildings and structures) in areas of Medium (potential intensity) Bushfire Hazard as identified on Bushfire hazard overlay map OM-004a-b, each lot has: (a) a reliable reticulated water supply that has sufficient flow and pressure characteristics for fire fighting purposes at all times (minimum pressure and flow in 10 litres a second at 200kPa); or (b) an accessible on-site dam or tank with fire fighting fittings, or a swimming pool of not less than 40,000 litres; or (c) pumps that produce water pressure output from a dam, tank or swimming pool, which are able to be operated without reticulated power.

Performance outcomes	Acceptable outcomes
Vehicular access (including fire fighting and emergency evacuation)	
PO5 In Medium (potential intensity) Bushfire Hazard Areas as identified on Bushfire hazard overlay map OM-004a-b, vehicular access is designed to mitigate against bushfire hazard by: (a) ensuring adequate access for fire fighting and other emergency vehicles; (b) ensuring adequate access for the evacuation of residents and emergency personnel in an emergency situation, including alternative safe access routes should access in one direction be blocked in the event of a fire; (c) providing for the separation of developed areas and adjacent bushland.	AO5.1 Development for Reconfiguring a Lot in a Medium (potential intensity) Bushfire Hazard Area as identified on Bushfire hazard overlay map OM-004a-b incorporates a perimeter road firebreak that: (a) is located between the boundary of the lots and stands of <i>native vegetation</i>; (b) has a minimum cleared width of 20 metres; (c) has a constructed road width of 6 metres; (d) is constructed to an all weather standard. AO5.2 The road design is capable of providing access for fire fighting and other emergency vehicles. AO5.3 In areas of Medium (potential intensity) Bushfire Hazard as identified on Bushfire hazard overlay map OM-004a-b, roads are provided in accordance with the following: (a) Roads are designed and constructed with a maximum gradient of 12.5 percent; (b) Cul-de-sacs are not used except where: (i) a perimeter road designed in accordance with AO5.1 isolates the development from hazardous vegetation; and (ii) provided with alternative access linking the cul-de-sac to other through roads; and (iii) the maximum length of the cul-de-sac is 200 metres. OR AO5.4 Where it is not practicable to provide perimeter road firebreaks in accordance with AO5.1, fire maintenance trails are provided in accordance with the following: (a) located as close as possible to the boundaries of the lot and the adjoining hazardous vegetation; (b) the minimum cleared width is not less than 6 metres; (c) the formed width is not less than 2.5 metres; (d) the formed gradient is not greater than 15 percent; (e) vehicular access is provided at both ends; (f) passing bays and turning areas are provided for fire-fighting appliances either located on public land or in an access easement that is granted in

Performance outcomes	Acceptable outcomes
	favour of the Local Government and QFES.

7.2.5 Catchment management overlay code

7.2.5.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the catchment management overlay code shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the catchment management overlay code by the tables of assessment in Part 5.

7.2.5.2 Purpose and overall outcomes

- (1) The purpose of the catchment management overlay code is to ensure that development does not *adversely impact on water quality* of *watercourses* or the following *waterbodies*:
 - (a) Lake Wivenhoe;
 - (b) Lake Somerset;
 - (c) Lake Atkinson; and
 - (d) Splityard Creek Dam.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the quality of surface water and groundwater in water resource catchments is protected from potential contamination by inappropriate land use and development;
 - (b) further deterioration of water quality in *waterbodies* throughout the Somerset region is avoided;
 - (c) *development* contributes to reducing pollution loads and improving water quality;
 - (d) *development* does not *adversely impact on water quality*, either directly or indirectly, local and regional water supply storages and catchment areas including adjoining regional Council catchments;
 - (e) *development* promotes sustainable land use practices within water resource catchments; and
 - (f) *development* protects and, where possible, enhances natural systems, vegetation and land stability within water resource catchments.

Note -Council may refer development applications to Seqwater for third party comment with respect to seeking comment in relation to the Seqwater Development Guidelines: Development Guidelines for Water Quality Management in Drinking Water Catchments (2010).

7.2.5.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.5.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 Land use and <i>development</i> is: (a) appropriately separated from <i>watercourses</i> and <i>waterbodies</i> to avoid <i>adversely impacting on water quality</i> ; and (b) connected to reticulated sewerage or is connected to an on-site waste water treatment or effluent disposal system that complies with Element 1 of the <i>Seqwater Development Guidelines – Development</i>	AO1.1 Development is setback a minimum of: (a) 25 metres from the <i>high bank</i> of a <i>watercourse</i> identified on Catchment management overlay maps OM005a-b ; and (b) 100 metres from the <i>full supply level</i> or the <i>upper flood margin level</i> of a <i>waterbody</i> (whichever is greater) identified on Catchment management overlay maps OM005a-b .

Performance outcomes	Acceptable outcomes
<i>Guidelines for Water Quality Management in Drinking Water Catchments.</i>	AND AO1.2 Buildings are connected to reticulated sewerage OR Where within a Higher Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO1.3 The development, including <i>effluent disposal areas</i> is setback a minimum of: (a) 100 metres from the <i>high bank</i> of a <i>watercourse</i> identified on Catchment management overlay maps OM005a-b; and (b) 400 metres from the <i>full supply level</i> or the <i>upper flood margin level</i> of a <i>waterbody</i>, whichever is greater, identified on Catchment management overlay maps OM005a-b. OR Where within a Lower Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO1.4 The development, including <i>effluent disposal areas</i> is setback a minimum of: (a) 75 metres from the <i>high bank</i> of a <i>watercourse</i> identified on Catchment management overlay maps OM004a-b; and (b) 150 metres from the <i>full supply level</i> or the <i>upper flood margin level</i> of a <i>waterbody</i>, whichever is greater, identified on Catchment management overlay maps OM004a-b.
For assessable development	
PO2 Higher risk land uses are appropriately sited, designed and managed to avoid <i>adversely impacting on water quality</i>.	Where within a Higher Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO2.1 No acceptable outcome provided.
Protection of natural systems	

Performance outcomes	Acceptable outcomes
PO3 <i>Development</i> maintains and rehabilitates the extent of riparian vegetation along the banks of a <i>waterbody</i> or <i>watercourse</i> so as to: (a) maintain the natural drainage function; (b) minimise erosion of banks and verges; and (c) reduce sediment and nutrient loads.	Where within a Higher Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO3.1 Vegetation clearing is not undertaken within: (a) 100 metres from the <i>high bank</i> of a <i>watercourse</i> identified on Catchment management overlay maps OM004a-b; and (b) 200 metres from the <i>full supply level</i> or the <i>upper flood margin level</i> of a <i>waterbody</i>, whichever is greater, identified on Catchment management overlay maps OM004a-b. Where within a Lower Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO3.2 Vegetation clearing is not undertaken within: (a) 75 metres from the <i>high bank</i> of a <i>watercourse</i> identified on Catchment management overlay maps OM005a-b; and (b) 150 metres from the <i>full supply level</i> or the <i>upper flood margin level</i> of a <i>waterbody</i>, whichever is greater, identified on Catchment management overlay maps OM005a-b.
Catchment Management Analysis	
PO4 Development in the Higher Risk Catchment Area is undertaken in a sustainable manner that: (a) contributes to maintaining and improving the water quality of the major drinking water storages; and (b) will not have an adverse impact on the environment.	Where within the Higher Risk Catchment Area identified on Catchment management overlay maps OM005a-b AO4.1 For development other than a <i>dwelling house</i> located within the Higher Risk Catchment Area the water quality impacts of the proposal are addressed in a catchment management analysis report undertaken in accordance with Planning Scheme Policy 3 – Catchment Management Analysis Guidelines

Editor's Note-The Higher Risk Catchment Area identified on the Catchment management overlay maps OM005a-b reflects the Seqwater and State planning policy Water Supply Buffer Area as identified on Strategic Framework Map SMF-006 – Water Quality.

7.2.6 Extractive resources overlay code

7.2.6.1 Application

This code applies to assessable development:

- (1) subject to the extractive resources overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the extractive resources overlay code by the tables of assessment in Part 5.

7.2.6.2 Purpose and overall outcomes

- (1) The purpose of the extractive resources overlay code is to protect and maintain the sustainable and viable use of extractive resources in the Somerset Region by preventing incompatible development and land uses from encroaching on:
 - (a) key resource areas including *resource/processing areas*, *separation areas*, *transport routes*, and *transport route separation areas*; and
 - (b) local resource areas including potential resource / processing areas, potential *separation areas*, and transport investigation areas.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development occurring within or adjacent to key resource areas and local resource areas does not adversely affect or compromise the ability of existing or future *extractive industry* to viably win the resource;
 - (b) development occurring within or adjacent to transport routes or transport investigation areas does not constrain or otherwise conflict with the safe and efficient transportation of the extractive resource; and
 - (c) the impacts of *extractive industry* on *sensitive land uses* within or adjacent to key resource areas and local resource areas and associated transport routes and transport investigation areas are mitigated to maintain high levels of safety and amenity.

7.2.6.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 7.2.6.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Development within a Resource/processing area or Potential resource/processing area¹⁰	
PO1 <i>Development within a resource/processing area or a potential resource/processing area does not constrain, prevent or otherwise interfere with the current or future viability of the winning or processing of extractive resources.</i>	AO1.1 <i>Development within the resource/processing area or a potential resource/processing area is limited to:</i> (a) <i>extractive industry</i> uses; (b) uses that are directly associated with an <i>extractive industry</i>; or (c) temporary or non-intensive uses that are compatible with future <i>extractive industry</i> operations. AO1.2 <i>Development not associated with an <i>extractive industry</i> use does not involve a</i>

¹⁰Potential resource/processing area means potential extractive resources that are not designated Key resource areas pursuant to *State Planning Policy (July 2014)*.

Performance outcomes	Acceptable outcomes
	<i>sensitive land use</i> and does not increase the number of people living and/or working in the Resource/processing area or Potential resource/processing area. AO1.3 Where involving reconfiguring a lot development does not result in an increase in the number of lots within the Resource/processing area or Potential resource/processing area.
Development within a Separation area or Potential separation area for a resource/processing area¹¹	
PO2 <i>Development</i> does not materially increase the number of people living within a <i>separation area</i> or a <i>potential separation area</i>.	AO2.1 <i>Development</i> does not result in an increase in residential density within a <i>separation area</i> or a <i>potential separation area</i>. AO2.2 Reconfiguring a lot within a <i>separation area</i> or a <i>potential separation area</i>: (a) does not result in the creation of additional <i>lots</i> used or capable of being used for residential purposes; and (b) where rearranging boundaries, potential <i>dwelling house</i> sites or envelopes as a result, are no closer to a <i>separation area</i> or a <i>potential separation area</i>.
PO3 <i>Development</i> minimises the potential adverse impacts arising from <i>extractive industry</i> operations upon people working or congregating within a <i>separation area</i> or a <i>potential separation area</i>.	AO3.1 The number of people working or congregating in a <i>separation area</i> or a <i>potential separation area</i> is not increased. AO3.2 Development is compatible with the potential effects arising from existing or future <i>extractive industry</i>. AO3.3 Development incorporates design, orientation, and construction measures that mitigate the potential adverse effects from an existing or future <i>extractive industry</i> to acceptable levels by: (a) locating buildings and structures the greatest distance practicable from the resource/processing area and associated transportation route, and (b) designing buildings so the areas where people live, work and congregate (habitable rooms) are furthest from

¹¹ Potential separation area means potential extractive resource separation areas that are not designated Key resource areas pursuant to State Planning Policy (July 2014).

Performance outcomes	Acceptable outcomes
	the resource/processing area and associated transportation route, and (c) minimising openings in walls closest to these effects, and (d) providing mechanical ventilation to habitable rooms, and (e) use of appropriate construction methods and materials including insulation and glazing materials, and (f) providing private outdoor recreation space adjacent to a building façade shielded from the extractive industry or resource. AO3.4 The use operates outside the normal hours of operation for existing or future <i>extractive industry</i> of 6am to 6pm (Monday to Friday) and 8am to 3pm (Saturday).
PO4 <i>Extractive industry</i> maintains the function and integrity of the <i>separation area</i> or <i>potential separation area</i>, as an efficient and effective <i>buffer</i> between potentially incompatible uses and <i>resource/processing areas</i> or a <i>potential resource/processing areas</i>.	AO4.1 <i>Development</i> for an <i>extractive industry</i> use is not located within a <i>separation area</i> or a <i>potential separation area</i>.
Development within or adjoining a Transport route, Transport route separation area or Transport investigation area¹²	
PO5 <i>Development</i> does not materially increase the number of people living within the <i>transport route separation area</i> or <i>transport investigation area</i>.	AO5.1 <i>Development</i> does not result in an increase in residential density within a <i>transport route separation area</i> or <i>transport investigation area</i>. AO5.2 Reconfiguring a lot within a <i>transport route separation area</i> or a <i>transport investigation area</i>: (a) does not result in the creation of additional <i>lots</i> used or capable of being used for residential purposes; and (b) where rearranging boundaries, does not result in potential <i>dwelling house</i> sites or envelopes that are closer to the <i>resource/processing area</i> or a <i>potential resource/processing area</i>.
PO6 <i>Development</i> involving a <i>sensitive land use</i> (other than for a residential activity) within a <i>transport route separation area</i> or a <i>transport</i>	AO6.1 Development involving a <i>sensitive land use</i> (other than for a residential activity) within a <i>transport route separation area</i> or a <i>transport investigation area</i> incorporates design,

¹²Transport investigation area means potential transport routes that are not designated Key resource areas pursuant to *State Planning Policy (December 2013)*.

Performance outcomes	Acceptable outcomes
<i>investigation area</i> is provided with an acceptable level of amenity.	orientation and construction measures that mitigate the potential adverse effects from existing or future extraction, processing and transportation of extractive materials by: (a) locating and designing buildings so the areas where people live, work and congregate are the greatest distance practicable from the resource/processing area and associated transport route; (b) incorporating acoustic and visual mitigation measures such as landscape buffer strips, mounding and screening; (c) minimising openings in walls closest to adverse effects; and (d) utilising appropriate construction insulation and glazing materials.
PO7 <i>Development</i> will not adversely affect the safe and efficient operation of vehicles transporting extractive materials.	AO7.1 <i>Development</i> does not increase the number of properties with access points to the transport route.

7.2.7 Flood hazard overlay code

7.2.7.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the flood hazard overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the flood hazard overlay code by the tables of assessment in Part 5.

7.2.7.2 Purpose and overall outcomes

- (1) The purpose of the code is to manage development outcomes in flood hazard areas so that risk to life, property, community and the environment during flood events is minimised to an acceptable or tolerable level, including other property.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Development in the **Extreme flood hazard area**:
 - (i) maintains and enhances the hydrological function of the land;
 - (ii) does not involve filling (earthworks) or changes to existing landform or drainage lines that results in a loss of the flood conveyance and flood storage capacity of the land;
 - (iii) is limited to:
 - A. *recreation activities where for outdoor sport and recreation and park*;
 - B. *rural activities where for animal husbandry, cropping, and permanent plantation*;
 - C. *utility installations where not involving water and sewerage treatment plants, substations, major electricity infrastructure*;
 - D. conservation and natural area management; and
 - E. replacement of existing lawful development, including *accommodation activities where habitable rooms are elevated above the defined flood level and freeboard*;where there is no increase to the number of persons at risk of flood and where development reduces existing or potential risks to life and property.
 - (b) Development in the **High flood hazard area**:
 - (i) maintains the hydrological function of the land;
 - (ii) does not involve filling (earthworks) or changes to the existing landform or drainage lines that results in a loss of the flood conveyance and flood storage capacity of the land;
 - (iii) is limited to:
 - A. *recreation activities where for outdoor sport and recreation and park , and club uses*;
 - B. a *dwelling house* only where the lot existed or had a lawful reconfiguring a lot approval at the commencement of the planning scheme, the land is included in a Residential Zone or Centre zone category and the risk to the dwelling house can be mitigated to an acceptable or tolerable level,
 - C. a *dwelling house* where for minor intensification of existing *dwelling houses*;
 - D. *rural activities where for animal husbandry, cropping, and permanent plantation*;
 - E. *industrial activities and business activities* where it is accepted that flood damage is incurred as an operational cost and where flood sensitive elements of the development or use are elevated above the *defined flood level and freeboard*;
 - F. *utility installations* where not involving water and sewerage treatment plants, *substations, major electricity infrastructure*;
 - G. conservation and natural area management; and
 - H. replacement of existing lawful development;where there is no increase to the number of persons at risk of flood and where development reduces existing or potential risks to life and property.

- (iv) does not increase the flood hazard on surrounding land uses;
 - (v) elevates habitable rooms for all *accommodation activities* (including where for minor building work) above the *defined flood level* and *freeboard*.
- (c) Development in the **Significant flood hazard area**:
- (i) minimises risk to life and property from flood events;
 - (ii) involves changes to the existing landform and drainage lines in this area only where detrimental impacts to the flood hazard risk of surrounding areas is avoided;
 - (iii) is limited to:
 - A. *recreation activities*;
 - B. *industrial activities* and *business activities* where it is accepted that flood damage is incurred as an operational cost and where flood sensitive elements of the development or use are elevated above the *defined flood level* and *freeboard*;
 - C. *rural activities*;
 - D. *accommodation activities*, excluding *residential care facility* and *retirement facility*;
 - E. *community activities*, excluding *child care centre*, *community care centre*, hospital and *community use* where a flood emergency evacuation plan ensures the safety of people during a flood event;
 - F. *utility installations* where not involving water and sewerage treatment plants, *substations*, *major electricity infrastructure*;
 - G. conservation and natural area management;
 - (iv) locates habitable rooms for all accommodation activities above the *defined flood level* and *freeboard*; and
 - (v) locates the minimum floor level for all buildings other than accommodation activities, industrial activities and business activities above the *defined flood level*.
- (d) Development in the **Low flood hazard area**:
- (i) minimises risk to life and property from flood events;
 - (ii) locates habitable rooms for all *accommodation activities* above the *defined flood level* and *freeboard*; and
 - (iii) locates the minimum floor level for all buildings other than *accommodation activities* above the *defined flood level* and *freeboard*.
- (e) Development in the **Potential flood hazard area**:
- (i) maintains the safety of people on the development site from flood events and minimises the potential damage from flooding to property;
 - (ii) does not result in adverse impacts on people's safety, the environment or the capacity to use land within the floodplain;
 - (iii) locates *habitable rooms* for all *accommodation activities* above the *defined flood level* and *freeboard*; and
 - (iv) locates the minimum floor level for all *building work* other than *accommodation activities* above the *defined flood level* and *freeboard*.
- (f) Development in all flood hazard areas:
- (i) supports, and does not unduly burden, disaster management response or recovery capacity and capabilities;
 - (ii) avoids the release of hazardous materials into floodwaters; and
 - (iii) where involving a vulnerable use, location and design achieves the required level of functionality during and immediately after a natural hazard event

7.2.7.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.7.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	

Performance outcomes	Acceptable outcomes
All flood hazard areas	
PO1 Development prevents the carriage or dispersal of contaminants or pollutants into the receiving environment.	AO1 The processing or storage of <i>dangerous goods</i> or <i>hazardous materials</i> is: (a) not undertaken in a flood hazard area on Flood Hazard Overlay Map OM-007; or (b) is located above the <i>defined flood level</i>; and (c) designed to prevent the intrusion of floodwaters
PO2 <i>Minor electricity infrastructure</i> which supplies a new development must be located and designed to be as resilient as practicable during and after a <i>defined flood event</i>.	Where for a reconfiguration of a lot involving Minor electricity infrastructure (pad mount transformer) AO2.1 Where land for the development is below the <i>defined flood level</i>, the <i>Minor electricity infrastructure</i> (pad mount transformer) for the development must be located on land above the <i>defined flood level</i>. AO2.2 Where land for the development is in an area where the <i>defined flood level</i> is not defined, the <i>Minor electricity infrastructure</i> (pad mount transformer) for the development must be located on a higher part of the site and designed to prevent the intrusion of floodwaters.
Extreme flood hazard area	
PO3 Development within an Extreme flood hazard area on Flood Hazard Overlay Map (OM-007) is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding; (b) the flood risk acceptability of development; (c) the vulnerability of and safety risk to persons associated with the use; and (d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.	Where for Material Change of Use AO3.1 Uses within the following <i>Activity groups</i> are not located within an Extreme flood hazard area identified on Flood Hazard Overlay Map OM-007: (a) <i>Accommodation activities</i>; (b) <i>Business activities</i>; (c) <i>Centre activities</i>; (d) <i>Community activities</i>; (e) <i>Entertainment activities</i>, except where for a <i>Club</i> with a maximum gross floor area of 100m²; (f) <i>Industry activities</i>; (g) <i>Rural activities</i>, except where for <i>animal husbandry, cropping, and permanent plantation</i>. AO3.2 <i>Recreation activities</i> are not located within an Extreme flood hazard area identified on Flood Hazard Overlay Map OM-007 except where for: (a) <i>Park</i>; and

Performance outcomes	Acceptable outcomes
	(b) <i>Outdoor Sport and Recreation</i> (excluding the provision of ancillary facilities or amenities conducted within a <i>building</i>). AO3.3 <i>Utility installations</i> where involving water and sewerage treatment plants are not located within an Extreme flood hazard area identified on Flood Hazard Overlay Map OM-007.
PO4 Development is located and designed to: (a) maintain and enhance the flood conveyance capacity of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) not increase the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that development levels are set above the <i>defined flood level</i>; (e) reduce property damage; and (f) provide road access to <i>buildings</i> above the level of the 1% AEP flood level. Note- in the event that a lawful <i>building</i> or <i>structure</i> is destroyed by flood or other event the building may be replaced <i>in situ</i> where there is no increase in: (a) <i>gross floor area</i>; or (b) the number of <i>dwellings</i> or bedrooms on the premises.	Where for Material Change of Use or Building Work AO4.1 <i>Buildings</i>, including extensions to existing <i>buildings</i> are: (a) not located within an Extreme flood hazard area on Flood Hazard Overlay Map OM-007; or (b) elevated above the <i>defined flood level</i>. OR AO4.2 New <i>buildings</i> are: (a) located on the highest part of the site to minimise entrance of floodwaters; and (b) provided with pedestrian and vehicle evacuation access between the <i>building</i> and a road that is above the 1% AEP flood level. Where for Reconfiguring a Lot AO4.3 Additional lots, except where for the purposes of public open space: (a) are not located in areas of Extreme flood hazard area as identified on Flood Hazard Overlay Map OM-007; or (b) are demonstrated to be above the <i>defined flood level</i>. AO4.4 Reconfiguration and road design ensure residents are not physically isolated from adjacent urban areas that are above the 1% AEP flood level and provides a safe and clear evacuation route: (a) by locating the access into the reconfiguration above the <i>defined flood level</i> or connecting to a road that is above the 1% AEP flood level; (b) by direct and simple routes to main roads; and (c) by avoiding culs-de-sac and other non-permeable layouts.
PO5	Where for Material Change of Use or Reconfiguring a Lot that involves new

Performance outcomes	Acceptable outcomes
Development siting, layout and flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of Extreme flood hazard.	gross floor area or increases the number of persons living, working or residing in areas of Extreme flood hazard area other than a Dwelling house AO5.1 Signage is provided on site: (a) indicating the position and path of all safe evacuation routes off the site; and (b) if the site contains or is within 100 metres of a flood hazard area, hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings or entrances to low-lying reserves. AO5.2 A material change of use or reconfiguring a lot that involves new <i>gross floor area</i> or increases the number of persons living, working or residing in areas of Extreme flood hazard area as identified on Flood Hazard Overlay Map OM-007 is supported by a Flood Emergency Evacuation Plan prepared by suitably qualified persons having regard to <i>Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia</i>, prepared by the Australian Government.
Where for Material Change of Use or Building Work or Operational Works PO6 Development involving earthworks in a flood hazard area below the <i>defined flood level</i> must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times.	Where for Material Change of Use or Building Work or Operational Works AO6 Filling above <i>ground level</i> is not undertaken in areas of Extreme flood hazard area as identified on Flood Hazard Overlay Map OM-007.
High flood hazard area	
PO7 Development within a High flood hazard area on Flood Hazard Overlay Map OM-007 is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding; (b) the flood risk acceptability of development; (c) the vulnerability of and safety risk to persons associated with the use; and (d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.	Where for Material Change of Use AO7.1 Uses within the following <i>Activity groups</i> are not located within a High flood hazard area identified on Flood Hazard Overlay Map OM-007: (a) <i>Accommodation activities</i>, except where for <i>dwelling house</i> and only where the lot existed or had a lawful reconfiguring a lot approval at the commencement of the planning scheme and the land is included in a Residential Zone or Centre zone category; (b) <i>Centre activities</i>, except where for <i>business activities</i>;

Performance outcomes	Acceptable outcomes
	(c) <i>Community activities</i> or <i>Entertainment activities</i>, except where for a <i>Club</i> with a maximum gross floor area of 100m²; (d) <i>Rural activities</i>, except where for <i>animal husbandry, cropping, and permanent plantation</i>. AO7.2 Recreation activities are not located within a High flood hazard area identified on Flood Haz. and Overlay Map OM-007 except where for: (a) <i>Park</i>; and (b) <i>Outdoor Sport and Recreation</i> (excluding the provision of ancillary facilities or amenities conducted within a <i>building</i>). AO7.3 <i>Utility installations</i> where involving water and sewerage treatment plants are not located within a High flood hazard area identified on Flood Hazard Overlay Map OM-007.
PO8 Development is located and designed to: (a) maintain hydrological function of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) minimises the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that an appropriate proportion of <i>buildings</i> are set above the <i>defined flood level</i>; (e) reduce the carriage of debris in flood waters; (f) reduce property damage; and (g) provide road access to <i>buildings</i> above the level of the 1% AEP flood level.	Where for Material Change of Use or Building Work AO8.1 <i>Buildings</i>, including extensions to existing <i>buildings</i> are: (a) not located within a High flood hazard area on Flood Hazard Overlay Map OM-007; or (b) elevated above the <i>defined flood level</i>; OR AO8.2 <i>Where for business activities or industry activities buildings</i> the minimum floor level supporting the following elements of the development must be located above the <i>defined flood level</i>: (a) administrative areas; (b) services, plant and equipment associated with the <i>building</i>. Editor's Note- AO8.2 accepts that the cost of flood impact is an operational cost of the <i>business activity or industry activity</i>. AO8.3 New <i>buildings</i> are: (a) located on the highest part of the site to minimise entrance of floodwaters; and (b) provided with pedestrian and vehicle evacuation access between the <i>building</i> and a road that is above the 1% AEP flood level. Where for Accommodation activities

Performance outcomes	Acceptable outcomes
	AO8.4 <i>Dwellings do not exceed four bedrooms.</i> AO8.5 <i>Building work on an existing dwelling does not comprise additional bedrooms.</i> AO8.6 <i>Building work on an existing dwelling is limited to a maximum increase of 20 percent of the lawfully approved gross floor area of the existing dwelling.</i> AO8.7 Design and layout of buildings minimises risk from flooding by providing parking and other non-habitable uses at ground level. Where for Reconfiguring a Lot AO8.8 Additional lots, except where for the purposes of public open space: (a) are not located in areas of High flood hazard area as identified on Flood Hazard Overlay Map OM-007 ; or (b) are demonstrated to be above the <i>defined flood level</i>. AO8.9 Reconfiguration and road design ensure residents are not physically isolated from adjacent urban areas that are above the 1% AEP flood level and provides a safe and clear evacuation route: (a) by locating the access into the reconfiguration above the <i>defined flood level</i> or connecting to a road that is above the 1% AEP flood level; (b) by direct and simple routes to main roads; and (c) by avoiding culs-de-sac and other non-permeable layouts.

Performance outcomes	Acceptable outcomes
PO9 Development siting, layout and flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of High flood hazard.	Where for Material Change of Use or Reconfiguring a Lot that involves new gross floor area or increases the number of persons living, working or residing in areas of High flood hazard area other than a Dwelling house AO9.1 Signage is provided on site: (a) indicating the position and path of all safe evacuation routes off the site; and (b) if the site contains or is within 100 metres of a flood hazard area, hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings or entrances to low-lying reserves. AO9.2 A material change of use or reconfiguring a lot that involves new <i>gross floor area</i> or increases the number of persons living, working or residing in areas of Extreme flood hazard area as identified on Flood Hazard Overlay Map OM-007 is supported by a Flood Emergency Evacuation Plan prepared by suitably qualified persons having regard to <i>Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia</i>, prepared by the Australian Government.
Where for Material Change of Use or Building Work or Operational Works PO10 Development involving earthworks in a flood hazard area below the <i>defined flood level</i> must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times. Note- where the development is located in a Potential Flood Hazard Area as identified on Flood Hazard Overlay Map OM-007, and there is no <i>defined flood level</i>, a hydraulic (flood hazard assessment) report prepared by a RPEQ is required in substantiation of a Performance Solution. Alternatively, the <i>defined flood level</i> from an adjacent representative hazard area may be used if deemed appropriate by Council.	Where for Material Change of Use or Building Work or Operational Works AO10.1 Filling above <i>ground level</i> is not undertaken in areas of High flood hazard area as identified on Flood Hazard Overlay Map OM-007. AO10.2 Development that involves earthworks in a floodplain must result in no net loss of flood storage for all storm events up to and including a 1 in 100 year ARI event and adjoining properties must remain free draining with no resultant increase in flood levels.
Significant flood hazard area	
PO11 Development within a Significant flood hazard area on Flood Hazard Overlay Map OM-007 is appropriate to the flood hazard risk having regard to the: (a) likelihood and frequency of flooding;	Where for Material Change of Use AO11.1 The following uses are not located within a Significant flood hazard area identified on Flood Hazard Overlay Map OM-007:

Performance outcomes	Acceptable outcomes
(b) the flood risk acceptability of development; (c) the vulnerability of and safety risk to persons associated with the use; and (d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.	(a) <i>child care centre</i> ; (b) <i>community care centre</i> ; (c) <i>community residence</i> ; (d) <i>community use</i> ; (e) <i>emergency services</i> ; (f) <i>hospital</i> ; (g) <i>residential care facility</i> ; (h) <i>retirement facility</i> ; or (i) <i>utility installation</i> involving water and sewerage treatment plants.
PO12 Development siting, layout and flood risk management minimises the impact on property and appropriately protects the health and safety of persons at risk of Significant flood hazard.	Where for Material Change of Use that involves three or more <i>dwelling</i>s, or <i>accommodation activities</i>, <i>business activities</i>, <i>centres activities</i>, <i>entertainment activities</i> or <i>community activities</i> with a staff or resident or non-resident worker or guest occupancy of more than 10 persons on premises at any one time AO12.1 Signage is provided on site: (a) indicating the position and path of all safe evacuation routes off the site; and (b) if the site contains or is within 100 metres of a flood hazard area, hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings or entrances to low-lying reserves. AO12.2 A material change of use or reconfiguring a lot that involves new <i>gross floor area</i> or increases the number of persons living, working or residing in areas of Extreme flood hazard area as identified on Flood Hazard Overlay Map OM-007 is supported by a Flood Emergency Evacuation Plan prepared by suitably qualified persons having regard to <i>Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia</i> , prepared by the Australian Government.
Significant flood hazard area, Low flood hazard area or Potential flood hazard area	
PO13 Development is located and designed to: (a) maintain hydrological function of the premises; (b) not increase the number of people calculated to be at risk from flooding; (c) minimises the flood impact on adjoining premises; (d) ensure the safety of all persons by ensuring that a proportion of <i>buildings</i> are set above the <i>defined flood level</i> ;	Where for Material Change of Use or Building Work AO13.1 <i>Buildings</i> , including extensions to existing <i>buildings</i> are: (a) elevated above the <i>defined flood level</i> ; and (b) the <i>defined flood event</i> does not exceed a depth of 600mm. OR

Performance outcomes	Acceptable outcomes
(e) reduce the carriage of debris in flood waters; (f) reduce property damage; and (g) provide road access to <i>buildings</i> above the level of the 1% AEP flood level. Note- where the development is located in a Potential flood hazard area as identified on Flood Hazard Overlay Map OM-007, and there is no <i>defined flood level</i>, a hydraulic (flood hazard assessment) report prepared by a RPEQ is required in substantiation of a Performance Solution. Alternatively, the <i>defined flood level</i> from an adjacent representative hazard area may be used if deemed appropriate by Council.	AO13.2 <i>Where for business activities or industry activities buildings</i> the minimum floor level supporting the following elements of the development must be located above the <i>defined flood level</i>: (a) administrative areas; (b) services, plant and equipment associated with the <i>building</i>. Editor's Note- AO13.2 accepts that the cost of flood impact is an operational cost of the <i>business activity</i> or <i>industry activity</i>. Editor's Note: Businesses should ensure that they have the necessary continuity plans in place to account for the potential need to relocate property prior to a flood event (e.g. allow enough time to transfer stock to the upstairs level of a building or off site). Editor's Note: The relevant building assessment provisions under the Building Act 1975 apply to all building work within the Flood Hazard Area and need to take account of the flood potential within the area. AO13.3 <i>Where the defined flood level is known , new buildings are:</i> (a) located on the highest part of the site to minimise entrance of floodwaters; and (b) provided with pedestrian and vehicle evacuation access between the <i>building</i> and a road that is above the 1% AEP flood level. AO13.4 <i>Where the defined flood level is not known, new buildings are:</i> (a) located on the highest part of the site to minimise entrance of floodwaters; and (b) provided with clear and direct pedestrian and vehicle evacuation access. AO13.5 <i>Where for accommodation activities, the design and layout of buildings minimises risk from flooding to an acceptable or tolerable level by providing parking and other non-habitable uses at ground level.</i> Where for Reconfiguring a Lot AO13.6 <i>Additional lots, except where for the purposes of public open space:</i> (a) are not located in areas of Significant flood hazard area, Low flood hazard area or Potential flood hazard area as identified on Flood Hazard Overlay Map OM-007 ; or

Performance outcomes	Acceptable outcomes
	(b) are demonstrated to be above the <i>defined flood level</i>. AO13.7 Reconfiguration and road design ensure residents are not physically isolated from adjacent urban areas that are above the 1% AEP flood level and provides a safe and clear evacuation route: (a) by locating the access into the reconfiguration above the <i>defined flood level</i> or connecting to a road that is above the 1% AEP flood level; (b) by direct and simple routes to main roads; and (c) by avoiding culs-de-sac and other non-permeable layouts.
Where for Material Change of Use or Building Work or Operational Works PO14 Development involving earthworks in a flood hazard area below the <i>defined flood level</i> must protect life and property on premises and off premises through maintaining: (a) flood storage capacity of land; (b) flood conveyance function of land; (c) flood and drainage channels; (d) overland flow paths; and (e) flood warning times.	Where for Material Change of Use or Building Work or Operational Works AO14.1 Development does not involve in excess of 50m³ of fill above <i>ground level</i> per 1,000 squared metres of site area.

Note: *Defined flood event* and *defined flood level* are defined in Schedule 1.

7.2.8 High impact activities management area overlay code

7.2.8.1 Application

This code applies to assessable development:

- (1) subject to the High impact activities management area overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the High impact activities management area overlay code by the tables of assessment in Part 5.

7.2.8.2 Purpose and overall outcomes

- (1) The purpose of the code is to protect the amenity and environmental values of identified *high impact activity management areas* located across the Somerset Region from the impacts of rural-based *high impact activities*.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) appropriately managing the impacts of rural-based *high impact activities* on the amenity enjoyed by the *high impact activity management area* identified on the **High impact activities management area overlay maps OM008a-b**;
 - (b) protecting the desired future settlement pattern for Somerset Region, that is, the compact urban expansion of the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah and, in the longer-term, the development of the Glamorgan Vale Urban Investigation Area, through the appropriate location of *high impact activities* in relation to these existing and future settlement pattern elements;
 - (c) promoting opportunities for tourism development in the Principal Future Strategic Tourism Focus Area and Lake Somerset Water-based Recreation Focus Area through the appropriate location of *high impact activities*; and
 - (d) contributing to the management of water quality in the regional water storages of Lake Somerset and Lake Wivenhoe through the appropriate location of *high impact activities*.

7.2.8.3 Assessment benchmarks

Part A—Assessment benchmarks for assessable development

Table 7.2.8.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
PO1 <i>High impact activities</i> in Somerset Region are appropriately located and operated to: (a) maintain the amenity of the <i>high impact activity management area</i>, having regard to the following: (i) air quality, including dust and odour; (ii) water quality; (iii) noise; and (iv) amenity considerations relevant to the <i>site</i>, locality and region; (b) protect the opportunity for the compact urban expansion of the towns of Esk, Fernvale, Kilcoy, Lowood and Toogoolawah and the possible future development of the Glamorgan Vale Urban Investigation Area, from the impacts of <i>high impact activities</i>; (c) protect opportunities for tourism development; and	AO1.1 <i>High impact activities</i> located within the <i>high impact activity management area</i> as shown on the High impact activities management area overlay maps OM008a-b are supported by a detailed site analysis that confirms that the site is suitable for the proposed high impact activity in terms of effective buffering from sensitive uses and appropriate access to water.

Performance outcomes	Acceptable outcomes
(d) contribute to the management of water quality in the regional water storages of Lake Somerset and Lake Wivenhoe.	

7.2.9 Infrastructure overlay code

7.2.9.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the infrastructure overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the infrastructure overlay code by the tables of assessment in Part 5.

7.2.9.2 Purpose and overall outcomes

- (1) The purpose of the infrastructure overlay code is to ensure that development is compatible with, and does not adversely affect the viability, integrity, operation and maintenance of existing and planned infrastructure within the Somerset Region as identified on the **Infrastructure overlay maps OM009a-g**, including the following:

- (a) gas pipelines;
- (b) high voltage electricity transmission lines;
- (c) substations and power stations;
- (d) wastewater treatment plants;
- (e) waste stations;
- (f) highways and main roads;
- (g) water pipelines;
- (h) pump stations, bores and reservoirs;
- (i) water treatment plants; and
- (j) Kilcoy bypass.

Editor's Note -The "Future Principal Route, SEQ Principal Cycle Network Plan" as shown on the **Infrastructure overlay maps OM009a-g** is addressed in the Transport, Access, and Parking Code.

- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) existing and planned infrastructure facilities, networks and corridors are protected from incompatible development; and
 - (b) development in proximity to existing and planned infrastructure facilities, networks and corridors is appropriately located, designed, constructed and operated to:
 - (i) avoid compromising the integrity, operational efficiency and maintenance of infrastructure; and
 - (ii) protect the amenity, health and safety of people and property.

7.2.9.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.9.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Gas pipelines	
PO1 <i>Buildings and structures</i> are designed and sited to: (a) minimise risk of harm to people and property; and (b) avoid damaging or adversely affecting the existing or future operation of gas pipelines and the supply of gas.	AO1.1 <i>Buildings and structures</i> are setback a minimum of 50 metres from a <i>gas pipeline</i> as identified on the Infrastructure overlay maps OM009a-g .

Performance outcomes	Acceptable outcomes
High voltage electricity transmission lines	
PO2 <i>High voltage electricity transmission lines:</i> (a) are protected from encroachment by incompatible <i>development</i>; and (b) <i>sensitive land uses</i> are appropriately separated from high voltage electricity transmission lines to protect public health and safety and to minimise the likelihood of nuisance or complaint	AO2.1 <i>Development</i> is not located within a <i>high voltage electricity transmission line</i> easement as identified on the Infrastructure overlay maps OM009a-g. AO2.2 <i>Buildings</i> associated with <i>sensitive land uses</i> are setback from <i>high voltage electricity transmission lines</i> as identified on the Infrastructure overlay maps OM009a-g and in accordance with the following: (a) 20 metres for transition lines between 110kV and 132kV; (b) 30 metres for transmission lines between 133kV and 330kV; and (c) 40 metres for transmission lines exceeding 331kV. AO2.3 <i>Buildings</i> that directly overlook <i>high voltage electricity transmission lines</i> have living areas that are oriented away from the transmission line. AO2.4 No additional gates, fences or other access restrictions are created within or along the easement for <i>high voltage electricity transmission lines</i>. AO2.5 Vegetation planted within an easement of a <i>high voltage electricity transmission line</i> or, where there is no easement the area of influence¹³ of a <i>high voltage electricity transmission line</i>, has a mature height of no more than 3.5 metres. AO2.6 No earthworks are undertaken within 20 metres of a transmission tower or pole, or within 20 metres of the edge of the easement (whichever is greater) for overhead <i>high voltage electricity transmission lines</i>
Substations and power stations	
PO3 <i>Power stations:</i>	AO3.1 <i>Sensitive land uses</i> are setback a minimum of 40 metres from a <i>power station site</i> as

¹³ Area of influence includes the area directly below and between conductors, including allowance for line swing.

Performance outcomes	Acceptable outcomes
(a) are protected from encroachment by incompatible land use and development; and (b) <i>sensitive land uses</i> are appropriately separated from power stations to protect public health and safety.	identified on the Infrastructure overlay maps OM009a-g. AO3.2 <i>Sensitive land uses</i> are setback a minimum of 5 metres from a <i>substation</i> as identified on the Infrastructure overlay maps OM009a-g
Wastewater treatment plants	
PO4 The operation and planned expansion of <i>wastewater treatment plants</i>: (a) are protected from encroachment by incompatible land use and development; and (b) <i>sensitive land uses</i> are appropriately separated from <i>wastewater treatment plants</i> to protect public health and safety.	AO4 <i>Sensitive land uses</i> are not established within a <i>wastewater treatment plant buffer</i> as identified on the Infrastructure overlay maps OM009a-g.
Highways and main roads	
PO5 <i>Development</i> is located, designed and constructed to ensure that noise from <i>Highways and Main roads</i> do not adversely affect: (a) the development's primary function; and (b) the wellbeing of occupants including their ability to sleep, work or otherwise undertake quiet enjoyment without unreasonable interference from <i>road</i> traffic noise.	AO5.1 Where adjoining a <i>Highway</i> or <i>Main road</i> and not located in an <i>urban area</i>, <i>buildings</i> are setback a minimum of 40 metres from the property boundary adjoining a <i>Highway</i> or <i>Main road</i> as identified on the Infrastructure overlay maps OM009a-g. AO5.2 Where adjoining a <i>Highway</i> or <i>Main Road</i> as identified on the infrastructure overlay maps OM009a-g, development ensures that a <i>sensitive land use</i> achieves the relevant road traffic noise criteria of the Queensland Development Code.
Waste stations	
PO6 The operation and planned expansion of <i>waste stations</i>: (a) are protected from encroachment by incompatible <i>development</i>; and (b) <i>sensitive land uses</i> are appropriately separated from waste stations to protect public health and safety.	AO6 <i>Sensitive land uses</i> are not established within a <i>waste station buffer</i> as identified on the Infrastructure overlay maps OM009a-g.
Water pipelines	
PO7 <i>Development</i> does not adversely impact on existing and planned <i>water pipeline</i> infrastructure.	AO7 <i>Development</i> is not located within a <i>water pipeline</i> easement as identified on the Infrastructure overlay maps OM009a-g.

Performance outcomes	Acceptable outcomes
Water treatment plants	
PO8 The operation and planned expansion of <i>water treatment plants</i>: (a) are protected from encroachment by incompatible <i>development</i>; and (b) <i>sensitive land uses</i> are appropriately separated from <i>water treatment plants</i> to protect public health and safety.	AO8 <i>Sensitive land uses</i> are setback a minimum of 100 metres from a <i>water treatment plant</i> as identified on the Infrastructure overlay maps OM009a-g.
For assessable development	
Kilcoy bypass	
PO9 <i>Development</i> does not prejudice the future establishment, operation, or maintenance of the <i>Kilcoy bypass</i> as identified on the Infrastructure overlay maps OM008a-g.	AO9 No acceptable outcome provided.
Reconfiguring a Lot	
PO10 The operation and planned expansion of infrastructure as identified on Infrastructure overlay maps OM009a-g is: (a) protected from encroachment by incompatible land use and development; and (b) land use and development is appropriately separated from the infrastructure to protect public health, and safety and appropriately manage amenity impacts.	AO10 No acceptable outcome provided.

7.2.10 Landslide hazard overlay code

7.2.10.1 Application

This code applies to accepted development and assessable development:

- (1) subject to the landslide hazard overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the landslide hazard overlay code by the tables of assessment in Part 5.

7.2.10.2 Purpose and overall outcomes

- (1) The purpose of the landslide hazard overlay code is to ensure that *development* avoids or mitigates the potential adverse impacts of landslide hazard on people, property, economic activity and the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *development* in areas at risk from landslide hazard is compatible with the nature of the hazard; and
 - (b) development does not result in a material increase in the extent or severity of landslide hazard.

7.2.10.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.10.3 - Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Risk of harm to people and property	
PO1 <i>Development</i> does not cause an unacceptable increase in the level of risk to people and property as a result of landslide or potential landslide. Note - A site-specific geotechnical investigation must be undertaken to demonstrate that although the development site is located within a landslide hazard area as identified on the Landslide hazard overlay maps OM0010a-b , the landslide hazard risk is acceptable.	AO1 <i>Buildings</i> are not located in a landslide hazard area as identified on the Landslide hazard overlay maps OM0010a-b .
PO2 Clearing of vegetation does not worsen the potential for landslide to occur.	AO2 No clearing of <i>native vegetation</i> is undertaken within landslide hazard areas identified on the Landslide hazard overlay maps OM0010a-b .
For assessable development	
Community infrastructure	
PO3 <i>Development</i> does not cause an unacceptable increase in the level of risk to people and property as a result of landslide or potential	AO3.1 <i>Development</i> involving <i>community infrastructure</i> is not located within a landslide

Performance outcomes	Acceptable outcomes
landslide and <i>community infrastructure</i> is able to function effectively during and immediately after landslide events. Note - Where <i>development</i> involving <i>community infrastructure</i> is located in a landslide hazard area, a site-specific geotechnical investigation prepared by an appropriately qualified professional certifies that: (a) the <i>footprint</i> is not located in an area of the <i>site</i> that is subject to an unacceptable level of risk; (b) the stability of the <i>site</i>, including associated <i>buildings</i> and infrastructure, will be maintained during both the construction and operational phases of the development; (c) <i>development</i> on the <i>site</i> will not increase the risk of landslide activity on other land; (d) the <i>site</i> is not subject to the risk of landslide activity originating from other land; and (e) access to the <i>site</i> will not be impeded by a landslide event.	hazard area as identified on the Landslide hazard overlay maps OM0010a-b. OR AO3.2 <i>Development</i> involving <i>community infrastructure</i>: (a) does not involve any new building work (other than <i>minor building work</i>); and (b) does not involve vegetation clearing; and (c) does not alter the <i>ground level</i> or stormwater conditions.

7.2.11 Local heritage overlay code

7.2.11.1 Application

This code applies to assessable development:¹⁴

- (1) subject to the local heritage overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the local heritage overlay code by the tables of assessment in Part 5.

7.2.11.2 Purpose and overall outcomes

- (1) The purpose of the local heritage overlay code is to ensure that *development* on or adjoining a *heritage place* is compatible with the heritage significance of the place.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the heritage significance of individual sites and places is conserved¹⁵;
 - (b) *development* on a local *heritage place* is compatible with the heritage significance of the place by:
 - (i) preventing the demolition or removal of the local *heritage place*, unless there is no prudent and feasible alternative to the demolition or removal¹⁶;
 - (ii) maintaining or encouraging, as far as practicable, the appropriate use (including adaptive reuse) of the local *heritage place* whilst protecting the amenity of adjacent uses;
 - (iii) protecting, as far as practicable, the materials and setting of the local *heritage place*;
 - (iv) ensuring that any exposed archaeological artefact/s and/or features are identified and managed prior to the redevelopment of a *site*¹⁷;
 - (v) ensuring, as far as practicable, development on the local *heritage place* is compatible with the heritage significance of the place; and
 - (c) *development* adjoining a local *heritage place* is sympathetic to the heritage significance of that place

¹⁴ This code does not apply to indigenous cultural heritage which is protected under the *Aboriginal Cultural Heritage Act 2003*. In accordance with this legislation, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage ("the cultural heritage duty of care").

¹⁵ Development on State heritage places is also regulated by the *Queensland Heritage Act 1992*.

¹⁶ In considering whether there is no prudent and feasible alternative to the demolition or removal of a local heritage place, the Council will have regard to:

- (a) safety, health and economic considerations; and
- (b) any other matters the Council considers relevant.

¹⁷ Under the *Queensland Heritage Act 1992*, a person must report to the Department of Environment and Heritage Protection (DEHP) if they discover an archaeological artefact that is an important source of information about an aspect of Queensland's history. Under the *Queensland Heritage Act 1992*, archaeological artefacts include any relic or other remains located above, on or below the present land surface, or found in State waters, that relate to past human behaviour.

7.2.11.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 7.2.11.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Material change of use involving a local <i>heritage place</i>	
PO1 The material change of use is compatible with the conservation and/or management of the significance of the local <i>heritage place</i>. Note – Development on a site identified on the Local heritage register overlay maps OM011a-d is undertaken in accordance with the Australian ICOMOS Charter for Places of Cultural Significance (Burra Charter).	AO1No acceptable outcome provided.
Reconfiguring a lot involving a local <i>heritage place</i>	
PO2 Reconfiguring a lot does not: (a) reduce public access to the local <i>heritage place</i>; or (b) obscure or destroy any of the following elements relating to the local <i>heritage place</i>: (i) pattern of historic subdivision; (ii) the landscape setting; or (iii) the scale and consistency of the urban fabric. Note – Development on a site identified on the Local heritage register overlay maps OM011a-d is undertaken in accordance with the Australian ICOMOS Charter for Places of Cultural Significance (Burra Charter).	AO2. No acceptable outcome provided.
Building work or operational work involving a local <i>heritage place</i>	
PO3 <i>Development</i> conserves and is subservient to the features and values of the local <i>heritage place</i> that contribute to its heritage significance. Note- A Heritage Impact Assessment Report Must be prepared by appropriately qualified persons that demonstrates to Council's satisfaction that the development does not detract from, or diminish the cultural heritage significance of the Heritage Place.	AO3.1 <i>Development</i> on a site identified on the Local heritage overlay maps OM011a-d (a) does not alter, remove or conceal significant features of the local <i>heritage place</i>; or (b) is minor and necessary to maintain a significant use for the local <i>heritage place</i>.

Performance outcomes	Acceptable outcomes
P04 Changes to a local <i>heritage place</i> are appropriately managed and documented.	AO4.1 <i>Development</i> on a <i>site</i> identified on the Local heritage overlay maps OM011a-d is compatible with a conservation management plan prepared in accordance with the <i>Australian ICOMOS Charter</i>¹⁸ for Places of Cultural Significance (Burra Charter). AO4.2 An archival quality photographic record is made of the features of the place that are destroyed because of the development that meets the standards outlined in the <i>Department of Environment and Resource Management Guideline: Archival of Heritage Registered Places</i>.
P05 <i>Development</i> does not adversely affect the character, setting or appearance of the local <i>heritage place</i>, including removal of vegetation that contributes to the heritage significance of the place. Note - A Heritage Impact Assessment Report must be prepared by appropriately qualified persons that demonstrates to Council's satisfaction that the development does not detract from, or diminish the cultural heritage significance of the Heritage Place.	AO5 Existing vegetation is retained and protected for the duration of development works being carried out on the premises.
P06 Excavation or other earthworks do not have a detrimental impact on archaeological sites. Note - An archaeological investigation is carried out for development involving a high level of surface or sub-surface disturbance.	AO6 No acceptable outcome provided.
P07 <i>Advertising devices (billboard)</i> proposed on a local <i>heritage place</i> are sited and designed in a manner that: (a) is compatible with the heritage significance of the place; and (b) does not obscure the appearance or prominence of the <i>heritage place</i> when viewed from the street or other public places.	AO7 No acceptable outcome provided.

¹⁸ Australia ICOMOS Inc. is the national chapter of ICOMOS (International Council of Monuments and Sites), a non-government international organisation primarily concerned with the philosophy, terminology, methodology and techniques of cultural heritage conservation.

Performance outcomes	Acceptable outcomes
Development adjoining a local <i>heritage place</i>	
PO8 Where on a <i>lot</i> or <i>premises</i> adjoining a local <i>heritage place</i>, development is designed and constructed in a manner that does not adversely affect the heritage significance of the <i>heritage place</i>, including its context, setting, appearance and archaeology. Note - A Heritage Impact Assessment Report must be prepared by appropriately qualified persons that demonstrates to Council's satisfaction that the development does not detract from, or diminish the cultural heritage significance of the Heritage Place. The following points give guidance as to the specific items that need to be considered when proposing a development in proximity to a Heritage Place: • development should not attempt to replicate or mimic the architectural detailing of all or part of the Heritage Place; • the architectural composition of facades should include transitional elements of a similar scale to an adjoining Heritage Place; • where a new facade abuts the facade of a Heritage Place, a clear transition between the old and new should be established and maintained; • projecting elements such as canopies, awnings, sunshades, banners and signage should not substantially interrupt views of a Heritage Place from the street or a public place; • the new development should complement the existing streetscape or prevailing architectural character of the street and the Heritage Place; and • an archaeological investigation is carried out for development involving a high level of surface or sub-surface disturbance.	AO8 No acceptable outcome provided.

7.2.12 Scenic amenity overlay code

7.2.12.1 Application

This code applies to accepted development subject to requirements and assessable development:

- (1) subject to the scenic amenity overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the scenic amenity overlay code by the tables of assessment in Part 5.

7.2.12.2 Purpose and overall outcomes

- (1) The purpose of the scenic amenity overlay code is to ensure that development does not adversely affect scenic amenity and landscape values within the Somerset region.
- (2) The purpose of the scenic amenity overlay code will be achieved through the following overall outcomes:
 - (a) *development* protects and enhances the significant landscape elements and features which contribute to the unique character and identity of the Somerset region including:
 - (i) high scenic amenity areas;
 - (ii) other scenic mountains; and
 - (iii) scenic route sections.

7.2.12.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.12.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Buildings within a scenic route section	
PO1 <i>Development within a scenic route section buffer identified on the Scenic amenity overlay maps OM012a-b:</i> (a) retains existing vegetation and incorporates landscaping to visually screen and soften built form elements, whilst not impeding distant views or view corridors from the <i>scenic route section</i>; (b) incorporates building materials and external finishes that are compatible with the visual amenity and the landscape character of the <i>scenic route section</i>; and (c) minimises visual impacts on the <i>scenic route section</i> in terms of: (i) <i>building</i> setbacks; (ii) the scale, height and setback of <i>buildings</i>; (iii) the extent of earthworks and impacts on the landform including the location and configuration of <i>roads</i> and driveways; and	AO1.1 <i>Advertising devices within a scenic route section buffer identified on the Scenic amenity overlay maps OM012a-b:</i> (a) refer only to the name and contact details for the proprietor, the name of the business or premises, the nature of uses conducted on the premises and the hours of operation; (b) are for one or more of the following uses: (i) <i>Food and drink outlet</i>; (ii) <i>Winery</i>; (iii) <i>Tourist attraction</i>; (iv) <i>Nature-based tourism</i>; (v) <i>Rural activities</i>; (vi) <i>Short-term accommodation</i>. (c) are setback 100 metres from waterway crossings; (d) has a sign face area not exceeding 1.5m² per side (up to two sides); (e) has a maximum height of 2 metres; (f) are not illuminated.

Performance outcomes	Acceptable outcomes
(iv) the scale, extent and visual prominence of <i>advertising devices</i> (<i>billboard</i>).	AO1.2 <i>Advertising devices (billboard)</i> are not located within a <i>scenic route section buffer</i> identified on the Scenic amenity overlay maps OM012a-b. AO1.3 <i>Buildings</i> do not exceed 8.5 metres or 2 storeys in height. AND AO1.4 <i>Buildings or structures, where not for a Dwelling house, home based business where for a home based child care, home occupation or bed and breakfast or Short term accommodation, within a scenic route section buffer</i> identified on the Scenic amenity overlay maps OM012a-b are setback a minimum of 100 metres from the scenic route. OR AO1.5 <i>Buildings or structures</i> within a <i>scenic route section buffer</i> identified on the Scenic amenity overlay maps OM012a-b are setback behind the building line of an existing <i>dwelling house</i>.
Buildings within high scenic amenity area	
PO2 <i>Development within a high scenic amenity area</i> identified on the Scenic amenity overlay maps OM012a-b: (a) maintains and enhances the landscape character and scenic amenity values of the locality and the Somerset region; (a) is not visible from the skyline or positioned on a ridgeline when viewed from a <i>Highway</i> or <i>Main road</i>; (b) is fully screened by an existing natural landform or vegetation, or will be fully screened by <i>native vegetation</i> within 5 years of construction when viewed from a <i>Highway</i> or <i>Main road</i>; (c) retains existing vegetation and incorporates landscaping to visually soften built form elements; (d) incorporates building materials and external finishes that are compatible with the visual amenity and the landscape character of the locality; and (e) minimises visual impacts on the high scenic amenity area in terms of:	AO2.1 <i>Buildings</i> do not exceed 8.5 metres or 2 storeys in height. AO2.2 <i>Buildings, structures</i> and operational works are located a minimum of 50 metres from ridges or peaks within <i>high scenic amenity areas</i> identified on Scenic amenity overlay maps OM-012a-b. AO2.3 Where within <i>high scenic amenity areas</i> identified on Scenic amenity overlay maps OM-012a-b no vegetation clearing occurs: (a) within 100 metres of ridgelines or peaks; (b) on land with a slope greater than 15 percent; (c) within 100 metres of waterways; (d) within 100 metres of wetlands; (e) unless where in accordance with Part 7.2.4 - Bushfire hazard Overlay Code.

Performance outcomes	Acceptable outcomes
(i) the scale, height and setback of <i>buildings</i>; (ii) the extent of earthworks and impacts on the landform including the location and configuration of <i>roads</i> and driveways.	
Buildings within other scenic mountains	
PO3 <i>Development within other scenic mountain areas identified on the Scenic amenity overlay maps OM012a-b:</i> (a) maintains the landscape character and scenic amenity values of the locality and the Somerset region; (b) retains existing vegetation and incorporates landscaping to visually soften built form elements; (c) incorporates building materials and external finishes that are compatible with the visual amenity and the landscape character of the locality; and (d) minimises visual impacts on <i>other scenic mountain</i> areas in terms of: (i) the scale, height and setback of <i>buildings</i>; (ii) the extent of earthworks and impact on the landform including the location and configuration of <i>roads</i> and driveways; and (iii) the scale, extent and visual prominence of <i>advertising devices (billboard)</i>.	AO3.1 <i>Buildings do not exceed 8.5 metres or 2 storeys in height.</i>

7.2.13 Stock route management overlay code

7.2.13.1 Application

This code applies to accepted development subject to requirements and assessable development .

- (1) subject to the stock route management overlay shown on the overlay maps contained within Schedule 2; and
- (2) identified as requiring assessment against the stock route management overlay code by the tables of assessment in Part 5.

7.2.13.2 Purpose and overall outcomes

- (1) The purpose of the stock route management overlay code is to ensure the function of the stock route network is maintained.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the stock route network is protected from *development* that has the potential to affect the continued operation of the stock route; and
 - (b) development for *urban purposes* is not located where it will increase the health and safety risk of people by exposure to vector borne disease.

7.2.13.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 7.2.13.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 <i>Development</i> does not result in a loss of extent, function or operational efficiency of the stock route as identified on Stock route management overlay maps OM0013a-b.	AO1 <i>Buildings, structures</i> and works are not located within a stock route buffer area as identified on Stock route management overlay maps OM0013a-b.
PO2 Reconfiguring a lot protects public health, and safety, appropriately manages amenity impacts, and does not result in a loss of extent, function or operational efficiency of the stock route as identified on Stock route management overlay maps OM0013a-b.	AO2 Reconfiguring a lot provides an access easement over land identified as a stock route on Stock route management overlay maps OM0013a-b.
PO3 The operation of stock routes as identified on Stock route management overlay maps OM0013a-b is: (a) protected from encroachment by incompatible land use and <i>development</i>; and (b) land use and development is appropriately separated from the infrastructure to protect public health, and safety and appropriately manage amenity impacts.	AO3 <i>Sensitive land uses</i> are setback a minimum of 75 metres from a stock route as identified on Stock route management overlay maps OM0013a-b.

8 Part 8 Development codes

8.1 Preliminary

- (1) Development codes are codes for assessment where identified as an applicable code in Part 5.
- (2) The requirements under the Regulation for development under schedules 6 and 7 of the Regulation relevant for the planning scheme are applicable as set out in Part 5.4, Table 5.4.1 to 5.4.3:
 - (a) Community residence;
 - (b) Cropping involving forestry for wood production;
 - (c) Particular reconfiguring a lot requiring code assessment (subdividing one lot into two lots and associated operational work).

.Note – The following schedules of the Regulation are relevant to the Somerset regional planning scheme;

- i. Schedule 6 Part 2 (6) of the Regulation – Material change of use for a Community residence;
- ii. Schedule 15 of the Regulation for Cropping involving forestry for wood production
- iii. Schedule 14 of the Regulation – Particular reconfiguring a lot requiring code assessment.

- (3) The following are the use codes for the planning scheme:
 - (a) Animal keeping code;
 - (b) Aquaculture code;
 - (c) Business activities code;
 - (d) Caretaker's accommodation code;
 - (e) Community activities code;
 - (f) Dwelling house code;
 - (g) Extractive industry code;
 - (h) Home based business code;
 - (i) Industrial activities code;
 - (j) Intensive animal industry code;
 - (k) Multiple dwelling and dual occupancy code;
 - (l) Recreation activities code;
 - (m) Renewable energy facility code;
 - (n) Retirement facility and residential care facility code;
 - (o) Roadside stall code;
 - (p) Rural industry code;
 - (q) Rural workers accommodation code;
 - (r) Sales office code;
 - (s) Short-term accommodation code;
 - (t) Telecommunications facilities code;
 - (u) Tourist park and relocatable home park code;
 - (v) Utility installation and substation code.
- (4) The following are the other development codes for the planning scheme:
 - (a) Advertising devices code;
 - (b) Filling and excavation code;
 - (c) Landscaping code;
 - (d) Reconfiguring a lot code;
 - (e) Services, works and infrastructure code;
 - (f) Transport, access and parking code.

8.2 Use codes

8.2.1 Animal keeping code

8.2.1.1 Application

This code applies to assessing a material change of use for development involving animal keeping for the following purposes:

- (a) *Apiculture;*
- (b) *Aviary;*
- (c) *Cattery;*
- (d) *Horse keeping; or*
- (e) *Kennel.*

Note-This Code does not apply to the keeping of *domestic pets*, which is regulated by local law.

8.2.1.2 Purpose

- (1) The purpose of the animal keeping code is to ensure that development for animal keeping is located, designed, and operated to avoid or appropriately minimise impacts on the amenity and character of the local area and *sensitive land uses*.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *animal keeping* is provided a *site* of sufficient size to provide adequate *buffers* to *sensitive land uses* and *adjoining premises*;
 - (b) *buildings, structures* and *animal enclosures* are located and designed and constructed in a manner that complements the intended amenity of the locality;
 - (c) ensure the use is located, designed, and operated to avoid or otherwise minimise impacts, including noise and odour nuisance;
 - (d) ensure public health and safety is maintained;
 - (e) are provided with the necessary infrastructure; and
 - (f) are designed, constructed and operated to protect the welfare of animals, and protect environmental values including water, soil, and air quality.

8.2.1.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.1.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Apiculture	
PO1 <i>Apiculture</i> facilities are located a safe distance from <i>sensitive land uses</i> and from land generally intended for <i>accommodation</i>	AO1.1 <i>Apiculture</i> facilities are set back a minimum of 25 metres from a public <i>road</i> .

Performance outcomes	Acceptable outcomes
<i>activities</i> or where people gather, recreate or shop, in order to safeguard public health and safety.	AO1.2 <i>Apiculture</i> facilities are set back a minimum of 200 metres from: (a) a <i>sensitive land use</i>; or (b) land in the following zones: (i) General residential zone, including the Park residential precinct; (ii) Centre zone; (iii) Emerging community zone; and (iv) Recreation and open space zone (v) Rural residential zone. AO1.3 The existence of <i>apiculture</i> facilities is sign posted at the nearest public <i>road</i> frontage.
Horse keeping	
PO2 The activity is located on a <i>premises</i> that: (a) is of sufficient size to accommodate the use; (b) is of a scale and intensity that does not result in <i>environmental harm</i> or <i>environmental nuisance</i>; and (c) sited to maintain the character of the locality.	AO2 The <i>site</i> area is a minimum one hectare for <i>horse keeping</i>.
PO3 The activity does not result in: (a) environmental harm or environmental nuisance on <i>sensitive land uses</i> located on <i>adjoining premises</i>; and (b) adverse impacts on water quality values of local receiving environments.	AO3 The following separation distances are provided for <i>animal enclosures</i>: (a) 50 metres to a <i>road</i> frontage; (b) 15 metres from side and rear boundaries; (c) 15 metres from a <i>dwelling</i> on the same <i>premises</i>; (d) 50 metres from a <i>dwelling</i> on another <i>premises</i>
For assessable development	
Siting	
PO4 The activity is located on a <i>premises</i> that: (a) is of sufficient size to accommodate the use; (b) is of a scale and intensity that does not result in <i>environmental harm</i> or <i>environmental nuisance</i>; and (c) is of a physical form and sited to maintain the character of the locality.	AO4 The <i>site</i> area is a minimum of: (a) one (1) hectare for an <i>aviary</i>; (b) two (2) hectares for a <i>cattery</i>; or (c) ten (10) hectares for a <i>kennel</i>.

Performance outcomes	Acceptable outcomes
PO5 The activity maintains the amenity of the locality and is on a <i>site</i> which: (a) has a suitable shape, slope and area to provide adequate setbacks of <i>animal enclosures</i> from: (i) <i>site</i> boundaries; (ii) on-site <i>dwelling</i>s; (iii) public roads; and (iv) <i>sensitive land uses</i> on other <i>premises</i>; (b) is sufficiently elevated to facilitate ventilation and drainage; and (c) is not subject unreasonable risks from natural hazards.	AO5.1 The following separation distances are provided for <i>animal enclosures</i>: (a) 50 metres to a <i>road</i> frontage; (b) 15 metres from side and rear boundaries; (c) 15 metres from a <i>dwelling</i> on the same <i>premises</i>; (d) 50 metres from a <i>dwelling</i> on another <i>premises</i> or 200 metres for a <i>kennel</i> or <i>aviary</i>; and (e) 500 metres from another <i>kennel</i>. AO5.2 The area of the <i>site</i> utilised for the activity: (a) has a slope of less than 10 per cent; (b) is not subject to flooding; and (c) is not subject to bushfire.
Built form and character	
PO6 <i>Animal enclosures</i> are designed to be: (a) escape proof; (b) predator proof; (c) of sufficient size for the animal; (d) provide weather protection; (e) minimise stress; (a) avoid injury; and (b) to ensure animals are securely housed.	AO6.1 <i>Animal enclosures</i> used to house animals are roofed. AO6.2 Outdoor <i>animal enclosures</i> are a minimum of 2 metres in height; and constructed of mesh, chain or hinge-joint stock proof wire. AO6.3 Where for a <i>kennel</i>, outdoor <i>animal enclosures</i> are screened with barriers to prevent external visual line of sight to other animals or external activities.
PO7 The character of <i>buildings</i> and <i>animal enclosures</i> maintains the amenity and character of the local area.	AO7.1 No acceptable outcome provided.
Managing operational impacts	
PO8 Noise is managed in accordance accepted standards and the use is of a scale, intensity, and duration that maintains the amenity of the surrounding area, <i>sensitive land uses</i>, and the enjoyment of public open spaces. Note - To demonstrate compliance with PO8, Council may require the preparation of an acoustic report which addresses anticipated noise impacts associated with the proposal.	AO8.1 Exterior walls of enclosed <i>buildings</i>, <i>structures</i> and <i>animal enclosures</i> are constructed of noise attenuating materials including but not limited to clay, concrete, masonry or solid concrete.
PO9 Liquid and solid waste disposal, and carcass disposal does not result in	AO9 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
<i>environmental harm, environmental nuisance or adversely impact on water quality.</i>	
PO10 Air quality is managed to acceptable levels and standards and does not cause <i>environmental harm or environmental nuisance</i> .	AO10 No acceptable outcome provided.
Waste management	
PO11 Disposal of solid waste and liquid waste generated by the use does not result in any On-Site or <i>off-site</i> contamination of soil, surface water and ground water, or create any nuisance from odour, dust or vermin.	AO11 No acceptable outcome provided.
Managing boundary interfaces	
PO12 The activity achieves a high standard of visual amenity and provides a physical <i>buffer</i> between areas of different character.	AO12 Where the activity adjoins land located in any zone other than the Rural zone, a screen fence not less than 1.8 metres in height but not more than 2 metres in height is provided along the common boundary.

8.2.2 Aquaculture code

8.2.2.1 Application

This code applies to assessing a material change of use for development involving aquaculture.

8.2.2.2 Purpose

- (1) The purpose of the aquaculture code is to locate and design the use in a way which minimises the impact on surrounding uses and the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *aquaculture* is located and sited to ensure compatibility with the desired visual, scenic amenity and landscape character of the locality;
 - (b) is appropriately managed and does not *adversely impact on water quality*;
 - (c) is sited to protect the viability of known extractive resources;
 - (d) to ensure development is designed, constructed and operated to ensure liquid and solid waste does not cause environmental harm or nuisance;
 - (e) development appropriately protects the productive capacity of the land in accordance with the applicable State Planning Scheme Policies; and
 - (f) is adequately separated from *sensitive land uses* and existing *rural activities*.

8.2.2.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.2.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Site area	
PO1 The use is located on a <i>site</i> which has sufficient area to: (a) accommodate the intensity and scale of the use, including <i>buildings</i>, pens, ponds, other structures and waste disposal areas comprising the use; and (b) adequately separate the use from <i>sensitive land uses</i>.	Where the <i>site</i> has a minimum area of 1 hectare AO1.1 <i>Buildings, structures</i> and areas associated with the use are set back a minimum of: (a) 10 metres from any road frontage; and (b) 10 metres from any side or rear boundary. Where the <i>site</i> has a minimum area of 100 hectares AO1.2 <i>Buildings, structures</i> and areas associated with the use are set back a minimum of: (a) 50 metres from any road frontage; and (b) 10 metres from any side or rear boundary.

PO2 The scale of the use: (a) is consistent with the amenity expectation of the zone; (b) has regard to proximity to <i>sensitive land uses</i>.	Where the site has a minimum area of 1 hectare AO2.1 The <i>total water surface area</i> does not exceed 50 square metres. AO2.2 <i>Buildings and structures</i> associated with the use do not exceed a total area of 25 square metres. Where the site has a minimum area of 100 hectares AO2.3 <i>Buildings and structures</i> associated with the use do not exceed a total area of 100 square metres. AO2.4 The <i>total water surface area</i> does not exceed 5 hectares.

PO3 Wastewater effluent and solid waste disposal does not result in an adverse impact on the environment or result in environmental harm or nuisance.	AO3.1 Wastewater is disposed of via: (a) collection for lawful offsite disposal; or (b) disposal to the reticulated sewer network. OR Where in the Rural zone AO3.2 Development is connected to a safe and efficient on-site waste water disposal system in accordance with <i>Queensland, Plumbing and Wastewater Code</i> and <i>Australian Standard A3500</i>.
Amenity	
PO4 <i>Buildings and structures</i> are designed and located to protect the scenic amenity and landscape character of the locality and are: (a) appropriately setback, consistent with <i>buildings</i> on the site or <i>buildings</i> on adjoining premises; (b) constructed of materials, colours, and finishes that are sympathetic to the background environment. (c) not visually intrusive, or are screened to mitigate visual intrusion.	AO4.1 Above ground containment facilities and other ancillary <i>buildings and structures</i> comprise non-reflective exterior finishes. AO4.2 The use and any associated buildings, structures and areas associated with the use are set back a minimum of: (a) 50 metres from any <i>road</i> frontage; and (b) 10 metres from any side or rear boundary. AO4.3 A landscaped buffer with a minimum width of 2 metres is provided to the street frontage.
Environmental impacts	
PO5 Wastewater effluent and solid waste disposal does not: (a) <i>adversely impact on water quality</i>; or (b) result in <i>environmental harm</i> or <i>environmental nuisance</i>.	AO5 No acceptable outcome provided.

8.2.3 Business activities code

8.2.3.1 Application

This code applies to assessing a material change of use for development involving the *business activities* group (other than a *sales office*).

8.2.3.2 Purpose

- (1) The purpose of the code is to develop business activities in a way that complements the character of the locality, enhances the streetscape, and manages operational impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the type, scale and location of the activity reinforces the town centre network;
 - (b) the built form and layout reinforces the existing or emerging character of the locality;
 - (c) mixed-use residential *development* is afforded a reasonable level of amenity located above or behind non-residential uses;
 - (d) the design and layout promotes a vibrant streetscape and a safe public environment;
 - (e) sites can be appropriately serviced and do not create unacceptable impacts on the *road* network; and
 - (f) operational impacts are appropriately managed.

8.2.3.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.3.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
All <i>business activities</i> other than markets	
Scale and intensity	
PO1 The activity is of a type and scale consistent with: (a) the desired character of the zone and locality in which it is situated; and (b) does not result in overdevelopment of the <i>site</i> .	AO1.1 Where the <i>site</i> is located in the Centre zone the <i>plot ratio</i> does not exceed 1.2 times the site area. OR AO1.2 Where the <i>site</i> in the Township zone the <i>plot ratio</i> does not exceed 0.8 times the site area.
Corner sites	
PO2 Where located on a <i>corner lot</i> on a main street, or a <i>site</i> with frontages to public or semi-public spaces, or a <i>site</i> terminating important vistas, building design expresses and emphasises the importance of its location through architectural expression and landscape treatments. Note- Main streets are identified in the Centre zone code.	AO2 No acceptable outcome provided.
Main street awnings	
PO3	AO3 Development on main streets is provided with awnings that:

Performance outcomes	Acceptable outcomes
Awnings contribute to the establishment of a 'main street' character and awnings are designed and located to: (a) provide climatic protection; (b) contribute to the establishment of continuous shelter; (c) integrate with adjoining shelters; (d) ensure pedestrian safety while not causing <i>environmental nuisance</i> to surrounding residents; and (e) permit the establishment of street trees; and (f) prevent accidental damage from vehicles.	(a) abut pedestrian footpaths; (b) include under awning lighting; (c) protect the normal flow of pedestrians; (d) is continuous across the frontage/s of the <i>site</i> (except for vehicle access points); (e) align to provide continuity with shelter on <i>adjoining premises</i>; (f) extends from the face of the building or the property line; (g) do not extend past a vertical plane of 1.5 metres inside the kerb to enable street trees to be planted and grow or 0.6 metres inside the kerb where trees are established; (h) have a 0.5 metre clearance to any tree trunk and main branches; and (i) are cantilevered from the main building with any posts within the footpath being non-load-bearing. Note - Main streets are identified in the Centre zone code.
Built form and materials	
PO4 The building form and finishes contribute to the established or emerging character of the zone and locality.	AO4 No acceptable outcome provided.
PO5 Mechanical plant and equipment is not a visually dominant feature of the streetscape or roof-scape.	AO5 Mechanical plant and equipment is screened from view.
PO6 Buildings and structures are constructed of robust materials that are graffiti resistant.	AO6 No acceptable outcome provided.
Interface with sensitive land uses or public open space	
PO7 The <i>business activity</i> provides an attractive interface that enhances the visual appearance of commercial buildings that adjoin public open space and land or used or intended for <i>sensitive land uses</i>.	AO7 Where the <i>business activity</i> adjoins a public open space and land or used or intended for use by <i>sensitive land uses</i>, the following is provided along the common boundary: (a) a minimum 3 metre wide landscape strip; and (b) screen fencing to a minimum height of 1.8 metres.
Emissions	
PO8 Lighting is designed in a manner to ensure ongoing amenity and safety whilst ensuring <i>sensitive land uses</i> are protected from undue glare or lighting overspill.	AO8 Fixed <i>site</i> lighting complies with Australian Standard AS4282 <i>Control of the Obtrusive Effects of Outdoor Lighting</i>.
PO9	AO9

Performance outcomes	Acceptable outcomes
Noise is managed in accordance with accepted standards and the use is of a scale, intensity, and duration that maintains the amenity of the surrounding area and nearby <i>sensitive land uses</i> , and the enjoyment of public open spaces.	No acceptable outcome provided.
CPTED	
PO10 The <i>site</i> layout and design incorporates crime prevention through environmental design (CPTED) principles.	AO10 No acceptable outcome proposed.
PO11 The <i>development</i> is landscaped to: (a) break up hardscape elements of the <i>development</i> ; (b) present an attractive appearance to the street; and (c) minimise visual and nuisance impacts on nearby <i>premises</i> , particularly <i>sensitive land uses</i> .	AO11 A minimum 1 metre wide landscape strip is provided along the frontage of the <i>site</i> , except where: (a) vehicle crossings are provided; or (b) on a Main street. Note -Main streets are identified in the Centre zone code.
Active frontages	
PO12 Mixed-use <i>development</i> ensures that <i>businesses activities</i> are positioned towards the street frontage at <i>ground level</i> to activate the street, and the design and layout provides that <i>accommodation activities</i> are provided with reasonable standards of amenity, privacy and security.	AO12.1 <i>Business activities</i> provide an active street frontage. AND AO12.2 <i>Accommodation activities</i> are located above or where at ground level behind <i>business activities</i> .
Service industry in the Centre zone	
PO13 <i>Service industry</i> : (a) is subordinate in scale to retail activities in the Centre zone; (b) impacts do not extend beyond the boundary of the tenancy; and (c) provides activation to the street and public thoroughfares.	AO13 No acceptable outcome provided.
Service station	
Location	
PO14 The <i>service station site</i> and/or development: (a) minimises potential for pedestrian vehicle conflict; (b) protects the function and operation of the road network; (c) is consistent with the role of the road in respect to road hierarchy;	AO14 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes		
(d) is suitable in respect to the amenity expectations and character of the surrounding locality			
Site area			
PO15 A <i>service station</i> has sufficient area and dimensions to accommodate: (a) buildings and associated storage areas; (b) vehicle access; (c) vehicle parking, manoeuvring and loading/unloading areas; and (d) landscaping and <i>buffers</i> .	AO15 The <i>site</i> has: (a) a minimum area of 1,500 square metres; and (b) a street frontage of not less than 60 metres.		
Convenience retail			
PO16 Ancillary components of a <i>service station</i> are subordinate to principal use. Note – Ancillary components of the service station include but is not limited to retail floor space	AO16 No acceptable outcome provided.		
Setbacks			
PO17 <i>Buildings and structures</i> are located and designed so that: (a) the visual impact is minimised from the street; and (b) an adequate <i>buffer</i> can be provided to nearby <i>sensitive land uses</i> .	AO17 <i>Service station</i> and/or car wash facilities are provided with the following minimum setbacks:		
	Building, structure or feature	Front boundary	Other boundary setbacks
	Building	15 metres	6 metres to a sensitive land use 2 metres otherwise
	Fuel pump	10 metres	10 metres
	Carwash	15 metres	6 metres to a sensitive land use
	Air hose facility	3 metres	3 metres to a sensitive land use
Hours of operation			
PO18 The hours of operation avoids <i>environmental nuisance</i> and does not detrimentally impact on <i>sensitive land uses</i> .	AO18 Where the <i>premises</i> adjoins land used or intended to be used for a <i>sensitive land uses</i> , the hours of operation are between 6am and 7pm Monday to Sunday.		
Operational impacts			
PO19 Liquid and solid waste disposal and emissions of contaminants to surface or groundwater (including contaminated stormwater) do not result in <i>environmental harm</i> or <i>environmental nuisance</i> or <i>adversely impact on water quality</i> .	AO19.1 Liquid or solid wastes (other than stormwater) are not discharged to land or waters.		
	AO19.2 Storage of potentially contaminating substances or areas where potentially contaminating activities occur are roofed.		

Performance outcomes	Acceptable outcomes
	AO19.3 Provision is made for spills to be banded and retained On-Site for removal and disposal by an approved means. AO19.4 Surfaces where spillages can occur are sealed with concrete, asphalt or similar impervious substance. AO19.5 Roof water is piped away from areas of potential contamination. AO19.6 Waste disposal bins are provided to contain potential contaminants for their removal and disposal <i>off-site</i>.
PO20 The risk to public safety, property and the environment from the storage of flammable and dangerous goods is minimised and managed in accordance with accepted standards. Note - The storage of flammable and combustible materials and liquids complies with the minor storage provisions of AS 1940:2004– <i>The Storage and Handling of Flammable and Combustible Liquids</i>.	AO20 No acceptable outcome provided.
Outdoor sales	
PO21 <i>Development</i> that includes the outdoor display of products for hire or sale provides a high quality streetscape appearance and boundary landscaping to soften the visual appearance.	AO21 Where goods are displayed or stored in the open and are visible from the street, a continuous 2 metre wide landscape strip is provided and maintained along the street frontage.
Outdoor material storage	
PO22 Dust from the outdoor storage of materials does not extend beyond the boundary of the <i>site</i>.	AO22.1 Outdoor material storage bays/areas are: (a) a maximum of 3 metres in height; (b) enclosed on three sides; and (c) include dust suppression devices (e.g. water sprays). OR AO22.2 Material storage bays/areas are fully enclosed.
Market	
Location	
PO23	AO23

Performance outcomes	Acceptable outcomes
The activity is conducted at a location where there is sufficient space to operate and support the attraction of a large numbers of people.	No acceptable outcome provided.
PO24 The activity does not prejudice the continuance of the primary use of the <i>premises</i> .	AO24 No acceptable outcome provided.
Duration of the use	
PO25 The duration of the <i>market</i> is consistent with the reasonable community expectations having regard to the character of the <i>site</i> and locality.	AO25.1 <i>Markets</i> are conducted (including set-up time) between the hours of: (a) 5:00am and 9:00pm Monday to Friday; or (b) 5:00am and 4:00pm on weekend days. AO25.2 The <i>market</i> is held on no more than two days per week.
Site restoration	
AO26 The <i>premises</i> is cleaned and restored to the original condition on completion of the use.	AO26 No acceptable outcome provided.
Public safety	
PO27 The use is operated safely and efficiently.	AO27 The following control measures are implemented: (a) crowd or pedestrian control measures; (b) traffic control measures; and (c) security measures.
Layout of markets	
PO28 <i>Markets</i> are designed to provide for: (a) convenient pedestrian access and movement; (b) legibility between stalls and existing surrounding uses; (c) pedestrian comfort and safety.	AO28.1 Pedestrian access or pathways a minimum of 2 metre wide are provided between: (a) stall fronts; and (b) stalls and existing shop fronts. AO28.2 Where the <i>market</i> is conducted on a footpath and the adjoining <i>road</i> remains open to vehicle use, a minimum 1.2m clearance from the kerb to any market <i>structure</i> or use area is provided. AO28.3 The <i>site</i> layout of the stalls provides view corridors and pedestrian circulation access to adjacent businesses and <i>advertising devices</i> .
Emergency access	
PO29 Provision is made for emergency vehicle access.	AO29 A clear movement path, at least 3 metres in width, is maintained through or around the activity to allow emergency vehicle access.

8.2.4 Caretaker's accommodation code

8.2.4.1 Application

This code applies to assessing a material change of use for development involving caretaker's accommodation.

8.2.4.2 Purpose

- (1) The purpose of the caretaker's accommodation code is to permit bona fide caretaker's accommodation that is ancillary to a non-residential use.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) ensure that *caretaker's accommodation* is a bona fide use associated with a non-residential activity;
 - (b) *caretaker's accommodation* is subordinate to the primary use of the *premises*;
 - (c) the *caretaker's accommodation* is visually integrated with new or existing on-site buildings and the character of the locality; and
 - (d) *caretaker's accommodation* is provided with a reasonable standard of amenity.

8.2.4.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.4.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Bona fide use	
PO1 The <i>caretaker's accommodation</i> is used for bona fide caretaking or property management purposes.	AO1 The <i>caretaker's accommodation</i> is occupied by a person having direct responsibility for the security, maintenance or management of a non-residential activity conducted on the same <i>site</i> , and if applicable, that person's immediate family.
Ancillary to primary use	
PO2 The <i>caretaker's accommodation</i> is ancillary to a non-residential activity on the same <i>premises</i> .	AO2.1 The <i>caretaker's accommodation</i> is not established on a separate <i>lot</i> to the non-residential activity. AO2.2 Only one <i>caretaker's accommodation</i> is established on the <i>site</i> .
Integration with the principal non-residential use	
PO3 The <i>caretaker's accommodation</i> operates as an independent and self contained <i>dwelling</i> .	AO3 The <i>caretaker's accommodation</i> is self contained. Note – Caretakers accommodation may be: (a) a separate building to the non-residential activity; (b) external but directly attached to the non-residential activity; or (c) located within the same building as the non-residential activity.

Performance outcomes	Acceptable outcomes
PO4 The <i>development</i> is consistent with the character of the locality and is visually compatible with the principal non-residential building in terms of: (a) built form; and (b) materials and finishes.	AO4 No acceptable outcome provided.
Open space	
PO5 The <i>caretaker's accommodation</i> is provided with <i>private open space</i> that is useable and adequately screened from the non-residential activities on the <i>site</i>. <i>Private open space</i> is directly accessible from a <i>habitable room</i> of the <i>dwelling</i>.	AO5.1 A <i>ground level caretaker's accommodation</i> is provided with a <i>private open space</i> area of at least 30 square metres that is able to contain a circle with a minimum diameter of at least 3 metres. The <i>private open space</i> has direct access from a living room. OR AO5.2 <i>Private open space</i> for a <i>caretaker's accommodation</i> located above ground is provided in the form of a balcony or balconies having a minimum area of 8 square metres and a minimum dimension of 2 metres. The <i>private open space</i> has direct access from a living room. AO5.3 <i>Private open space</i> is sited and orientated so that other non-residential activities on the <i>site</i> do not directly overlook the <i>private open space</i>. OR AO5.4 <i>Private open space</i> is screened where direct view is available into the <i>private open space</i> from the non-residential activity: (a) for <i>ground level private open space</i> by a minimum 1.8 metres high solid screen fence; and (b) for above ground <i>private open space</i> by lightweight screening devices.

8.2.5 Community activities code

8.2.5.1 Application

This code applies to assessing a material change of use for development for the *community activities* group, other than a *community residence*.

8.2.5.2 Purpose

- (1) The purpose of the community activities code is to ensure community facilities are well located and do not detract from the desired character and amenity of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) community activities are established in appropriate locations that best serve the community through accessibility, co-location, and integration with other community uses and facilities;
 - (b) community activities are designed to:
 - (i) operate safely and efficiently;
 - (ii) enhance community identity and character;
 - (iii) create high quality public realm, where appropriate; and
 - (iv) discourage crime and anti-social behaviour.
 - (c) community activities do not unduly impact on the amenity of the locality.

8.2.5.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.5.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Location	
PO1 The <i>development</i> is: (a) highly accessible to the intended catchment; (b) in proximity to other community or recreational activities, where practicable; and (c) located to avoid conflict with potentially incompatible land uses.	AO1 <i>Community activities</i> are co-located with other community activities or community focal points such as shopping centres, educational establishments, or recreational activities.
Built form and character	
PO2 Buildings and structures are of form and character that is commensurate with the zone and locality in which the activity is located.	AO2 No acceptable outcome provided.
PO3 The <i>community activity</i> is screened from view, except where the <i>community activity</i> is intended for the provision of civic services or requires a public interface.	AO3 No acceptable outcome provided.
Scale and intensity	
PO4	AO4 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
The scale and intensity of the activity is commensurate with the zone and locality in which the activity is located.	
Emissions	
PO5 Lighting is designed in a manner to ensure ongoing amenity and safety whilst ensuring <i>sensitive land uses</i> are protected from undue glare or lighting overspill.	AO5 Fixed <i>site</i> lighting complies with Australian Standard AS4282 <i>Control of the Obtrusive Effects of Outdoor Lighting</i> .
PO6 Noise is managed in accordance with accepted standards and the use is of a scale, intensity, and duration that has minimal impacts on the surrounding area, <i>sensitive land uses</i> , and the enjoyment of public open spaces.	AO6 No acceptable outcome provided.
PO7 Air quality is managed to acceptable levels and standards and does not cause <i>environmental nuisance</i> or <i>environmental harm</i> .	AO7 No acceptable outcome provided.
Public health and safety	
PO8 Employees and other users are not exposed to harmful levels of air pollutants, other potential health hazards, or contaminants.	AO8.1 The <i>community activity</i> is a <i>sensitive land use</i> and is setback and minimum of: (a) 500 metres from the High impact industry zone; and (b) 100 metres from the Industry zone. AO8.2 The <i>community activity</i> is a <i>sensitive land use</i> and the <i>site</i> is not included on the Contaminated Land Register (CLR), Environmental Management Register (EMR) and has not been previously used for a notifiable activity.
CPTED	
PO9 The <i>site</i> layout and design incorporates crime prevention through environmental design (CPTED) principles.	AO9 No acceptable outcome provided.
Hours of operation	
PO10 The hours of operation do not create <i>environmental nuisance</i> or detrimentally impact on the amenity of the locality.	AO10 The hours of operation occur only between 7am and 6pm Monday to Friday where adjacent to a <i>sensitive land use</i> or where adjoining land in the: (a) General residential zone;

Performance outcomes	Acceptable outcomes
	(b) General residential zone - park residential precinct; (c) Rural residential zone; and (d) Emerging community zone.
PO11 Community activities provide for alternative forms of transportation and access, where practicable and reasonably required.	AO11 No acceptable outcome provided.
Child care centre	
PO12 The <i>development</i> avoids the introduction of additional traffic into access places or access streets, except where exceptional circumstances are demonstrated, and the impacts can be appropriately managed.	AO12. The <i>site</i> is not located on a <i>road</i> with a reserve width of less than 20 metres.
PO13 The <i>site</i> is of a sufficient size to accommodate the indoor, outdoor, landscaping and parking needs of the use.	AO13. <i>Site</i> area is: (a) a minimum 1,500 square metres for less than 50 children; or (b) 2,000 square metres for 50-75 children.
PO14 The <i>site</i> accommodates the activity needs of the children, and provides climatic protection to outdoor spaces.	AO14. The design layout incorporates: (a) areas for indoor play and outdoor play; and (b) outdoor shade.
PO15 <i>Site</i> design avoids the potential for vehicle and child conflict and separates operational areas from areas intended for children.	AO15. No acceptable outcome provided.

8.2.6 Dwelling house code

8.2.6.1 Application

This code applies to assessing a material change of use or building work for development involving a dwelling house.

Note- The dwelling house performance outcomes and acceptable outcomes in this code vary, or are otherwise in addition to, the performance criteria and acceptable solutions of the:

- (a) Queensland Development Code MP1.1 – Design and Siting Standard for Single Detached Housing – On Lots under 450m²; and
- (b) Queensland Development Code MP1.2 – Design and Siting Standard for Single Detached Housing – On Lots 450m² and Over.

Note-The Queensland Development Code will be assessed during an application for building works.

8.2.6.2 Purpose

- (1) The purpose of the dwelling house code is to ensure that the character, form, and scale of dwelling houses is consistent with the reasonable expectations of the locality in which the development is situated.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *dwelling houses* are compatible with surrounding *development*;
 - (b) *dwelling houses* are appropriately located to mitigate impacts from potentially incompatible land uses in the Rural zone;
 - (c) ensure *domestic outbuildings* and *secondary dwellings* are subordinate in scale to the principal *dwelling*;
 - (d) ensure *secondary dwellings* are used for one related single household; and
 - (e) ensure that *domestic outbuildings* are not used for habitable purposes.

8.2.6.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.6.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
General	

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 The scale, intensity, and siting of <i>dwelling houses</i> maintains the character and amenity of the locality.	AO1.1 <i>Building height</i> does not exceed two <i>storeys</i> and 8.5 metres above <i>ground level</i>. AO1.2 <i>Site cover</i> does not exceed 50 per cent in the General residential zone. AO1.3 <i>Site cover</i> does not exceed 20 per cent in the: (a) General residential zone—Park residential precinct; or (b) Rural residential zone. AO1.4 The <i>dwelling house</i> is set back a minimum of 10 metres from all boundaries in the: (a) General residential zone—Park residential precinct; or (b) Rural residential zone; or (c) Emerging community zone. AO1.5 The <i>dwelling house</i> is set back no less than 15 metres from all boundaries in the Rural zone.

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO2 Premises have an adequate volume and supply of water that: (a) meets the needs of users; (b) is adequate for fire fighting purposes; (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	AO2.1 Where the site is located in a reticulated water supply service catchment area, the development is connected to the reticulated water supply. OR AO2.2 Where the site is not located in a reticulated water supply catchment area, the development is provided with a potable water supply. OR AO2.3 Where the site is not located in a reticulated water supply service catchment area, the development is provided with a potable water supply from a tank with a minimum storage capacity of 45,000 litres per dwelling. OR AO2.4 Where the site is not located in a reticulated water supply service catchment area, the development is connected to a potable water supply from an approved bore, and has a tank with a minimum storage capacity of 10,000 litres per dwelling.
Domestic outbuildings	
PO3 <i>Domestic outbuildings</i> remain subordinate in scale to the <i>dwelling house</i> and do not detract from the streetscape character of <i>dwelling house</i> , or the character of the locality.	AO3.1 The total maximum <i>gross floor area</i> of all <i>domestic outbuildings</i> (other than in the Rural zone) shall not exceed 70 percent of the gross floor area of the <i>dwelling house</i> . AO3.2 The <i>domestic outbuilding</i> is set back a minimum of 10 metres from all boundaries in the: (a) General residential zone—Park residential precinct; or (b) Rural residential zone; or (c) Emerging community zone. AO3.3 The <i>domestic outbuilding</i> is set back no less than 15 metres from all boundaries in the Rural zone.

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO4 <i>Domestic outbuildings</i> do not dominate the streetscape or create unacceptable visual impacts when viewed from the street.	AO4.1 A maximum of two <i>domestic outbuildings</i> are constructed on the <i>premises</i> in the: (a) Centre zone; (b) Emerging community zone; (c) General residential zone; (d) Rural residential zone; and (e) Township zone.
Secondary dwellings	
PO5 The <i>secondary dwelling</i> is not used by persons that are unrelated to the principal <i>household</i> .	AO5.1 The <i>secondary dwelling</i> is occupied by a relative of the principal <i>household</i> , which forms a single related <i>household</i> . Note -Two dwellings for separate unrelated households on the same premises is deemed to be dual occupancy.
PO6 The <i>secondary dwelling</i> is small-scale, low-key, and subordinate to the <i>dwelling house</i> .	AO6.1 The total maximum <i>gross floor area</i> of the <i>secondary dwelling</i> shall not exceed 60 percent of the gross floor area of the <i>dwelling house</i> on the same <i>site</i> .
PO7 The <i>site</i> is capable of accommodating the <i>secondary dwelling</i> without resulting in over development of the <i>site</i> .	AO7.1 The <i>lot</i> size is a minimum of 800 square metres.
PO8 <i>Secondary dwellings</i> : (a) are designed and sited to maintain local character and amenity; (b) are visually compatible with the existing <i>dwelling house</i> ; and (c) are located in proximity to the principal <i>dwelling</i> .	AO8.1 The <i>secondary dwelling</i> is no closer to the front boundary of the <i>premises</i> than the principal <i>dwelling house</i> . AO8.2 In the Rural zone, the <i>secondary dwelling</i> is located a minimum of 15 metres from any side or rear boundary. AO8.3 The <i>secondary dwelling</i> is provided with at least one covered parking space.
Proximity to Intensive Animal Industry or Extractive Industry	
PO9 The location of any <i>dwelling house</i> does not compromise the continued operation of an existing <i>intensive animal industry</i> or <i>extractive industry</i> not identified as a <i>key resource area</i> .	AO9.1 Any new <i>dwelling house</i> is to be located a minimum of 500 metres from an existing <i>intensive animal industry</i> or <i>extractive industry</i> not identified as a <i>key resource area</i> , unless it is associated with one of these uses.

8.2.7 Extractive industry code

8.2.7.1 Application

This code applies to assessing a material change of use for development involving extractive industry.

8.2.7.2 Purpose

- (1) The purpose of the code is to ensure extractive industry operations are undertaken in a safe and efficient manner that is environmentally sensitive and minimises *off-site* impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *extractive industry* is appropriately separated from incompatible and *sensitive land uses*;
 - (b) *extractive industry* appropriately manages the operational impacts of the activity and protects public safety;
 - (c) significant ecological and biodiversity values including and *waterbodies*, *watercourses* and *wetlands* are protected from the impacts of *extractive industry*;
 - (d) the visual impacts of *extractive industry* are appropriately managed;
 - (e) new haulage routes do not interfere with the safe and efficient operation of the *road* network or adversely impact on the amenity of *sensitive land uses* adjacent to the route; and
 - (f) the land is progressively rehabilitated during the lifetime of the *extractive industry*.

8.2.7.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.7.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Separation distances	
PO1 The effects of <i>extractive industry</i> operations (dust, air and noise emissions, blasting, vibration and overpressure) and from associated transport movements do not create significant environmental harm, unreasonably disrupt the amenity of nearby <i>sensitive land uses</i> , or detract from the significance of protected areas.	AO1.1 <i>Extractive industry</i> operations that involve blasting and/or crushing, are located a minimum 1,000 metres from: (a) a <i>sensitive land use</i> not associated with the <i>extractive industry</i> excluding <i>dwelling(s)</i> on land that is the subject of the <i>extractive industry</i>; or (b) land located in the General residential zone or Rural residential zone. AO1.2 <i>Extractive industry</i> operations that do not involve blasting and/or crushing of rock (namely sand, gravel, clay and soil extraction) are located: (a) a minimum of 200 metres from a <i>sensitive land use</i> excluding a <i>dwelling(s)</i> on land that is the subject of the <i>extractive industry</i>; or (b) land in a General residential zone, General residential zone - park residential precinct or Rural residential zone. AO1.3

Performance outcomes	Acceptable outcomes
	External haul routes, other than a <i>State-controlled road</i> or transport route identified on OM006a-b , are located not less than 100 metres from a <i>sensitive land use</i> (not associated with the subject site) or land in a General residential zone, General residential zone - park residential precinct, or Rural residential zone.
Environmental values	
PO2 Where in a <i>key resource area</i> , the design, operation and staging of the <i>extractive industry</i> appropriately mitigates impacts on areas of ecological significance, scenic amenity and landscape character of the locality.	AO2 No acceptable outcome provided.
PO3 Where not in a <i>key resource area</i> the design, operation and staging of the <i>extractive industry</i> appropriately protects and avoids impacts on areas of ecological significance, scenic amenity and landscape character of the locality.	AO3 Development for an extractive industry is not located in: (a) an area of ecological significance or protected estate identified on Biodiversity overlay maps OM003a-b; (b) a high scenic amenity area identified on Scenic amenity overlay map OM12a-b; or (c) a scenic route section identified on Scenic amenity overlay map OM12a-b.
Managing the effects of extractive industry operations	
PO4 Wastewater and stormwater discharge does not: (a) <i>adversely impact on water quality</i>; (b) result in the worsening of stormwater quality or quantity; or (c) create <i>environmental harm</i> or <i>environmental nuisance</i>.	AO4.1 Banks and channels are constructed to divert stormwater runoff away from disturbed areas. AO4.2 Sediment basins are provided to detain stormwater runoff from disturbed areas for treatment by sedimentation / settlement or flocculation such that there is no <i>off-site</i> discharge likely to cause environmental harm. AO4.3 Bunding, diversion, containment, treatment, clearing, recycling and disposal of wastes is carried out such that no environmental harm is caused. AO4.4 Suitable treatment of erosion prone areas is established and maintained at discharge points.

Performance outcomes	Acceptable outcomes
PO5 <i>Extractive industry</i> operations minimise lighting impacts from external viewpoints, including public roads, other public vantage points, and neighbouring properties, taking into consideration the: (a) illumination levels; (b) periods of illumination; (c) direction of lighting; (d) use of vegetation buffers; and (e) proximity to <i>sensitive land uses</i>.	AO5 Lighting complies with <i>Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting</i>.
PO6 Air quality is managed to acceptable levels and standards.	AO6 Development complies with <i>Environmental Protection (Noise) Policy 2008</i>.
PO7 Noise and vibration is managed in accordance accepted standards.	AO7.1 Blasting operations are limited to between the hours of 9.00am to 5.00pm Monday to Friday. AO7.2 Extraction, crushing, screening loading and the operation of plant equipment and haulage are only to be undertaken between the hours of: (a) 6.00am and 6.00pm Monday to Friday; and (b) 8.00am and 3.00pm on Saturdays.
PO8 The haulage of extractive material ensures: (a) the roads used as haulage routes are of an adequate standard to accommodate the type and frequency of traffic generated; (b) haulage routes are maintained including the removal of dirt and other debris or spillage from trucks; and (c) haulage routes do not compromise traffic safety in the area.	AO8 No acceptable outcome provided.
PO9 Public access to the site is strictly managed to ensure public safety.	AO9.1 Blasting does not result in material escaping the site. AO9.2 Warning signs are placed on the perimeter fence every 200 metres on any frontage to a public road.

Performance outcomes	Acceptable outcomes
Landscape buffering	
PO10 <i>Extractive industry</i> buildings, machinery operating areas and access ways are sited and effectively screened from public <i>roads</i>, other public vantage points, and neighbouring properties. Landscaping species complement the biodiversity values of the <i>site</i> and surrounding area.	AO10.1 A landscape <i>buffer</i> of a minimum 25 metres screens site operations and incorporates the following elements where appropriate: (a) native plants of local origin; (b) known food and habitat trees and shrubs; (c) replication of adjacent healthy remnant habitats, including understorey vegetation; and (d) no declared noxious plants, weeds or invasive plants likely to displace native flora species or degrade fauna habitat.
Rehabilitation	
PO11 Progressive rehabilitation of the <i>site</i> is to be carried out over the life of the extractive operations to minimise the impacts on the environment and to retain the environmental values and natural appearance of the surroundings.	AO11 No acceptable outcome provided.

8.2.8 Home based business code

8.2.8.1 Application

This code applies to assessing a material change of use for development involving a home based business.

8.2.8.2 Purpose

- (1) The purpose of the home based business code is to provide for residents of a *dwelling house* to conduct economically productive activities from home while ensuring that business activities associated with a *dwelling house* are low-key and remain subordinate to the use of the *dwelling house*.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the use is operated by persons of the *dwelling house* who permanently reside at the *premises*;
 - (b) the use is low-key and subordinate to the *dwelling house* having regard to the composition of the *dwelling house*, the nature of the *home based business*, and reasonable expectations of the community;
 - (c) the activity is visually compatible with the existing scale and character of the locality;
 - (d) the activity protects and maintains the urban or rural amenity of the locality; and
 - (e) where for *bed and breakfast* purposes is easily accessible to guests and reinforces the tourism and recreation strategy.

8.2.8.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.8.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Home based child care	
PO1 The establishment and ongoing operation of the <i>home based child care</i> is appropriately managed and regulated.	AO1 The <i>home based child care</i> is registered with an identified day care association.
Bed and breakfast	
PO2 The use is appropriately located in an area that advances the intent of the tourism and recreation strategy.	AO2 The <i>bed and breakfast</i> is located in one of the following locations shown on Figure 8.2.8.3 - Tourism Areas : (a) a Major Tourism Hub; or (b) a Minor Tourism Hub; or (c) a Principal Future Strategic Tourism Focus Area; or (d) the Lake Somerset Water-based Recreation Focus Area; or (e) adjacent to the Brisbane Valley Rail Trail.
PO3 The use maintains the character and amenity of the local area.	AO3.1 The maximum number of paying guests at any one time is six (6).

Performance outcomes	Acceptable outcomes
	AO3.2 The maximum continuous period of stay for any guest is six (6) consecutive nights. AO3.3 The <i>site</i> has a minimum area of 2,000 square metres and the <i>bed and breakfast</i> accommodation is setback at least 20 metres from an adjoining <i>dwelling</i>. AO3.4 The <i>home based business</i> is conducted within a <i>dwelling house</i>. AO3.5 The <i>home based business</i> does not include <i>habitable rooms</i>, or buildings, separate to the <i>dwelling house</i>. Note - Stand alone habitable rooms are deemed to be a short term accommodation use rather than a home based business use.
PO4 The use must provide reasonable levels of privacy and convenience.	AO4.1 Guests are to be provided with a bedroom capable of being enclosed to prevent visual or other intrusion by members of the host household. AO4.2 The <i>bed and breakfast</i> is to provide one (1) car parking space for each accommodation room separate to the host's parking area.
For assessable development	
Home based business other than bed and breakfast	
Bona fide use	
PO5 The <i>home based business</i> is operated by bonafide occupants of the <i>dwelling house</i> in which the <i>home based business</i> operates.	AO5 The <i>home based business</i> is operated by persons of the <i>dwelling house</i> who permanently reside at the <i>premises</i>.
Subordinate to dwelling house	

Performance outcomes	Acceptable outcomes
PO6 The <i>home based business</i> is small-scale and subordinate to the <i>dwelling house</i> in terms of, but not limited to: (a) the number of employees relative to the typical or common number of people who comprise a household; (b) the scale and intensity of the use relative the <i>gross floor area</i> of the <i>dwelling house</i>; (c) the physical appearance of the activity, and visual compatibility with the <i>dwelling house</i>; (d) the physical appearance of the activity, and visual compatibility from the street frontage; (e) the hours of operation and impacts on amenity; (f) the emissions generated relative to the existing residential use and whether impacts are caused beyond the <i>dwelling house</i> or <i>site</i>; (g) traffic generation relative to the existing residential use; (h) the amenity expectations for the locality and adjacent and nearby land uses; and (i) the general nature of the use and suitability of the use in the locality having regard to reasonable community expectations in the respective zone.	AO6.1 The <i>home based business</i> is conducted within a <i>dwelling house</i> or <i>domestic outbuilding</i>. AO6.2 The external scale, appearance and character of the <i>dwelling house</i> has not been modified to accommodate the <i>home based business</i>. OR AO6.3 Extensions or modifications to a <i>dwelling house</i> are undertaken in a manner that maintains the character, integrity, and architectural style of the building. AO6.4 Where in the General residential zone, other than the park residential precinct the <i>gross floor area</i> does not exceed 30 percent of the <i>gross floor area</i> of the <i>dwelling house</i>, or 40 square metres, whichever is greater. OR AO6.5 Where in the Emerging community zone, Rural residential zone or General residential zone - park residential precinct the <i>gross floor area</i> does not exceed 30 percent of the <i>gross floor area</i> of the <i>dwelling house</i>, or 60 square metres, whichever is greater. OR AO6.6 Where in the Rural zone the <i>gross floor area</i> does not exceed 30 percent of the <i>gross floor area</i> of the <i>dwelling house</i>, or 100 square metres, whichever is greater. AO6.7 Where in the General residential zone, other than the park residential precinct equipment, goods, or materials associated with the <i>home based business</i> are located within the <i>dwelling house</i> and/or <i>domestic outbuilding</i>. OR AO6.8 Where in the Emerging community zone, Rural residential zone or General residential

Performance outcomes	Acceptable outcomes
	zone - park residential precinct, equipment, goods, or materials associated with the <i>home based business</i> which are located outdoors: (a) do not exceed 30 square metres in area; (b) are located behind the rear building line of the <i>dwelling house</i>; and (c) are not visible from the street frontage. OR AO6.9 Where in the rural zone, equipment, goods, or materials associated with the <i>home based business</i> which are located outdoors: (a) do not exceed 50 square metres in area; (b) is located behind the rear building line of the <i>dwelling house</i>; and (c) is not visible from the street frontage. AO6.10 In addition to the persons who permanently reside at the <i>premises</i>, the maximum number of other persons employed on-site is: (a) 1 person in the General residential zone, General residential zone - park residential precinct, or Rural residential zone; or (b) 2 persons in the Rural zone. AO6.11 The activity does not require an <i>environmentally relevant activity</i> (ERA) to operate in the: (a) General residential zone; (b) General residential zone - park residential precinct; (c) Emerging community zone; or (d) Rural residential zone. AO6.12 <i>Home based businesses</i> do not occur outside the hours of: (a) 6am and 6pm Monday to Friday; and (b) 8am and 12pm on Saturday.
Amenity	
PO7 The <i>home based business</i> does not detract from the amenity of the locality or nearby <i>sensitive land uses</i> through unacceptable noise impacts.	AO7 No acceptable outcome provided.
PO8	AO8

Performance outcomes	Acceptable outcomes
The <i>home based business</i> must not detract from the amenity of locality or nearby <i>sensitive land uses</i> through unacceptable impacts including: (a) vibration; (b) light; (c) odour; (d) emissions or by-products including fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, <i>wastewater</i>; and (e) electrical or other interference.	The activity does not emit or cause vibration, odour, fumes, smoke, vapour, steam, soot, ash, dust, grit, oil, radio, electrical interference, or other environmental emissions.
Hazardous goods	
PO9 The storage and quantities of flammable and hazardous goods associated with the <i>home based business</i> does not compromise resident, employee, visitor or public safety. Note- The storage of flammable and combustible materials and liquids complies with the minor storage provisions of AS 1940 – <i>The Storage and Handling of Flammable and Combustible Liquids</i>.	AO9 No acceptable outcome provided.
Infrastructure and waste collection	
PO10 No load is imposed on any local utility or refuse collection service that is greater than that which is normally provided in the zone in which the <i>home based business</i> is situated.	AO10 No acceptable outcome provided.
Bed and breakfast	
Location and site suitability	
PO11 <i>Bed and breakfast</i> accommodation is located as to avoid land use conflicts with nearby <i>sensitive land uses</i> and rural activities on surrounding properties.	AO11.1 Where located in the General residential zone - park residential precinct, Rural residential zone, Emerging community zone, or Rural zone, the <i>site</i> has a minimum area of 2,000 square metres. AO11.2 The <i>bed and breakfast</i> accommodation is setback at least 50 metres from the boundary of an adjoining <i>dwelling</i> in the Rural zone.
PO12 The <i>home based business</i> is operated by bonafide occupants of the <i>dwelling house</i> in which the home based business operates.	AO12 The <i>home based business</i> is operated by persons of the <i>dwelling house</i> who permanently reside at the <i>premises</i>.
Scale	

Performance outcomes	Acceptable outcomes
PO13 The <i>home based business</i> is small-scale and subordinate to the <i>dwelling house</i> in terms of, but not limited to: (a) the number of employees relative to the typical or common number of people who comprise a household; (b) the scale and intensity of the use relative the <i>gross floor area</i> of the <i>dwelling house</i>; (c) the physical appearance of the activity, and visual compatibility with the <i>dwelling house</i>; (d) the physical appearance of the activity, and visual compatibility from the street frontage; (e) the hours of operation and impacts on amenity; (f) the emissions generated relative to the existing residential use and whether impacts are caused beyond the <i>dwelling house</i> or <i>site</i>; (g) traffic generation relative to the existing residential use; (h) the amenity expectations for the locality and adjacent and nearby land uses; and (i) the general nature of the use and suitability of the use in the locality having regard to reasonable community expectations in the respective zone.	AO13.1 The <i>home based business</i> is conducted within a <i>dwelling house</i>. AO13.2 The <i>home based business</i> does not include <i>habitable rooms</i>, or buildings, separate to the <i>dwelling house</i>. Note - Stand alone habitable rooms are deemed to be a short term accommodation use rather than a home based business use. AO13.3 The <i>home based business</i> is not self contained in General residential zone, Emerging community zone, or the Rural residential zone. AO13.4 The <i>bed and breakfast</i> in the Rural zone may include a kitchenette. AO13.5 Extensions or modifications to a <i>dwelling house</i> are undertaken in a manner that maintains the character, integrity, and architectural style of the building. AO13.6 The maximum number of rooms used to accommodate guests: (a) in the General residential zone, other than the park residential precinct, is two; (b) in the Emerging community zone, Rural residential zone and General residential zone - park residential precinct is three. (c) in the Rural zone is four.
Infrastructure and waste collection	
PO14 No load is imposed on any local utility or refuse collection service that is greater than that which is normally provided in the zone in which the <i>home based business</i> is situated.	AO14.1 No acceptable outcome provided.

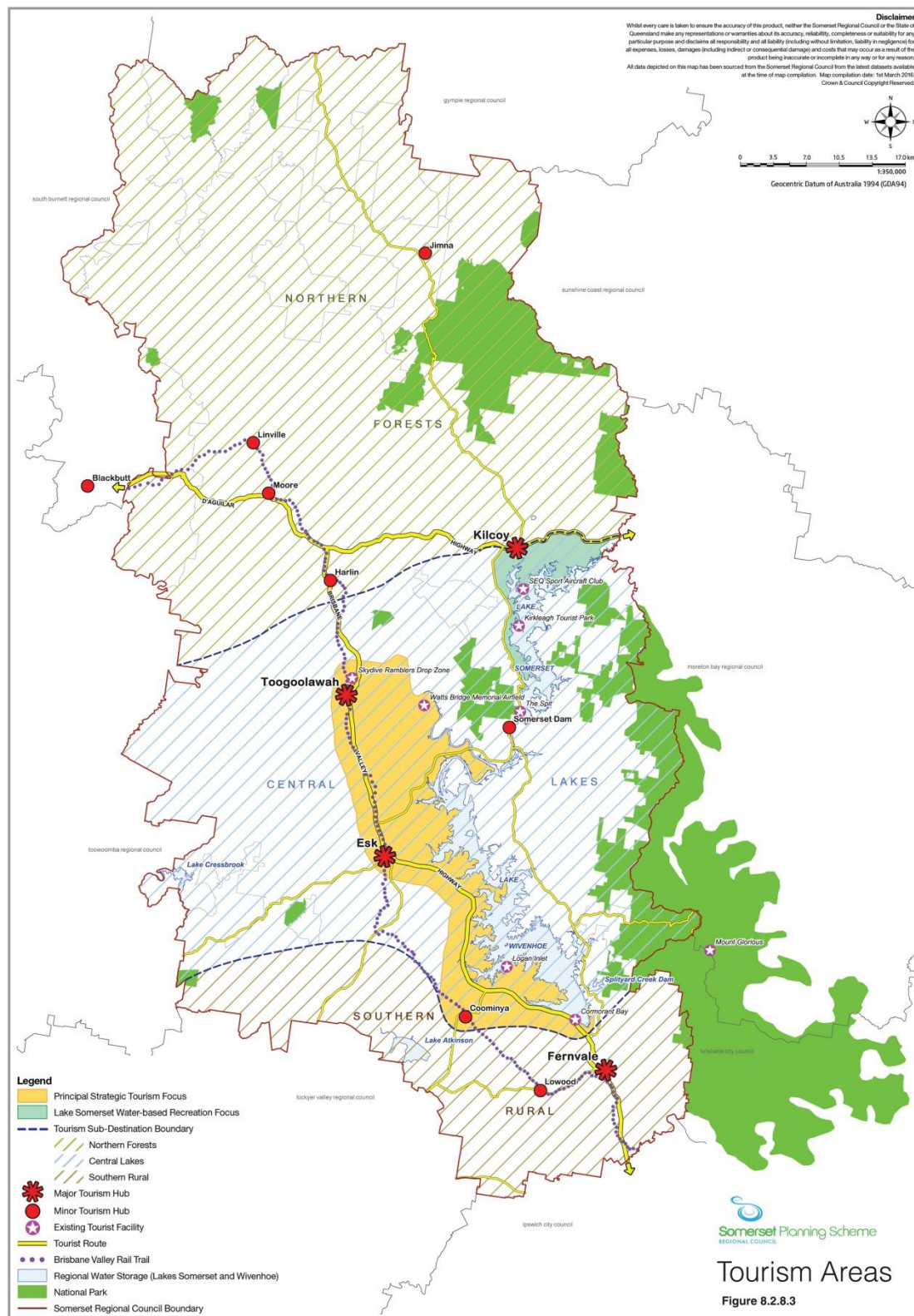


Figure 8.2.8.3—Tourism Areas

8.2.9 Industrial activities code

8.2.9.1 Application

This code applies to assessing a material change of use for development involving industrial activities group, other than *extractive industry*.

8.2.9.2 Purpose

- (1) The purpose of the industrial activities code is to establish industrial uses that appropriately manage environmental risks, public safety and operational impacts. Industrial activities are functional and visually attractive.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) ensure that the environmental performance of industry achieves a satisfactory standard and minimises adverse impacts on natural environment, *sensitive land uses*, and public open spaces;
 - (b) ensure that ancillary on-site activities remain subordinate to the primary industry use; and
 - (c) the design provides a coherent *site* layout and an efficient, safe and visually attractive built form that includes landscaping and visual buffering where appropriate.

8.2.9.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.9.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Site layout, scale, and intensity	
PO1 The <i>development</i> incorporates a <i>site</i> layout, scale, and intensity that: (a) provides an efficient use of the <i>site</i>; (b) enhances the streetscape and softens the visual appearance; (c) ensures that <i>sensitive land uses</i> and public open spaces are not adversely affected; and (d) does not result in overdevelopment.	AO1.1 The building is setback not less than 5 metres to any boundary that adjoins land used or intended for <i>sensitive land uses</i> or public open space. AO1.2 <i>Gross floor area</i> does not exceed the area of the <i>site</i> . AO1.3 Vehicle unloading, outdoor activities and outdoor storage areas are sited to be unobtrusive from the street. AO1.4 The building design and layout locates potential noise sources away from <i>sensitive land uses</i> , street frontages and public open spaces.

Performance outcomes	Acceptable outcomes
	AO1.5 Landscaping is provided along the street frontage of the <i>premises</i>, and has a minimum width of 2 metres (excluding access ways) in the Industry zone or 10 metres in the High impact industry zone. AO1.6 A minimum of 10 percent of the <i>site</i> is provided as landscaped open space.
Fencing	
PO2 Boundary fencing provides security to the <i>site</i> and promotes passive surveillance and fencing is designed and constructed of robust materials resistant to graffiti.	AO2 Security fencing is provided that is: (a) a maximum height of 1.8 metres; and (b) a minimum of 75 percent visually transparent.
Administration and sales areas	
PO3 Office and sales areas remain subordinate to the primary industrial use.	AO3.1 Areas for administration or sales purposes do not exceed 20 percent of the <i>gross floor area</i> of the industrial building. OR AO3.2 Where no industrial building is provided, standalone buildings for office and sales purposes do not exceed 150 square metres of <i>gross floor area</i>.
Streetscape appearance, materials and finishes	
PO4 Buildings are designed and finished to have a high quality appearance, and promote visual interest when viewed from the primary street frontage, <i>sensitive land uses</i> and public open spaces.	AO4.1 The main entry to the building is easily identifiable and directly accessible from the primary street frontage. AO4.2 The ground floor of the building is designed with office, display windows, entrance foyers and building forecourts that are orientated towards the primary street frontage.
Operational impacts	
PO5 Air quality is managed to acceptable levels and standards and does not cause <i>environmental nuisance</i> or <i>environmental harm</i>.	AO5 Development complies with the applicable requirements of: (a) <i>the Environmental Protection (Air) Policy 2008; and</i> (b) <i>the Environmental Protection (Noise) Policy 2008.</i>

Performance outcomes	Acceptable outcomes
PO6 Noise is managed in accordance accepted standards and the use is of a scale, intensity, and duration that has minimal impacts on the surrounding area, <i>sensitive land uses</i>, and the enjoyment of public open spaces.	AO6 Activities occur between 7am to 6pm Monday to Friday and 7am to 2pm on Saturdays. No operations occur on Sundays or public holidays.
PO7 Liquid and solid waste disposal and emissions of contaminants to surface or groundwater (including contaminated stormwater) do not result in <i>environmental harm</i> or <i>environmental nuisance</i> or <i>adversely impact on water quality</i>.	AO7.1 Liquid or solid wastes (other than stormwater) are not discharged to land or waters. AO7.2 Storage of potentially contaminating substances or areas where potentially contaminating activities occur are roofed. AO7.3 Provision is made for spills to be bunded and retained ON-Site for removal and disposal by an approved means. AO7.4 Surfaces where spillages can occur are sealed with concrete, asphalt or similar impervious substance. AO7.5 Roof water is piped away from areas of potential contamination. AO7.6 Waste disposal bins are provided to contain potential contaminants for their removal and disposal <i>off-site</i>.
PO8 Industry operations minimise lighting impacts, taking into consideration the: (a) illumination levels; (b) period of illumination; (c) direction of lighting; (d) use of vegetation <i>buffers</i>; and (e) proximity to <i>sensitive land uses</i>.	AO8 Lighting complies with <i>Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting</i>.
PO9 The risk to public safety, property and the environment from technological hazards (fire, explosion, and chemical release) and from the storage of dangerous goods is minimised and managed in accordance with accepted standards.	AO9 The storage of flammable and combustible materials and liquids complies with the minor storage provisions of AS 1940:2004:-<i>The Storage and Handling of Flammable and Combustible Liquids</i>.

Performance outcomes	Acceptable outcomes
Material storage	
PO10 Dust from the outdoor storage of materials does not extend beyond the boundary of the <i>site</i> .	AO10.1 Outdoor material storage bays/areas are: (a) a maximum of 3 metres in height; (b) enclosed on three sides; and (c) include dust suppression devices (e.g. water sprays). OR AO10.2 Material storage bays/areas are fully enclosed.
PO11 Outdoor material or product storage is not a visually dominant feature of the streetscape when viewed from the street frontage.	AO11 No acceptable outcome provided.

8.2.10 Intensive animal industry code

8.2.10.1 Application

This code applies to assessing material change of use for development involving *intensive animal industry*.

8.2.10.2 Purpose

- (1) The purpose of the intensive animal industry code is to locate and design the use in a way which protects surrounding uses and the environment from unacceptable impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the use, even of a small scale, is not located:
 - (i) where the use could have adverse impacts on water quality in the catchments of the major drinking water storages;
 - (ii) where the use could conflict with amenity and image of a tourism or recreation focus area;
 - (iii) in areas with high scenic amenity values;
 - (iv) in areas of ecological significance; and
 - (v) in areas where the subdivision pattern is highly fragmented and there is potential for significant rural settlement;
 - (b) the use is established in areas which protects the scenic, visual and landscape character values of the locality;
 - (c) does not cause environmental harm or nuisance by way of air quality, noise, traffic, water quality, liquid and solid waste or any other operational aspects;
 - (d) *development* protects the productive capacity of the land in accordance with the applicable State Planning Policies;
 - (e) is sited to protect the viability of known extractive resources;
 - (f) avoids any potential adverse effects on the amenity and character of the locality or nearby sensitive uses; and
 - (g) protects the viable operation of existing *rural activities* from incompatible development .

8.2.10.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.10.3.A—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Scale and intensity	
PO1 The development incorporates a site layout, scale, and intensity that does not cause environmental nuisance or environmental harm and maintains: (a) the character, landscape and scenic and visual amenity values of the locality; (b) the amenity and environmental health of <i>sensitive land uses</i>; (c) water quality in the catchments of the major drinking water storages (d) amenity and image of a tourism or recreation focus area (e) areas of ecological significance; and (f) the operation of lawfully existing <i>rural activities</i>.	AO1.1 All buildings and operational elements of a new or expanded facility are setback from boundaries in accordance with Table 8.2.10.3.B (except where for a poultry farm). AO1.2 New uses are separated from sensitive receptors in accordance with Table 8.2.10.3.C (except where for a poultry farm). AO1.3 The use does not cause environmental harm or nuisance. AO1.4 Where for a poultry farm:

Performance outcomes	Acceptable outcomes
	All buildings and operational elements or a new or expanded facility are setback in accordance with Table 8.2.10.3.D. AO1.5 Where for a poultry farm: Separation distances between the poultry farm building complex and a <i>sensitive land use</i> (not on the site of the poultry farm) are determined on a site-by-site basis using odour dispersion modelling. Where involving over 1,000 birds the modelling levels must be assessed against the following criteria: (a) 2.5 OU, 99.5%, 1 hour average for a sensitive land use site in a Rural zone (b) 1.0 OU, 99.5%, 1 hour average for the boundary of a non-Rural zone. AO1.6 Where for a poultry farm: Noise from the operation of the poultry farm does not cause unlawful environmental nuisance: (a) access points and roads are located to minimise noise impacts on neighbouring sensitive land uses; and (b) the design and siting of all mechanical equipment, including fans, pneumatic feed systems and other equipment, minimises the generation of mechanical noise and the likelihood of off-site vibration.
Waste management	
PO2 Liquid and solid waste disposal, and carcass disposal does not result in <i>environmental harm or environmental nuisance or adversely impact on water quality</i>.	AO2 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
Visual Amenity	
PO3 The intensive animal industry and associated infrastructure is screened from adjacent public places and nearby properties.	AO3 A 10m wide vegetated landscape strip is located between the facility and adjoining roads and properties.

Table 8.2.10.3.B—Boundary setbacks and minimum site area

Use	Minimum setback from boundaries
All intensive animal industry uses (except poultry farm)	
Piggery – 20 standard pig units or less	200 metres
Piggery – more than 20 standard pig units	300 metres
Feed lot – 49 or less standard cattle units or 349 or less standard sheep units	200 metres
Feedlot – more than 49 standard cattle units and less than 151 standard cattle units, or more than 349 standard sheep units and less than 3,500 standard sheep units	300 metres
Feedlot – more than 151 standard cattle units and less than 999 standard cattle units, or more than 3,499 standard sheep units and less than 6,999 standard sheep units	300 metres
Feedlot – more than 999 standard cattle units or more than 6,999 standard sheep units	500 metres

Table 8.2.10.3.C—Separation distances to sensitive receptors

Sensitive receptors	Minimum separation distance
All intensive animal industry uses (except poultry farm)	
Land in a town or <i>urban area</i> , small township, rural residential area, or other substantial settlement of established small rural lifestyle lots	2 kilometres
Land in the Principal Future Strategic Tourism Focus Area or the Lake Somerset Water-based Recreation Focus Area	2 kilometres
Land in the Glamorgan Vale Urban Investigation Area	2 kilometres
Regional Water Storage (Lake Wivenhoe, Lake Somerset, Lake Atkinson or Lake Cressbrook)	2 kilometres
Piggery	
Another piggery	2 kilometres
Water course including gullies and channels, wells and bores	200 metres
Existing houses in the Rural zone	20 or less standard pig units – 500 metres More than 20 standard pig units – 2 kilometres
Constructed road	100 metres
Feedlot	

Sensitive receptors	Minimum separation distance
Water course including gullies and channels, wells and bores	200 metres
Existing houses in the Rural zone	49 or less standard cattle units or 349 or less standard sheep units – 200 metres 50 or more standard cattle units or 350 or more standard sheep units – 2 kilometres
Constructed road	100 metres

Table 8.2.10.3.D—Poultry farming (over 1000 birds) setbacks distances

Aspect	Distance in metres (measured from poultry farm building complex to relevant aspect)
Areas of environmental interest/sensitive receptor	
Surveyed bank of a permanent watercourse	100
Water supply dam	250
Upper flood margin level of an urban water supply storage	800
Wetlands and tidal waters	250
Other surface waters (not covered by other categories)	100
Constructed road	Public road carrying >50 vehicles per day – 200 Public road carrying <50 vehicles per day - 100
Another poultry farm	1 kilometre between new and existing meat chicken farm complexes and any alternative form of intensive poultry farming (chickens, turkeys, guineafowl, ducks, geese, quails, pigeons, pheasants, partridges, ostriches and emus reared or kept in captivity) 5 kilometres between a meat chicken farm complex and a meat chicken breeder farm
Property boundaries	
Own property boundary	100
Own property boundary (where also a non-rural zone boundary)	300

8.2.11 Multiple dwelling and dual occupancy code

8.2.11.1 Application

This code applies to assessing a material change of use for development involving a multiple dwelling or a dual occupancy.

8.2.11.2 Purpose

- (1) The purpose of the multiple dwelling and dual occupancy code is to ensure that apartments, flats, townhouses, and duplexes are appropriately located and provide an alternative form of residential accommodation that maintains the character of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) ensuring *multiple dwellings* and *dual occupancies* are located in close proximity to higher order centre and community activities;
 - (b) ensuring that *multiple dwellings* and *dual occupancies* are compatible with the scale, form and character of the locality;
 - (c) ensuring that *multiple dwellings* and *dual occupancies* are provided with high standards of privacy, sunlight, ventilation and, private and communal open space;
 - (d) ensure that *multiple dwellings* and *dual occupancies* do not unreasonably impact on the amenity of adjoining *sensitive land uses*; and
 - (e) ensure that *multiple dwellings* and *dual occupancies* are designed to minimise pedestrian and vehicular conflict.

8.2.11.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.11.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Dual occupancy	
Note - Except where varied by this Code, the performance criteria and acceptable solutions of the Queensland Development Code MP1.3 – Design and Siting Standard for Duplex Housing apply.	
Location	
PO1 <i>Dual occupancy development is:</i> (a) located within a short walking distance of higher order <i>centre activities</i> or <i>community activities</i> ; or (b) directly adjoining or directly opposite a public park and contributes to the passive surveillance of the park.	AO1 <i>Dual occupancy development is located in the General residential zone where not in the park residential precinct.</i>
Character, intensity and lot size	
PO2 <i>The development:</i> (a) contributes to a streetscape appearance that is compatible with the emerging or existing character of the locality; and (b) does not result in overdevelopment of the <i>site</i> .	AO2.1 The density does not exceed 1 <i>dwelling</i> per 400 square metres of <i>site area</i> . AO2.2 The <i>site area</i> is a minimum of 800 square metres. AO2.3 The <i>site</i> has a minimum <i>road</i> frontage width of 20 metres.
Frontage fencing and walls	

Performance outcomes	Acceptable outcomes
PO3 Fences and walls are designed, erected and finished to: (a) enable outlook from <i>dwelling</i>s to the street for safety and surveillance purposes; and (b) assist in noise attenuation where necessary.	AO3.1 Front fences and walls are no more than 1.2 metres high if solid, or up to 1.5 metres high if the fence has openings which make it no less than 50 percent transparent. OR AO3.2 The provision of solid front fence and walls up to 1.8 metre high, where the main <i>private open space</i> fronts the street, or where the <i>site</i> fronts a collector street, or higher order street.
Private open space	
PO4 Private open space is conveniently located and of a practical size that meets the reasonable needs of residents, having regard to: (a) liveability; (b) recreation; (c) privacy; (d) outdoor entertaining; (e) landscaping; (f) amenity; (g) outlook; and (h) climate.	AO4 Each <i>dwelling</i> is provided with a <i>private open space</i> area that is: (a) at least 40 square metres; (b) able to contain a circle with a minimum diameter of at least 4 metres; (c) directly accessible from a living room; and (d) not more than 10 percent slope.
Multiple dwellings	
Location	
PO6 <i>Multiple dwellings</i> are: (a) located within a short walking distance of higher order <i>centre activities</i> or <i>community activities</i>; or (b) directly adjoining or directly opposite a public park and takes advantage of the amenity of the park and contributes to the passive surveillance of the park.	AO6 <i>Multiple dwellings</i> are located: (a) in the Centre zone; or (b) in the General residential zone where not in the park residential precinct, where: (i) located no more than 400 metres from the Centre zone, a school or a hospital; or (ii) directly adjoining a public park.
Character, intensity and lot size	
PO7 The <i>site</i> size, frontage width, density and <i>site cover</i> : (a) contributes to a streetscape appearance that is compatible with the emerging or existing character of the locality; and (b) does not result in overdevelopment of the <i>site</i>.	AO7.1 The density does not exceed 1 <i>dwelling</i> per 250 square metres of <i>site</i> area. AO7.2 The <i>site cover</i> does not exceed 40 percent. AO7.3 The <i>site</i> area is not less than 1,000 square metres. AO7.4

Performance outcomes	Acceptable outcomes
	The <i>site</i> has a minimum <i>road</i> frontage width of 20 metres.
Built form	
PO8 The building scale, roof form, detailing, materials and colours are compatible with the emerging or existing character of the locality.	AO8 No acceptable outcome provided.
PO9 The building is: (a) designed and articulated to provide visual interest; (b) oriented to address the street; and (c) promotes passive surveillance.	AO9.1 Buildings are oriented to the street frontage. AO9.2 Buildings have a maximum unarticulated length of 5 metres to the street frontage or 9 metres to a side or rear boundary. AO9.3 Facades are punctuated by windows, balconies, verandas, offsets, or other forms of <i>articulation</i> .
PO10 Car parking structures or areas located external to the main building are visually compatible with the building in terms of height, roof form, detailing, materials and colours.	AO10 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
Setbacks	
PO11 <i>Building setbacks:</i> (a) assist in providing landscaping opportunities; (b) protect the amenity of residents and <i>adjoining premises</i> ; (c) provide space between <i>adjoining premises</i> ; (d) ensure that <i>development</i> is not overbearing; and (e) contribute to a consistent streetscape character.	AO11.1 <i>Buildings</i> incorporate the following setbacks: (a) minimum clearance from a <i>road</i> frontage of 6 metres; (b) minimum clearance from the rear boundary of 3 metres; and (c) minimum clearance from side boundaries of: (i) 1.5 metres for a building not exceeding 4.5 metres in height; and (ii) 2 metres plus 0.5 metres for every additional 3 metres or part thereof over 4.5 metres for buildings of a height in excess of 4.5 metres.
Open space	
PO12 Landscaped open space contributes to an 'open' appearance that enhances the streetscape character of the locality and provides acceptable levels of separation between <i>adjoining premises</i> . The landscaped open space is of a practical size that meets the reasonable expectations of residents.	AO12.1 A minimum of 15 percent of the <i>site</i> area is provided as landscaped open space with a minimum width of 2 metres. AND AO12.2 The open space area is kept clear of all obstacles such as clothes hoists, driveways, parking spaces and waste receptacles.
PO13 Private open space is conveniently located and of a practical size that meets the reasonable needs of residents, having regard to: (a) liveability; (b) recreation; (c) privacy; (d) outdoor entertaining; (e) landscaping; (f) amenity; (g) outlook; and (h) climate.	AO13.1 In addition to landscaped open space, each <i>ground level</i> unit is provided with a <i>private open space</i> area that has: (a) a minimum area of 30 square metres; (b) a minimum width of 3 metres; and (c) direct access from a living room. AO13.2 <i>Private open space</i> for units above ground storey are provided in the form of a balcony/ balconies having a minimum area of 8 square metres and a minimum width of 2 metres with direct access from a living room.
PO14 Communal open space for recreation is provided where a significant proportion of <i>dwellings</i> do not have access to <i>ground level private open space</i> .	AO14 Where more than 25 percent of <i>dwellings</i> do not have access to <i>ground level private open space</i> , communal open space is provided in addition to <i>private open space</i> with at least one continuous area of 50 square metres with a minimum width of 5 metres.

Performance outcomes	Acceptable outcomes
Fences and walls	
PO15 Fences and walls are designed and constructed to: (a) effectively define and screen <i>private open space</i> and service areas, such as garbage collection areas; (b) provide an adequate screen to living and open space areas on <i>adjoining premises</i>; (c) enable some outlook from buildings to the street for safety and surveillance; (d) assist in highlighting entrances; (e) assist in noise attenuation where necessary; (f) use materials which are compatible with existing or emerging character; and (g) be compatible with services such as mail collection.	AO15.1 Front fences and walls are no more than 1.2 metres high if solid, or up to 1.5 metres high if the fence has openings which make the wall no less than 50 percent transparent. OR AO15.2 The provision of solid front fence and walls up to 1.8 metre high, where the main <i>private open space</i> fronts the street, or where the <i>site</i> fronts a collector street, or higher order street. AO15.3 Front fences do not exceed 10 metres in length without <i>articulation</i> or detailing to provide visual interest. AO15.4 1.8 metre high screen fences are provided along the side (from the front line of the building) and rear boundaries. AO15.5 Mail boxes are easily accessible to Australia Post, couriers, and residents.
Security, safety and privacy	
PO16 <i>Site</i> layout and building design maximises casual surveillance and security.	AO16.1 <i>Dwellings</i> adjacent to public streets or public open space provide passive surveillance to that area by: (a) including a balcony or veranda; or (b) <i>habitable room</i> windows. AO16.2 Lighting is provided to all pedestrian paths between public <i>roads</i>, communal areas, parking areas and building entries.

Performance outcomes	Acceptable outcomes
PO17 Habitable spaces do not directly overlook <i>private open spaces</i> or <i>habitable rooms</i> on the same <i>site</i> or on adjacent land.	AO17.1 Where <i>habitable room</i> windows directly face <i>habitable room</i> windows in an adjacent unit within 2 metres at <i>ground level</i> or 9 metres at levels above <i>ground level</i> , privacy is protected by: (a) sill heights a minimum of 1.5 metres above floor level; or (b) fixed opaque glazing in any part of the window below 1.5 metres above floor level; or (c) fixed internal screens; or (d) if at <i>ground level</i> , fencing to a minimum of 1.5 metres above <i>ground level</i> . AO17.2 Where screening of decks and balconies is required, screening consists of translucent screens, perforated panels or trellises that: (a) are permanently fixed; and (b) have a maximum of 25 percent openings.
Footpaths	
PO18 Internal access way and footpath systems provide for the safe and convenient access of pedestrians.	AO18 Footpaths are provided within or adjacent to access ways to connect unit buildings to external <i>roads</i> .
Clothes drying	
PO19 Communal open space for clothes drying is provided where a significant proportion of <i> dwellings</i> do not have access to <i>ground level private open space</i> .	AO19 Where more than 25 percent of <i> dwellings</i> do not have access to <i>ground level private open space</i> , outdoor areas for clothes drying facilities are provided with at least one continuous area of 25 square metres which has a minimum width of 5 metres.
PO20 Clothes drying areas: (a) can be conveniently accessed by residents; and (b) are not visible from the street.	AO20 No acceptable outcome provided.
Amenity	
PO21 Siting and design achieves a high level of amenity for residents by minimising impacts from noise generating areas, such as streets, driveways, car parking areas, service areas, adjoining <i>development</i> , private and communal open space areas and mechanical equipment.	AO21 No acceptable outcome provided.
PO22 <i>Site</i> design incorporates landscaping in a manner that: (a) maintains the visual amenity and character of the surrounding area; and	AO22 A landscape area with a minimum width of 2 metres is provided along the full frontage of any <i>road</i> frontage (excluding crossover and pedestrian access only).

Performance outcomes	Acceptable outcomes
(b) maintains the safety or security of pedestrians.	

8.2.12 Recreation activities code

8.2.12.1 Application

This code applies to assessing a material change of use for development involving a recreation activity group.

8.2.12.2 Purpose

- (1) The purpose of the recreation activity code is to ensure that development for *recreation activities* is compatible with surrounding development and appropriately manages impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) sport and recreation facilities are established in appropriate locations that best serve the community through accessibility, co-location and integration with other like facilities;
 - (b) recreation and sporting uses do not unduly impact on the amenity of the surrounding area;
 - (c) a safe environment for users is provided; and
 - (d) *development* is appropriately managed and does not *adversely impact on water quality*.

8.2.12.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.12.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Location	
PO1 The <i>development</i> is: (a) highly accessible to the intended catchment; (b) in proximity to other community or recreational activities, where practicable; and (c) located to avoid conflict with incompatible land uses.	AO1 No acceptable outcome provided.
Site layout and design	
PO2 Site layout and design optimises pedestrian and vehicular accessibility.	AO2 No acceptable outcome provided.
Built form and character	
PO3 Buildings and structures are of form and character that is commensurate with the zone and locality in which the activity is located.	AO3 No acceptable outcome provided.
Scale and intensity	
PO4 The scale and intensity of the activity is commensurate with the zone and locality in which the activity is located.	AO4 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
Building articulation	
PO5 Building design incorporates <i>articulation</i> to provide visual interest.	AO5 No acceptable outcome provided.
Building materials	
PO6 Buildings and structures are constructed of robust materials that are graffiti resistant.	AO6 No acceptable outcome provided.
Emissions	
PO7 Uses do not generate or emit noise, odour, smoke, ash or other particulate emissions that would cause <i>environmental harm</i> or <i>environmental nuisance</i> .	AO7 No acceptable outcome provided.
Outdoor lighting	
PO8 Lighting is designed in a manner to ensure ongoing amenity and safety whilst ensuring <i>sensitive land uses</i> are protected from undue glare or lighting overspill.	AO8.1 Fixed <i>site</i> lighting complies with Australian Standard AS4282 <i>Control of the Obtrusive Effects of Outdoor Lighting</i> . AO8.2 Outdoor lighting is not operated between the hours of 10 pm and 6am.
Hours of operation	
PO9 The hours of operation are within the reasonable expectations of the zone and locality.	AO9 No acceptable outcome provided.
Water quality	
PO10 The design and ongoing management of outdoor tracks and facilities minimises erosion and sedimentation and does not adversely impact on water quality.	AO10 No acceptable outcome provided.
CPTED	
PO11 The <i>site</i> layout and design incorporates crime prevention through environmental design (CPTED) principles.	AO11 No acceptable outcome proposed.
Emergency access	
PO12 <i>Development</i> provides for emergency medical treatment or evacuation commensurate with the nature of the activity.	AO12 The <i>site</i> provides unobstructed emergency access during hours of operation.

8.2.13 Renewable energy facility code

8.2.13.1 Application

This code applies to assessing material change of use for development involving a *renewable energy facility*.

8.2.13.2 Purpose

- (1) The purpose of the renewable energy facility code is to ensure that renewable energy facilities are appropriately located to appropriately manage significant visual, scenic amenity, and landscape amenity values, and significant natural environmental features are protected.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) renewable energy facilities are designed and sited to:
 - (i) *development* appropriately protects the productive capacity of the land in accordance with the State Planning Policy;
 - (ii) is sited to protect the viability of known extractive resources;
 - (iii) protect significant visual and scenic amenity and landscape character values;
 - (iv) protects the streetscape character;
 - (v) protect significant natural environmental features;
 - (vi) appropriately manage *site* constraints, for example flooding and bushfire;
 - (vii) appropriately manage noise, glare, emissions and other forms of potential interferences and impacts to protect:
 - a. the amenity of *sensitive land uses*;
 - b. public health;
 - c. livestock health; and
 - d. public infrastructure;
 - (viii) ensure suitable access to the *site* can be provided;
 - (ix) ensure the activity can be connected to the power grid;
 - (x) ensure the *site* can be rehabilitated after the use has been decommissioned; and
 - (b) *development* is appropriately managed and does not *adversely impact on water quality*.

8.2.13.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.13.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Site size and location of facility	
PO1 The <i>site</i> is of sufficient size and the use is suitably sited to avoid land use conflict.	AO1.1 For a solar panel array, the minimum <i>lot</i> size is 20 hectares. OR AO1.2 For a wind farm, the minimum <i>lot</i> size is 50 hectares. AO1.3 The use is located a minimum of 100 metres from an adjoining property boundary or <i>road</i> frontage.

Performance outcomes	Acceptable outcomes
	AO1.4 A wind farm is located a minimum distance of 2 kilometres from a <i>sensitive land use</i> .
Public safety	
PO2 Public access to the <i>site</i> is managed to ensure public safety.	AO2 No acceptable outcome provided.
Siting	
PO3 The <i>renewable energy facility</i> is sited to appropriately protect or otherwise mitigate impacts on the amenity of nearby <i>sensitive land uses</i> , the <i>streetscape</i> , the zone, the locality, and broader region, having regard to: (a) the intent of the zone or precinct; (b) the significance of the visual and scenic values and landscape character; (c) the significance of other natural environmental features; (d) streetscape character; (e) cumulative impacts where similar facilities exist in proximity; (f) access <i>roads</i> ; (g) reflection/ glare; (h) noise; (i) shadow flicker; and (j) blade glinting.	AO3 No acceptable outcome provided.
Interference with utilities and infrastructure	
PO4 The <i>renewable energy facility</i> is sited to avoid impacts on infrastructure and public utilities from electromagnetic radiation and interference, including, but not limited to: (a) transmission lines; (b) phone towers; (c) television; and (d) radio.	AO4 No acceptable outcome provided.
Network connection	

Performance outcomes	Acceptable outcomes
PO5 The <i>renewable energy facility</i> is connected to the power grid network having regard to: (a) the operation and capacity of the power grid network; (b) safety of the network connection; (c) the location of the network connection and associated infrastructure, ensuring that any visual elements are sympathetic to scenic amenity and landscape character Note – Compliance with PO5 may be achieved through submission of a technical assessment report prepared by a suitably qualified professional to address the type of electrical infrastructure required to support the development, details of how the injection of power from the development will impact on the operation of the existing network, and whether the development can be connected to the existing network from the site, and details of the impact of the network connection and its visual impact on the locality.	AO5 No acceptable outcome provided.
Materials, colours, and finishes	
PO6 A <i>renewable energy facility</i> and associated supporting infrastructure is constructed of materials, colours, and finishes that are: (a) non-reflective; (b) sympathetic to the visual and scenic amenity of the locality; and (c) sympathetic to the landscape character of the locality.	AO6 No acceptable outcome provided.

8.2.14 Retirement facility and residential care facility code

8.2.14.1 Application

This code applies to assessing a material change of use for development involving a retirement facility or residential care facility.

8.2.14.2 Purpose

- (1) The purpose of the retirement facility and residential care facility code is to ensure that aged persons accommodation and aged care and special care is developed and managed in a way that meets the residential, social, care and amenity needs of residents, while maintaining a character of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) providing a range of housing types and levels of care for aged persons and persons with special care needs;
 - (b) ensuring that housing for older people and those with special care needs is well located and has good access to transport and a range of centre and community activities;
 - (c) ensuring an appropriate level of amenity for residents and surrounding properties is achieved and maintained;
 - (d) promoting a range of mobility options;
 - (e) ensuring the safety and security of residents;
 - (f) providing a comfortable, stimulating and attractive living environment that supports the social and physical needs of residents; and
 - (g) ensuring that developments are of a scale, intensity, and form that is visually compatible with the surrounding area.

8.2.14.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.14.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Location and access to services	
PO1 The use is located on land that: (a) is in close proximity to <i>centre activities</i> and <i>community activities</i> ; or (b) provides on-site convenience services and alternative transport options to centre activities and community activities where public transport is not available.	AO1.1 The use is located within 400 metres of public transport or the Centre zone; OR AO1.2 The use provides one or more of the following on-site services for residents: chemist; (a) hairdresser; (b) convenience shopping; (c) postal facility; (d) public telephone; or (e) basic medical services; AO1.3 Provides a shuttle bus service to convenience and higher order shopping and medical facilities.

Performance outcomes	Acceptable outcomes
PO2 The use is located on land that has a gradient conducive to aided mobility.	AO2 The use is located on <i>premises</i> where a minimum of 50 percent of the <i>site</i> has a slope that does not exceed 1 in 14.
Character, intensity and lot size	
PO3 The <i>site</i> is of a size that is commensurate with the operational needs of the use and level of care being provided and the physical layout and intensity does not overdevelopment.	AO3 The use: (a) has a density that does not exceed: (i) where independent units – 1 <i>dwelling</i> per 250 square metres of <i>site</i> area; (ii) where semi-independent units – 1 <i>dwelling</i> per 150 square metres of <i>site</i> area; (iii) where dependent units – 1 <i>dwelling</i> per 100 square metres of <i>site</i> area; (b) is located on a <i>lot</i> that is not less than 1,200 square metres; (c) has a minimum street frontage width of 25 metres; and (d) does not exceed 40 percent <i>site cover</i>.
Building height	
PO4 <i>Building height</i> does not detrimentally impact on the amenity of private and communal open spaces, <i>adjoining premises</i> , or the streetscape. <i>Development</i> exceeding 8.5 metres in height is for the purposes of providing a lift for mobility access purposes and the extent of area exceeding 8.5 metres in height is subordinate in scale to the overall proposal. Note - This code recognises that when aged persons and special needs buildings exceed a single storey, lifts may be required to facilitate a suitable level of mobility and access.	AO4.1 <i>Building height</i> does not exceed 8.5 metres or two <i>storeys</i> . OR AO4.2 One additional <i>storey</i> , not exceeding 10 percent <i>site cover</i> , may be provided, where the additional <i>storey</i> : (a) does not result in the overall <i>building height</i> exceeding 9.5 metres above ground; (b) does not cause overshadowing of private or communal open spaces or adjoining land for more than 3 hours between 9am and 3pm on June 21; and (c) provides boundary setbacks of at least 15 metres.

Performance outcomes	Acceptable outcomes
Open space	
PO5 Open space: (a) includes clearly designated <i>private open space</i> areas that provide privacy for residents; (b) includes communal open space areas that are functional and accessible; (c) is of a useable size and dimension; (d) is of a suitable slope; (e) is directly accessible from the main living area for <i>private open space</i>; (f) is capable of receiving sufficient sunlight; (g) is located behind the front building line, and, where above ground, protects the privacy of adjoining and nearby <i>dwellings</i>; and (h) provides easy access to communal areas by the elderly and persons with special needs and promotes formal and informal social interaction.	AO5.1 No less than 20 percent of the <i>site</i> is provided as open space. AO5.2 Each <i>dwelling</i> provides a designated <i>private open space</i> area that is directly accessible from the main living area: (a) where independent units: (i) at <i>ground level</i>, a minimum of 25 square metres with a minimum width of 4 metres; or (ii) above <i>ground level</i>, a minimum of 10 square metres with a minimum width of 2.5 metres; or (b) where semi-independent or dependent units, a minimum of 8 square metres with a minimum width of 2.5 metres. AO5.3 Where 10 or more <i>dwellings</i> are proposed: (a) communal outdoor areas are 10 percent of the <i>site</i> area, a minimum width of 15 metres and located in the one area; (b) communal indoor areas are provided at a rate of: (i) where independent units - 3 square metres; (ii) where semi-independent units - 6 square metres; (iii) where dependent units - 2 square metres; (c) the finished surface for private and communal open space areas at <i>ground level</i> does not exceed 1 in 14; (d) communal facilities, including outdoor recreation areas are accessed by pedestrian paths from individual <i>dwellings</i> and/or buildings containing groups of <i>dwellings</i>; and (e) communal indoor areas providing essential facilities, including toilets, kitchen/tea making facilities and storage areas.
Mobility and access	
PO6 The pedestrian movement system: (a) enables residents to easily navigate the <i>site</i> on foot or with the assistance of mobility aids; (b) provides non-discriminatory access; (c) incorporates covered or protected walkways, particularly those linking <i>dwellings</i> with communal facilities;	AO6 Internal pathways: (a) are a width of 2 metres extending to 3.5 metres when combined with a seating area; (b) comply with <i>AS1428.1-4: 2010 - Design for Access and Mobility</i>; (c) have a firm, level, well drained non-slip surface;

Performance outcomes	Acceptable outcomes
(d) provides comfortable vantage points to rest, socialise and observe surrounding activities; (e) provides a variety of circulation options; and (f) links with external pedestrian paths.	(d) provide handrails where there are grade changes or other areas of potential risk to pedestrians; (e) provide a covered principal walkway that links all ON-SITE communal facilities; and (f) resting areas (seats and shade) are incorporated into the walkway design and provide hand rails where necessary.
PO7 Residents are provided with an appropriate level of access to on-site communal facilities commensurate with the mobility needs of the residents and level of care being provided.	AO7 Communal buildings are: (a) centrally located; and (b) easily accessible to residents by foot, and by mobility aids and scooters.
PO8 Sufficient levels of wheelchair accessibility to car parking areas are provided commensurate with the mobility needs of the residents and level of care being provided.	AO8 20 per cent of covered and uncovered car parking spaces have minimum dimensions of 6 metres by 3.8 metres to permit wheelchair manoeuvring and access.
Emergency access	
PO9 <i>Dwellings</i> and communal buildings are easily accessible by emergency service vehicles.	AO9 No acceptable outcome provided.

8.2.15 Roadside stall code

8.2.15.1 Application

This code applies to assessing material change of use for development involving a *roadside stall*.

8.2.15.2 Purpose

- (1) The purpose of the roadside stall code is to ensure that the use is low key, small scale and located and designed in a way which minimises the visual impact on surrounding uses, the environment and the *road* frontage.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *roadside stalls* are of a very limited scale and intensity in order to protect amenity and limit the retail sale of goods outside urban areas;
 - (b) the primary produce sold at *roadside stalls* has a direct connection with the *premises* on which it is located;
 - (c) no additional vehicular access is provided; and
 - (d) informal on-site parking is provided.

8.2.15.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.15.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Location	
PO1 The retail sale of primary produce is low key, small scale, and has a direct nexus with the land on which the use is located. The sale of primary produce from other <i>premises</i> does not occur. Editor's Note - For Roadside Stalls on a State-controlled road, contact the Department of Transport and Main Roads for further information about obtaining a 'Road Corridor Permit' under the <i>Transport Infrastructure Act 1994</i> .	AO1.1 Products offered for sale are produced on the <i>premises</i> or land holding on which the <i>roadside stall</i> is located. AO1.2 Only one <i>roadside stall</i> is provided per premises.
Intensity, access, and parking	
PO2 The display and sale of primary produce maintains the amenity, character and safety of rural areas.	AO2 Any <i>structure</i> used for the sale of produce is: (a) limited to 20 square metres of <i>gross floor area</i> ; and (b) setback a minimum of 15 metres from any <i>site</i> boundary.

8.2.16 Rural industry code

8.2.16.1 Application

This code applies to assessing a material change of use for development involving for *rural industry* or *wholesale nursery* or a *winery*.

8.2.16.2 Purpose

- (1) The purpose of the rural industries code is to establish rural industry, wholesale nurseries or wineries in the Rural zone in order to support and value add to primary production activities.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *rural industry, wholesale nurseries* and *wineries* complement and support rural activities;
 - (b) is sited to protect the viability of known extractive resources;
 - (c) *development* is located and designed so as not to adversely impact upon rural landscape character or scenic amenity;
 - (d) *development* appropriately protects the productive capacity of the land in accordance with the applicable State Planning Policy;
 - (e) ensure that the environmental performance of the activity achieves a satisfactory standard and minimises adverse impacts on natural environment, and *sensitive land uses*;
 - (f) ensure that office space remains subordinate to the primary use;
 - (g) ensure retail sales remain subordinate to the primary use;
 - (h) the design provides a visually attractive built form that is sited and landscaped to protect the visual amenity of the locality;
 - (i) the recreational needs of staff are accommodated; and
 - (j) *development* is appropriately managed and does not *adversely impact on water quality*.

8.2.16.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.16.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Site layout, scale, and intensity	
PO1 The activity is located on a <i>site</i> which is sufficient in size and shape to accommodate the scale and intensity of the use.	AO1 The activity is located on a <i>site</i> that has a minimum area of 1 hectare.

Performance outcomes	Acceptable outcomes
PO2 The activity maintains the visual and scenic amenity and landscape character by: (a) providing for adequate setbacks of buildings, structures, and open space areas involved in the activity from: (i) <i>road</i> frontages; (ii) <i>site</i> boundaries; and (iii) <i>sensitive land uses</i> on surrounding <i>premises</i>; and (b) providing for On-Site landscaping that effectively screens non-residential buildings, structures and outdoor areas from <i>roads</i> and <i>sensitive land uses</i>.	AO2 Any buildings, structures or outdoor areas associated with the activity are set back not less than: (a) 20 metres from a <i>road</i> frontage; (b) 10 metres from all other <i>site</i> boundaries; and (c) 50 metres from any existing <i>dwelling</i> on nearby <i>premises</i>.
Administration	
PO3 Office areas are subordinate to the primary activity.	AO3.1 Areas for administration purposes do not exceed 10 percent of the <i>gross floor area</i> of the industrial building. OR AO3.2 Where no industrial building is provided, standalone buildings for office purposes do not exceed 150 square metres of <i>gross floor area</i>.
Operational impacts	
PO4 Emissions of contaminants heat, radioactivity and electromagnetic radiation do not cause <i>environmental harm</i> or <i>environmental nuisance</i>.	AO4.1 No radioactivity or electromagnetic radiation is emitted by the rural industry. AO4.2 Any heat emitted by the rural industry is contained within <i>buildings</i>.
PO5 Air quality is managed to acceptable levels and standards.	AO5 No airborne pollutants are emitted by the rural industry.
PO6 Noise is managed in accordance accepted standards and the use is of a scale, intensity, and duration that has minimal impacts on the surrounding area, <i>sensitive land uses</i>, and the enjoyment of public open spaces.	AO6.1 Noise emissions from rural industry operations are contained within site boundaries. AO6.2 Activities occur between 7am to 6pm Monday to Friday and 7am to 2pm on Saturdays. No operations occur on Sundays or public holidays.

Performance outcomes	Acceptable outcomes
PO7 Liquid and solid waste disposal and emissions of contaminants to surface or groundwater (including contaminated stormwater) do not result in <i>environmental harm</i> or <i>environmental nuisance</i> or <i>adversely impact on water quality</i>.	AO7.1 Liquid or solid wastes (other than stormwater) are not discharged to land or waters. AO7.2 Storage of potentially contaminating substances or areas where potentially contaminating activities occur are roofed. AO7.3 Provision is made for spills to be banded and retained on-site for removal and disposal by an approved means. AO7.4 Surfaces where spillages can occur are sealed with concrete, asphalt or similar impervious substance. AO7.5 Roof water is piped away from areas of potential contamination. AO7.6 Waste disposal bins are provided to contain potential contaminants for their removal and disposal <i>off-site</i>.
PO8 Industry operations minimise lighting impacts, taking into consideration the: (a) illumination levels; (b) period of illumination; (c) direction of lighting; (d) use of vegetation <i>buffers</i>; and (e) proximity to <i>sensitive land uses</i>.	AO8 Lighting complies with <i>Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting</i>.
For assessable development	
Sales areas	
PO9 Retail sales are subordinate to the primary activity.	AO9 Any incidental retail activity is no greater than 150 square metres <i>gross floor area</i>.
PO10 The risk to public safety, property and the environment from technological hazards (fire, explosion, and chemical release) and from the storage of dangerous goods is minimised and managed in accordance with accepted standards.	AO10 The storage of flammable and combustible materials and liquids complies with the minor storage provisions of AS 1940:2004 – <i>The Storage and Handling of Flammable and Combustible Liquids</i>.
Material storage	
PO11	AO11.1

Performance outcomes	Acceptable outcomes
Dust from the outdoor storage of materials does not extend beyond the boundary of the <i>site</i> .	Outdoor material storage bays/areas are: (a) a maximum of 3 metres in height; (b) enclosed on three sides; and (c) include dust suppression devices (e.g. water sprays). OR AO11.2 Material storage bays/areas are fully enclosed.

8.2.17 Rural workers accommodation code

8.2.17.1 Application

This code applies to assessing a material change of use for development involving *rural workers accommodation*.

8.2.17.2 Purpose

- (1) The purpose of the rural workers accommodation code is to permit bona fide rural workers accommodation that directly serves the principal agricultural based rural activity.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) ensure that *rural workers accommodation* is a bona fide use associated with an agricultural based *rural activity* undertaken on the same *premises* or land holding;
 - (b) *rural workers accommodation* is subordinate to the primary use of the *premises*;
 - (c) *rural workers accommodation* is visually integrated with on-site buildings and the character of the locality;
 - (d) *rural workers accommodation* is provided with a reasonable standard of amenity; and
 - (e) the types of amenities and facilities provided are commensurate with the permanent or seasonal employment needs of the *rural activity*.

8.2.17.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.17.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Bona fide use	
PO1 Rural workers accommodation is provided for the sole purpose of housing employees or contractors and their families on the same <i>premises</i> as the agriculturally based <i>rural activity</i> .	AO1 The <i>rural workers accommodation</i> is occupied by an employee or contractor (other than a caretaker), who is directly involved in agriculturally based <i>rural activity</i> on the same <i>premises</i> . Note -If applicable, rural workers accommodation includes the employees or contractors immediate family.
Ancillary to bona fide agriculturally based rural activity	
PO2 There is a need for the <i>rural workers accommodation</i> is directly associated with a bona fide agriculturally based rural activity on the same <i>site</i> .	AO2.1 The <i>rural workers accommodation</i> is associated with an agriculturally based <i>rural activity</i> conducted on the same <i>premises</i> . AO2.2 The agriculturally based <i>rural activity</i> has a minimum use area of 10 hectares.
Worker facilities	
PO3 The types of facilities provided as part of the <i>rural workers accommodation</i> is commensurate with the needs of the employees and the permanent or seasonal nature of the employment.	AO3.1 The accommodation is for permanent occupation and is self contained. OR

Performance outcomes	Acceptable outcomes
	AO3.2 The accommodation is for seasonal occupation and is either self-contained or shares facilities with an existing <i>dwelling house</i> or <i>caretaker's accommodation</i> .
Integration with the principal agricultural based rural activity	
PO4 The building is consistent with the character of the locality and is visually compatible with the principal rural activity in terms of: (a) built form; and (b) materials and finishes.	AO4 No acceptable outcome provided.

8.2.18 Sales office code

8.2.18.1 Application

This code applies to assessing a material change of use for development involving a sales office.

8.2.18.2 Purpose

- (1) The purpose of the sales office code is to facilitate the temporary display or sale of land or buildings in a manner that does not adversely impact on the amenity of surrounding uses.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the use has a limited duration; and
 - (b) the use maintains the character and amenity of the surrounding area.

8.2.18.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.18.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Duration of use	
PO1 The <i>sales office</i> is used for promotional purposes and operates for a finite period with a limited duration.	AO1 The <i>sales office</i> is limited in its duration to a period not greater than 2 years from the completion of construction.
Location	
PO2 A <i>sales office</i> is appropriately located to service land or <i>premises</i> that is: (a) for sale; (b) on display; or (c) able to be won as a prize.	AO2 The <i>sales office</i> is located on land that has a direct connection with the <i>dwelling</i> s and/ or land being marketed.
Hours of operation	
PO3 The hours of operation of the <i>sales office</i> does not affect the amenity of adjoining or nearby <i>sensitive land uses</i> .	AO3 The <i>sales office</i> is not conducted outside the hours 7:00 am to 7:00 pm, Monday to Saturday and 8:00 am to 7:00 pm Sunday and public holidays.

8.2.19 Short-term accommodation code

8.2.19.1 Application

This code applies to assessing a material change of use for development involving *short-term accommodation* or *nature based tourism*.

8.2.19.2 Purpose

- (1) The purpose of the short-term accommodation code is to ensure that visitor and tourist accommodation is appropriately located and of a form, scale and intensity that maintains the character of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) facilitating short-term accommodation, other than *resource based tourism*, that is well located in urban areas, towns or small townships or in locations that are consistent with the tourism and recreation strategy;
 - (b) facilitating the establishment of *resource based tourism* in natural or rural settings, whilst protecting nature conservation, scenic amenity, landscape, cultural and heritage values;
 - (c) ensuring an appropriate range of amenities are provided commensurate with the reasonable expectations of the accommodation type; and
 - (d) ensuring that short-term accommodation does not unreasonably impact on the amenity of nearby *development*.

8.2.19.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.19.3—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 <i>Short-term accommodation</i> , other than <i>nature-based tourism</i> or <i>resource based tourism</i> : (a) has a high degree of accessibility to town centre services and facilities; or (b) is on a tourist route in a <i>Urban Area</i>, <i>Town</i> or a <i>Small Township</i>; or (c) is consistent with the tourism and recreation strategy.	AO1 Short-term accommodation, other than <i>nature-based tourism</i> or <i>resource based tourism</i> , is located in one of the following locations shown on Figure 8.2.19.3 – Tourism Areas : (a) a Major Tourism Hub; or (b) a Minor Tourism Hub; or (c) a Principal Future Strategic Tourism Focus Area; or (d) the Lake Somerset Water-based Recreation Focus Area; or (e) adjacent to the Brisbane Valley Rail Trail.
PO2 The use is small-scale and maintains the character and amenity of the local area.	AO2.1 Where located in the General residential zone - park residential precinct, Rural residential zone, Emerging community zone, or Rural zone, the <i>site</i> has a minimum area of 2,000 square metres. OR AO2.2

Performance outcomes	Acceptable outcomes
	Where located in any other zone the Site has a minimum area of 1,000 square metres. AO2.3 The short term accommodation is setback at least 50 metres from the boundary the Rural zone.
PO3 The building, including orientation of windows, is designed to ensure the use does not intrude on the privacy of other visitors/guests.	AO3.1 No windows have direct views into adjoining residential buildings or other accommodation units/rooms.
PO4 The use must provide a reasonable level of convenience for guests.	AO4.1 Where not in a reticulated water area, the <i>short term accommodation</i> is to be provided with a minimum potable water supply of 45,000 litres. AO4.2 Development provides: (a) one (1) car parking space for each accommodation unit; and (b) one (1) car parking space per three (3) accommodation units for employees where involving three (3) or more accommodation units. AO4.3 Where not in a sewerage area, the <i>short-term accommodation</i> is to be serviced by an on-site effluent disposal system which complies with AS/NZ 1546:2001; AS/NZ1547:2000; Plumbing and Drainage Act 2002 and Queensland plumbing and wastewater code. Note—The on-site wastewater is to be verified by a competent person and verification submitted to Council with the development and plumbing application. Editor's note – A system treating sewerage from equal to or greater than 21 EP requires a licence from the Department of Environment and Heritage Protection.
Character and intensity	
Where for short-term accommodation other than nature-based tourism or resource based tourism: PO5 The <i>site</i> size, frontage width, density and <i>site cover</i>: (a) contributes to a streetscape appearance that is compatible with the emerging or existing character of the locality; and	Where for short-term accommodation other than nature-based tourism or resource based tourism: AO5.1 The <i>site cover</i> does not exceed 40 percent. AO5.2 The <i>site</i> has a minimum <i>road</i> frontage width of 20 metres.

Performance outcomes	Acceptable outcomes
(b) does not result in overdevelopment of the <i>site</i> .	AO5.3 Where for a self-contained accommodation unit, the density does not exceed 1 accommodation unit per 250 square metres of <i>site</i> area. OR AO5.4 Where not for a self-contained accommodation unit, the density does not exceed 1 bedroom per 100 square metres of <i>site</i> area. Note: A self-contained accommodation unit includes a bed, food preparation facilities, a bath or shower, and a toilet and wash basin (for example, serviced apartment). Accommodation units that are not self-contained may provide a bed in each room with either private or shared bath or shower and toilet and wash basin, and food preparation facilities may or may not be provided (for example, a hotel or a backpacker hostel).
Streetscape appearance	
PO6 The frontage of the <i>site</i> is landscaped to enhance the streetscape appearance in an urban zone.	AO6 In an <i>urban area (except in the Centre zone)</i> a minimum 3 metre wide landscape strip is provided to the street frontage of the <i>site</i> .
Guest facilities	
PO7 An acceptable standard of facilities is provided for guests.	AO7 (a) Guest accommodation is self-contained: or (b) A common area or building is provided for meals and other facilities.
For assessable development	
Location	
PO8 <i>Nature-based tourism or resource based tourism</i> is located in natural or rural setting, is consistent with the tourism and recreation strategy, and is appropriately sited with respect to: (a) protecting scenic amenity values; (b) minimising visual impact; (c) maintaining landscape character; (d) natural hazard management; (e) the protection of existing <i>rural activities</i> and <i>sensitive land uses</i> ; (f) the protection of the productive capacity of the land; (g) maintaining conservation and ecological values.	AO8 No acceptable outcome provided.
Where for nature-based tourism or resource based tourism:	Where for nature-based tourism or resource based tourism:

Performance outcomes	Acceptable outcomes
PO9 For <i>nature-based tourism</i> or <i>resource based tourism</i> the siting of buildings and access roads and the extent of works is sympathetic to the character of the <i>site</i> and the locality.	AO9.1 The <i>site</i> area is not less than 10 hectares. AO9.2 The <i>site cover</i> does not exceed 10 percent. AO9.3 The position of any buildings or access roads or driveways does not result in the removal of established mature vegetation.
Where for nature-based tourism or resource based tourism: PO10 Buildings are consistent with the character of the locality and are visually compatible with the principal natural or rural nature of the site in terms of built form and materials and finishes.	Where for nature-based tourism or resource based tourism: AO10 No acceptable outcome provided.
Privacy and amenity	
PO11 Outdoor recreation areas do not create a nuisance or impact on the amenity of adjoining <i>sensitive land uses</i> .	AO11 Outdoor recreation areas are positioned as far as practical from adjoining <i>sensitive land uses</i> .
Outdoor activities and experiences	
PO12 Outdoor activities and experiences for <i>nature-based tourism</i> or <i>resource based tourism</i> are limited to the provision of low key pursuits.	AO12 No acceptable outcome provided.
Streetscape appearance	
PO13 The frontage of the <i>site</i> is landscaped to enhance the streetscape appearance in an urban zone.	AO13 In an <i>urban area</i> a minimum 3 metre wide landscape strip is provided to the street frontage of the <i>site</i> .
Setbacks and screening	
PO14 <i>Buildings</i> and <i>structures</i> associated with <i>nature-based tourism</i> or <i>resource based tourism</i> are visually separated from public streets, nearby <i>sensitive land uses</i> and activities on neighbouring properties.	AO14 <i>Buildings</i> and <i>structures</i> associated with <i>nature-based tourism</i> or <i>resource based tourism</i> are set back a minimum of: (a) 50 metres from a public road. (b) 20 metres from the boundary of the <i>site</i> .

Performance outcomes	Acceptable outcomes
Open space	
PO14 The <i>development</i> provides sufficient common open space on the <i>site</i>, which provides adequate and useable recreational areas required to service the needs of guests.	AO14 The <i>development</i> provides open space for common guest recreation purposes at the following rates: (a) 10 square metres for each <i>habitable room</i> within a self contained accommodation unit; and (b) 10 square metres for every 10 square metres, or part thereof, of the area provided for accommodation that is not self contained.

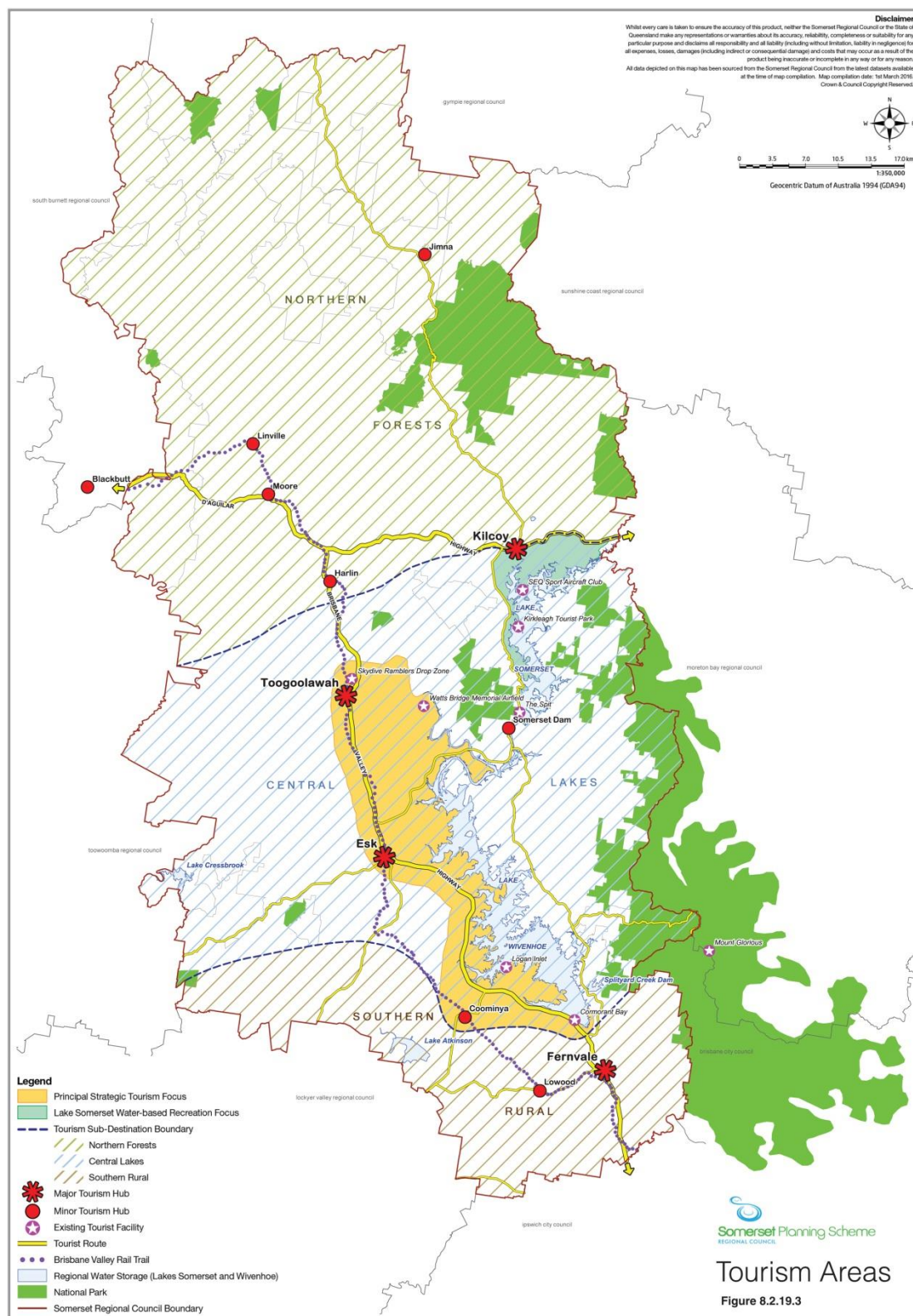


Figure 8.2.19.3—Tourism Areas

8.2.20 Telecommunications facilities code

8.2.20.1 Application

This code applies to assessing a material change of use for development for telecommunications facilities.

8.2.20.2 Purpose

- (1) The purpose of the code is to facilitate the provision of telecommunications infrastructure that provides an appropriate standard of service whilst minimising the potential impacts of the infrastructure on community health and the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the design and location of telecommunications facilities protects community, environmental, local character and scenic amenity values;
 - (b) telecommunications facilities are located with compatible uses and facilities where appropriate and practical; and
 - (c) the telecommunications facilities are designed, located and constructed to a standard that protects and maintains community safety in regard to structural integrity and electromagnetic emissions.

8.2.20.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.20.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Amenity	
PO1 The design and form of the tower mitigates visual impacts on the character of the locality to the greatest extent practicable and the tower does not cast shadows on nearby land such that the amenity of <i>sensitive land uses</i> or public open space is unacceptably reduced.	AO1.1 Where not located in the Rural zone, the height of a tower does not exceed 15 metres. AO1.2 The tower is located a minimum distance of 50 metres from a <i>sensitive land use</i> .
PO2 <i>Telecommunications facilities</i> are located, designed and constructed to integrate visually with the surrounding natural or built environment and do not visually intrude upon or dominate the landscape.	AO2 <i>Telecommunications facilities</i> are constructed of non-reflective and visually recessive materials and colours.
PO3 Buildings and structures, other than towers, are of a scale, height, form and bulk that are compatible with the character of the locality.	AO3 No acceptable outcome provided.
Co-location	
PO4 Where practicable, telecommunications facilities that have a significant visual impact such as radio masts or towers are co-located to reduce the cumulative visual impacts of multiple facilities.	AO4 Telecommunications facilities are co-located with existing facilities.

Performance outcomes	Acceptable outcomes
PO5 Telecommunications facilities located on buildings are visually integrated with the host building.	AO5 No acceptable outcome provided.
Operational impacts	
PO6 All practical measures are undertaken to ensure public health and safety by ensuring: (a) potentially hazardous emission levels from equipment and infrastructure comply with the relevant industry standard; and (b) security fencing and signage provided where it is necessary to prohibit access by the public and maintain public safety.	AO6.1 <i>Telecommunications facilities</i> which include potentially climbable structures are enclosed by a secure perimeter fence to prevent unauthorised access. AO6.2 Electromagnetic radiation (EMR) emissions from the telecommunications device or facility are in accordance with the maximum exposure levels set by the <i>Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz</i> (Australian Radiation Protection and Nuclear Safety Agency 2003).

8.2.21 Tourist park and relocatable home park code

8.2.21.1 Application

This code applies to assessing a material change of use for development involving a tourist park or a relocatable home park.

8.2.21.2 Purpose

- (1) The purpose of the tourist park and relocatable home park code is to ensure that these types of accommodation are developed in appropriate locations, and are designed and managed in a way that meets the accommodation needs of residents and visitors, while maintaining the character of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) facilitating short-term accommodation in locations that is consistent with the tourism strategy or is located in a *urban area*, town or small township;
 - (b) long term accommodation in the form of relocatable home parks are established in close proximity to centre facilities and community services, including schools;
 - (c) tourist parks and relocatable home parks are compatible with the amenity and character of the area; and
 - (d) tourist parks and relocatable home parks are established in locations that ensure high standards of protection from natural hazards.

8.2.21.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.2.21.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Size and Design	
PO1 The use provides suitable levels of buffering, amenity, privacy, and recreation areas commensurate with the reasonable expectations of visitors and residents having regard to the nature of the accommodation use, and the character of the locality Short term and long term accommodation densities are compatible with the character and amenity of the locality and does not result in overdevelopment of the <i>site</i> . A tourist park includes a mix of accommodation types.	AO1.1 A park has a minimum <i>site</i> area of 2 hectares. AO1.2 The <i>site cover</i> for permanent buildings, relocatable homes and covered structures does not exceed 40 percent. AO1.3 Separate areas are provided for each form of accommodation in the same park, for example, caravans, relocatable homes, tents and holiday cabins.

Performance outcomes	Acceptable outcomes
	AO1.4 The proposal complies with the provision in Table 8.2.21.3.B with respect to: (a) minimum <i>site</i> area for each accommodation type; (b) setbacks to internal <i>road</i> frontages; (c) distances to amenities; and (d) distance from refuse storage areas. AO1.5 The relocatable home park provides communal recreation facilities for the exclusive use of residents.
Accommodation purposes	
PO2 The accommodation activity, built form and <i>site</i> layout is used for the intended accommodation purpose.	AO2.1 The tourist park provides short term accommodation not exceeding 3 months stay. AO2.2 The relocatable home park provides long term or permanent accommodation only.
PO3 Relocatable homes are designed to be able to be moved from one position to another within the <i>premises</i> or to another relocatable home park.	AO3 Relocatable homes are capable of being moved on and off the <i>site</i>.
Amenities	
PO4 The use must provide a reasonable level of convenience for guests.	AO4.1 For a <i>tourist park</i>, where up to 40 sites are proposed, one (1) female toilet for every seven (7) sites, or part thereof and one (1) male toilet for every ten (10) sites or part thereof, are to be provided. For a tourist park, where in excess of 40 sites are proposed, six (6) female toilets and four (4) male toilets plus an additional one (1) toilet for each sex for every 15 sites or part thereof in excess of 40 sites are to be provided. Note - A site is taken to contain a maximum of three (3) people. Where more than three (3) people per site are proposed facilities in excess of the above may be required. AO4.2 Where not in a sewered area, the <i>tourist park</i> is to be serviced by an on-site effluent disposal system which complies with the AS/NZ 1546:2001;AS/NZ1547:2000;

Performance outcomes	Acceptable outcomes
	Plumbing and Drainage Act 2002 and Queensland plumbing and wastewater code. Note—The on-site wastewater is to be verified by a competent person and verification submitted to Council with the development and plumbing application. Editor's note – A system treating sewerage from equal to or greater than 21 EP requires a licence from the Department of Environment and Heritage Protection.
For assessable development	
Location	
PO5 Short term tourist park accommodation: (a) has high degree of accessibility to town centre services and facilities; or (b) is on a major tourist route in an <i>Urban Area</i> ; or (c) is consistent with the tourism and recreation strategy.	A05 No acceptable outcome provided.
PO6 Long term relocatable home park accommodation is located in a position that has high degree of accessibility to town centre services and community facilities.	A06 No acceptable outcome provided.

Table 8.2.21.3.B—Site design and layout requirements

Item	Type of Accommodation			
	Relocatable Home	Caravan	Tourist Park Holiday Cabin	Tent Site
Minimum site area	250 m ² with a minimum frontage of 15 metres	70 m ²	150 m ² with a minimum frontage of 15 metres	40 m ²
Minimum setback from any internal road frontage of a site to the nearest point of any vehicle or structure	1.5 metres	1.5 metres	1.5 metres	-
Minimum distance to any toilet or ablution building on the land	20 metres	20 metres	20 metres	20 metres
Maximum distance to any amenity building providing toilet, laundry and ablution facilities	100 metres	100 metres	100 metres	100 metres
Minimum distance to any bulk storage refuse bin	50 metres	50 metres	50 metres	50 metres
Minimum recreation space	10 per cent of total site area			

8.2.22 Utility installation and substation code

8.2.22.1 Application

This code applies to assessing a material change of use for development involving a utility installation or substation.

8.2.22.2 Purpose

- (1) The purpose of the code is to allow for the effective and efficient development of utility installations and substations without negatively impacting on the character and amenity of the surrounding area or the environment.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Public utility and substation infrastructure does not cause *environmental harm* or *environmental nuisance*;
 - (b) the design and operation protects public health and safety;
 - (c) the character and amenity of the locality is protected; and
 - (d) the amenity of nearby *sensitive land uses* is maintained.

8.2.22.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.2.22.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Location and site suitability	
PO1 The location and siting of the <i>utility installation</i> or <i>substation</i> : (a) is co-located or in close proximity to other public utilities where practicable; (b) is carried out on a <i>site</i> at a scale and intensity that can be operated to maintain the amenity of the locality; and (c) are appropriately separated from substations to protect public health and safety.	AO1.1 The <i>utility installation</i> or <i>substation</i> is co-located with existing utilities on the same <i>site</i> . AO1.2 <i>Substations</i> are setback a minimum of 5 metres to any boundary that adjoins land used or intended for use by <i>sensitive land uses</i> or public open space.
Safety and security	
PO2 <i>Utility installations</i> and <i>substations</i> are secure and are designed to minimise act of vandalism.	AO2 The boundary of the <i>site</i> is protected with visually permeable security fencing.
Built form and character	
PO3 Buildings and structures are of a form, position and character that minimises visual impact.	AO3 No acceptable outcome provided.
PO4	AO4.1 Transformers and other equipment are enclosed within buildings.

Performance outcomes	Acceptable outcomes
<i>Substations</i> are designed and landscaped to substantively screen equipment from surrounding areas.	AO4.2 A minimum 3 metre wide strip of dense planting is provided within the site along all front, side and rear boundaries.
Scale and intensity	
PO5 The scale and intensity of the activity is commensurate with the zone and locality in which the activity is located.	AO5 No acceptable outcome provided.
Building articulation	
PO6 Building design incorporates <i>articulation</i> , colours and materials to provide visual interest and minimise visual prominence.	AO6 No acceptable outcome provided.
Building materials	
PO7 Buildings and structures are constructed of robust materials that are graffiti resistant.	AO7 No acceptable outcome provided.
PO8 Fencing is of a style and materials that is compatible with surrounding development.	AO8 No acceptable outcome provided.
Emissions	
PO9 Buildings, structures and equipment are designed in a manner to ensure ongoing amenity and safety whilst ensuring <i>sensitive land uses</i> are protected from undue glare, reflectivity or lighting overspill.	AO9.1 Fixed <i>site</i> lighting complies with Australian Standard AS4282 <i>Control of the Obtrusive Effects of Outdoor Lighting</i> . AO9.2 Buildings, structures and equipment are screened to avoid increased glare or reflectivity on adjoining <i>sensitive land uses</i> .
PO10 <i>Utility installations</i> and <i>substations</i> are designed to minimise noise impacts on adjoining land.	AO10.1 Noise levels generated do not exceed the levels stipulated in the <i>Environmental Protection (Noise) Policy 2008</i> .
Maintenance and access	
PO11 The facility has suitable agreements/ easements in place to ensure that it is accessible for maintenance and emergency purposes.	AO11 The <i>site</i> can be accessed by an existing public <i>road</i> .
PO12 The siting and operation of the <i>utility installation</i> or <i>substation</i> does not restrict existing legal public access.	AO12 The <i>utility installation</i> or <i>substation</i> does not prevent access to existing public spaces.

8.3 Other development codes

8.3.1 Advertising devices code

8.3.1.1 Application

This code applies to assessing development purposes of a *billboard* where the advertising devices code has been identified as an applicable code.

Note -Advertising devices, other than for billboards, are administered in accordance with Subordinate Local Law No. 1.4 (Installation of Advertising Devices) 2011.

8.3.1.2 Purpose

- (1) The purpose of the advertising devices code is to ensure that *billboards* are designed and positioned in a manner which does not adversely impact on the amenity values of the locality in which the *billboard* is situated, or create a safety hazard.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *billboards* are limited to the centre and industry zones;
 - (b) *billboards* are designed to minimise adverse impacts on traffic safety and public safety;
 - (c) the amenity of *sensitive land uses* is maintained; and
 - (d) the character, and visual and scenic amenity values of the Somerset Region are maintained.

8.3.1.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.3.1.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Location	
PO1 <i>Billboards</i> are limited to the following urban zones: (a) Centre zone; (b) High impact industry zone; (c) Industry zone; or (d) Township zone. Note -Billboards are undesirable and not compatible with open space, urban residential, semi-rural or rural character and associated scenic amenity values.	AO1.1 <i>Billboards</i> are not located in the: (a) Community facilities zone; (b) Emerging community zone; (c) General residential zone (including the Park residential precinct); (d) Recreation and open space zone; (e) Rural residential zone; or (f) Rural zone.
Public safety	
PO2 <i>Billboards</i> are designed to withstand local climatic conditions without failure and are constructed and anchored in a manner that protects public safety.	AO2 <i>Billboards</i> are securely mounted or fastened to prevent accidental damage or injury.
Amenity	

Performance outcomes	Acceptable outcomes
PO3 <i>Billboards</i> do not adversely impact on the amenity of an existing or planned <i>sensitive land use</i> .	AO3 Lighting complies with <i>AS4282 Control of the Obtrusive Effects of Outdoor Lighting</i> . Note - Billboards with flashing lights or that revolve are undesirable and not compatible with the intended character of Somerset Region.
Road safety	
PO4 <i>Billboards</i> do not impact on <i>road</i> safety or efficiency or cause a traffic hazard. The positioning of <i>billboards</i> does not obscure other signs. Editor's Note - For Billboards and/or advertising devices on a State-controlled road, contact the Department of Transport and Main Roads for further information about obtaining a 'Road Corridor Permit' under the <i>Transport Infrastructure Act 1994</i> .	AO4.1 The <i>billboard</i> is not located within 100 metres of a traffic intersection. AO4.2 Moving, variable or illuminated <i>billboards</i> are not located adjacent to any <i>road</i> which has a traffic speed of more than 60 kilometres per hour. AO4.3 The <i>billboard</i> is not positioned in a location that obscures a traffic sign or street sign.
Form and positioning	
PO5 <i>Billboards</i> are designed and constructed to avoid clutter. <i>Billboards</i> are compatible with the streetscape character and do not adversely impact on the visual and scenic amenity values of the locality.	AO5.1 The <i>billboard</i> face has the following maximum dimensions: (a) the area does not exceed 8 square metres. AO5.2 The maximum height of the <i>billboard</i> (including supports) is 8.5 metres above ground. AO5.3 <i>Billboards</i> are located within private property and not within the <i>road</i> reserve. AO5.4 The <i>billboard</i> is not a revolving <i>advertising device</i> .

8.3.2 Filling and excavation code

8.3.2.1 Application

This code applies to assessing development where the filling and excavation code has been identified as an applicable code.

Note -This code does not apply to filling or excavation where part of building works that is only subject to code assessment against the Building Regulation.

8.3.2.2 Purpose

- (1) The purpose of the filling and excavation code is to ensure earthworks activities do not have adverse environmental or amenity impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) ensure that there are no significant impacts on the character of the *site* and locality;
 - (b) seek to minimise the extent of filling and excavation;
 - (c) maintain environmental values including surface water quality, water flows, and significant vegetation;
 - (d) ensure that there are no adverse effects on the level and extent of flooding of upstream or downstream properties;
 - (e) ensure drainage performance does not alter or increase *off-site* drainage onto adjoining properties;
 - (f) filling and excavation does not *adversely impact on water quality* of permanent *watercourse, waterbody or wetland*;
 - (g) filling and excavation does not inhibit fish passage through permanent or ephemeral *watercourse, waterbody or wetland*;
 - (h) ensure the risk of land instability or the contamination of land does not increase; and
 - (i) no adverse impact on infrastructure, public utilities and underground services occurs, including the safe and efficient operation and maintenance of those services.

8.3.2.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.3.2.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Impacts on character and amenity	
PO1 The extent and degree of excavation and filling is within the reasonable community expectations having regard to the intended character of the zone in which the <i>site</i> is located.	AO1 No acceptable outcome provided.
Stability and appearance	
PO2 Filling and excavation: (a) does not create an unreasonable height difference between <i>adjoining premises</i> ; or (b) adversely impact on the visual amenity of the locality.	AO2.1 Retaining walls do not exceed 1 metre in height. AO2.2 Where fencing is positioned above a retaining structure, it is sited, designed or landscaped to reduce the bulk of the entire structure.

Performance outcomes	Acceptable outcomes
	AO2.3 Filling and excavation does not occur within 3 metres of the <i>site</i> boundary.
PO3 The finished land is stable and capable of accommodating the intended activity.	AO3 No acceptable outcome provided.
Environmental impact	
PO4 Filling and excavation does not adversely affect the environmental values of the <i>premises</i> or <i>adversely impact on water quality</i> of receiving environment. Filling and excavation does not inhibit fish passage through a watercourse (permanent or ephemeral), <i>wetland</i> , waterbody or other aquatic habitat.	AO4.1 For filling, only clean, uncontaminated fill is used. AO4.2 Filling and excavation does not occur on land that is on the Contaminated Land Register or the Environmental Management Register. AO4.3 No filling or excavation occurs in a <i>buffer</i> setback of a <i>watercourse</i> , <i>waterbody</i> or <i>wetland</i> as determined by the applicable overlay code. OR AO4.4 Where a <i>watercourse</i> , <i>waterbody</i> or <i>wetland</i> is not mapped, no filling or excavation activities occurs within 100 metres of the top bank of that <i>watercourse</i> , <i>wetland</i> , or <i>waterbody</i> .
Flooding and drainage	
PO5 Filling and excavation does not result in any adverse impact on the existing drainage regime or exacerbate flows upstream or downstream of the <i>site</i> .	AO5 Filling and excavation does not: (a) concentrate flows across adjoining sites; or (b) cause ponding on the <i>site</i> or on adjoining or nearby land.
Operational management	
PO6 Filling and excavation does not impact adversely on the visual amenity of the locality.	AO6.1 Spoil is not stockpiled in locations that can be viewed from adjoining properties or from a <i>road</i> frontage for a period exceeding 1 month. AO6.2 Finished slopes, surfaces and batters are graded to smooth contours and are seeded and turfed.

Performance outcomes	Acceptable outcomes
PO7 Emissions do not cause <i>environmental harm</i> or <i>environmental nuisance</i> .	AO7.1 Dust and odour emissions are contained within the boundaries of the <i>site</i> . AO7.2 Operations occur only between 7am to 6pm Monday to Friday, 8am-5pm Saturday excluding Sundays and public holidays.
Impacts on infrastructure, public utilities and easements	
PO8 Filling or excavation does not prejudice the integrity, operation, and maintenance of infrastructure, public utilities and easements.	AO8.1 Filling and excavation does not take place: (a) within an easement; (b) within 3 metres of public utilities; or (c) where underground infrastructure services would be impacted. OR AO8.2 Filling and excavation over existing sewers is in accordance with <i>Queensland Urban Utilities</i> standards.

8.3.3 Landscaping code

8.3.3.1 Application

This code applies to assessing development where the landscaping code has been identified as an applicable code.

8.3.3.2 Purpose

- (1) The purpose of the landscaping code is to provide for landscaping that is functional, attractive, and complements the built form and natural environment of the locality.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) landscaping complements and enhances the amenity and character of the locality, street and public places;
 - (b) suitable forms of buffering are established between potentially incompatible land uses and infrastructure;
 - (c) landscaping contributes to the enhancement of ecologically significant areas, scenic amenity, and landscape character;
 - (d) landscape design softens built form and hardscape areas;
 - (e) ensure significant on-site vegetation is retained and protected, where practicable;
 - (f) locally endemic and drought resistant species are incorporated;
 - (g) design facilitates a complementary transition between the public and private realm;
 - (h) landscaping design provides a safe environment; and
 - (i) landscaping is low maintenance.

8.3.3.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.3.3.3—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Character	
PO1 Landscaping contributes to a sense of place or specific character having regard to the zone in which the <i>site</i> is located.	AO1 No acceptable outcome provided.
Retention of significant vegetation	
PO2 The <i>development</i> retains existing significant vegetation, and integrates the vegetation within the <i>site</i> layout and landscape concept, where practicable.	AO2 <i>Site</i> design integrates and retains existing significant vegetation.
PO3 Unavoidable removal or damage to existing vegetation of significance is replaced with compatible vegetation that contributes to the established or emerging streetscape character.	AO3 No acceptable outcome provided.
PO4 <i>Site</i> planning and on-site management procedures are undertaken to ensure new buildings, car parks and driveways are located in order to enable the retention and	AO4 Areas of cut or fill, buildings or structures, and vehicle movement areas are located outside the drip line of trees to be retained.

Performance outcomes	Acceptable outcomes
long term health and viability of significant on-Site vegetation.	
Amenity	
PO5 Landscaping enhances the function, operation and appearance of <i>development</i> .	AO5 Landscaping contributes to the creation of legible spaces by: (a) defining entry and exit points and assisting in way finding; (b) distinguishing between private property and public areas; and (c) incorporating street furniture and plantings to create a safe, comfortable, useable and attractive streetscape.
Streetscape	
PO6 Landscaping contributes to the established or emerging character of the street.	AO6.1 The scale and design of fences, walls and landscaped frontages complement existing boundary treatments in the street. AO6.2 Landscape design and street tree planting contributes to reinforcing desired traffic speeds, driver behaviour, and maintaining appropriate sight distances. AO6.3 Entrance features and streetscape treatments reflect a local character that features vegetation, rather than built structures, and integrates with an overall landscape theme.
Landscape buffering	
PO7 Landscape buffering effectively separates incompatible land uses, and appropriately mitigates the visual impact of <i>development</i> .	AO7 Vegetated <i>buffer</i> strips to common boundaries and street frontages include a combination of trees and shrubs and, where appropriate, earth mounds.
Road frontage wall and fence treatments	
PO8 Retaining walls, solid walls or fences, including acoustic fences located on <i>road</i> frontages are visually softened and screened.	AO8.1 Walls and fences exceeding 15 metres in length along a <i>road</i> frontage are: (a) recessed at regular intervals for a minimum of 25 percent of the length of the fence or wall; and (b) recesses are at least 1.2 metres deep. AO8.2 Planting and recessed areas are located within the <i>site</i>.

Performance outcomes	Acceptable outcomes
	AO8.3 Trees, shrubs and ground covers are planted within the recesses. AO8.4 Landscaping is provided to screen and soften the visual impact of service areas, retaining walls, long driveways, and long unbroken walls or blank walls.
Car parking areas	
PO9 Landscaping reduces the visual impact of car parking areas and provides shading to the <i>site</i>.	AO9.1 A landscape setback with a minimum width of two metres is provided along the street frontage of a <i>site</i> between at ground car park areas and the <i>road</i> reserve. AO9.2 Shade trees are planted uniformly throughout the car parking area, driveways and internal manoeuvring, with a minimum of one tree provided for every 6 car parking spaces. AO9.3 Trees within car parking areas are protected by raised kerbs, wheel stops or bollards. AO9.4 Trees within car parking areas are provided with: (a) a minimum planting area of 1.2 square metres (b) with a minimum topsoil depth of 0.8 metres (if surrounded by hard surfaces); and (c) permeable surface treatments for all spill over carparking areas.
Species	
PO10 Plants selected for landscaping: (a) are fit for the intended purpose; (b) are suitable for local environmental conditions; and (c) are low maintenance.	AO10.1 Native species or locally endemic species are used. AO10.2 Drought resistant species are utilised. AO10.3 Low maintenance species are utilised. AO10.4 Species that have the potential to become an environmental weed or are known to be toxic to people or animals are not used in any circumstance.

Performance outcomes	Acceptable outcomes
Safety	
PO11 Landscaping does not compromise vehicle and pedestrian safety.	AO11 Trees with a minimum clear trunk height of 1.8 metres are used when planted near street corners, intersections or driveways.
PO12 Landscaping enhances public safety and reduces the potential for crime and vandalism through Crime Prevention Through Environmental Design (CPTED) principles.	AO12.1 Landscaping enables passive surveillance of public areas. AO12.2 Dense shrubby vegetation over 1.2 metres in height is avoided along street frontages and adjacent to open space areas. AO12.3 Security lighting is provided on pedestrian pathways, <i>site</i> or building entries, and parking areas.
Maintenance of public infrastructure	
PO13 Landscaping does not interfere with the safety, operation or maintenance of infrastructure, public utilities and easements.	AO13 No acceptable outcome provided.
Site drainage	
PO14 Landscape design incorporates measures to: (a) minimise impacts on stormwater flow; (b) maximise stormwater harvesting; (c) sensitively integrate drainage; and (d) maximise landform and soil stability.	AO14 No acceptable outcome provided.

8.3.4 Reconfiguring a lot code

8.3.4.1 Application

This code applies to assessing development where the reconfiguring a lot code has been identified as an applicable code.

8.3.4.2 Purpose

- (1) The purpose of the reconfiguring a lot code is to ensure lot reconfiguration provides for safe, accessible and environmentally responsive development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) by encouraging a diverse range of *lot* sizes in residential areas to meet the needs of residents and provide housing choice;
 - (b) lots are of a suitable size and dimension to accommodate the intended use;
 - (c) lots are of a suitable size and configuration having regard to the slope of the land;
 - (d) *lot* layout and building envelopes are located to protect the safety of people and property from the risk of natural hazards;
 - (e) *site* layout avoids adversely impacting on ecologically significant values, including vegetation and *waterbodies*, *watercourses* and *wetlands*;
 - (f) infrastructure and services are supplied to meet the anticipated needs of future land use activities and the reasonable expectations of the community;
 - (g) *lot* layout and design provides safe and efficient access to the *road* network and does not adversely impact on the functioning of the *road* network;
 - (h) *lot* reconfiguration incorporates urban design principles that promote energy efficiency, and supports walking, cycling and public transport as alternative forms of transport to the private car, where practicable;
 - (i) *lot* reconfiguration provides for effective integration with existing or planned *development* on adjoining or nearby land; and
 - (j) *lot* reconfiguration contributes to an accessible and usable open space network.

8.3.4.3 Assessment benchmarks

Part A – Assessment benchmarks for assessable development

Table 8.3.4.3.A—Assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Lot size and subdivision design	
PO1 <i>Lot</i> size and dimensions: (a) provide sufficient area for the siting and construction of buildings and structures; (b) provide for safe vehicular and pedestrian access; (c) respond appropriately to site characteristics including slope of the land and topography; and (d) are consistent with the intended character of the zone.	AO1.1 The minimum <i>lot</i> size and dimensions complies with Table 8.3.4.3.B – Minimum Lot Size and Dimensions. AO1.2 <i>Lots</i> in the General residential zone, Rural residential zone and Emerging community zone have an average slope of less than 12.5 percent.
PO2 <i>Lot</i> frontage width and access driveways for irregularly shaped allotments provide a safe vehicle entry and exit.	AO2 Irregularly shaped allotments have: (a) an average width not less than the minimum frontage for a rectangular allotment; and

Performance outcomes	Acceptable outcomes
	(b) the minimum frontage of the allotment is not less than one half the minimum frontage for a rectangular allotment.
PO3 Reconfiguration retains and protects significant features, including, but not limited to: (a) significant vegetation and habitat links/corridors; (b) <i>wetlands, waterbodies and watercourses</i>; (c) cultural features; and (d) natural contours of the land	AO3 No acceptable outcome provided.
Lot layout	
PO4 Where in the Rural zone, lots must be of an appropriate size and configuration to sustain the utility and productive capacity of the land for rural purposes and to reduce potential for impacts on the natural environment by facilitating opportunities for the implementation of improved land management practices and through provision of safe and adequate water supply and sewerage disposal. Development involving a realignment of boundaries does not result in: (a) Fragmentation of rural lands and loss of land to rural production; (b) Conflict between farming and residential uses; (c) Loss of farming flexibility; (d) Ribbon development along rural roads; (e) Detrimental impacts on areas of ecological and scenic values; (f) Loss of practical access to extractive and mineral resources; or (g) A net increase in the number of lots within the Rural zone.	AO4.1 Lot boundaries relate to natural features such as ridges or other catchment boundaries, drainage lines or flood flows, or remnant stands of vegetation. AND AO4.2 The minimum lot size is in accordance with the provisions of Table 8.3.4.3.B – Minimum Lot Sizes and Dimensions. OR AO4.3 Where a proposed lot is smaller in size than provided for in AO4.2 and the reconfiguration is a boundary realignment that would not create any additional lots, it is to improve the relationship of the lots to the natural features of the land or would otherwise provide for the implementation of improved land management practices. OR AO4.4 Where a proposed lot is smaller in size than provided for in AO4.2, and accommodates a new farming venture then it is to be demonstrated that such activity will be sustainable on a smaller lot (including demonstration of a secure and reliable water allocation for the venture).
PO5 Reconfiguring a lot in the General residential zone (other the park residential precinct), provides a mix of <i>lot</i> sizes and frontage widths that encourages:	AO5 No acceptable outcome provided.

Performance outcomes	Acceptable outcomes
(a) a variety of built forms and associated streetscape variation; and (b) dwelling mix.	
PO6 Reconfiguring a lot integrates with existing and planned <i>development</i> on adjoining land and the broader locality, having regard to: (a) <i>road</i> connections; (b) infrastructure; (c) pedestrian paths and bikeways; and (d) open space networks.	AO6 No acceptable outcome provided.
PO7 Development provides for the realignment of a lot boundary or boundaries which results in each of the lots having a dimension and size that is consistent with providing for a lawful use intended for the lots and locality.	AO7.1 Lots created through the realignment of a boundary or boundaries achieve the relevant lot size and frontage width as identified in Table 8.3.4.3.B – ‘Minimum Lot Sizes and Dimensions’. OR AO7.2 The realignment of a lot boundary or boundaries results in an improvement to the existing situation whereby the proposed lots achieve at least one of the following:- (a) the rearrangement of lots remedies an existing boundary encroachment by a building or areas; (b) the rearranged lots will be made more regular in shape; (c) access is provided to a lot that previously had no access or an unsuitable access; (d) the rearranged lots better meet the overall outcomes for the zone in which the site is situated; (e) the rearrangement of lots remedies a situation where an existing lot has multiple zonings; (f) the rearrangement of lots provides for a significant improvement in rural productivity; or (g) the rearrangement of lots results in a significant improvement in the protection of environmental values.
PO8 The <i>lot</i> layout and physical design facilitates energy efficiency by: (a) maximising solar access to the north in winter; (b) minimising solar access to the east and west in the summer;	AO8 A minimum of 30 percent of lots allow for future <i>dwelling houses</i> to be orientated to within 20 degrees either side of north.

Performance outcomes	Acceptable outcomes
(c) maximising access to any prevailing summer breezes; and (d) minimising exposure to prevailing winter winds.	
PO9 Reconfiguring a lot enhances public safety and minimises of potential for crime and vandalism by maximising opportunities for casual surveillance of streets and public spaces.	AO9 Lots are arranged to front streets and <i>public open space</i> .
Movement network and access	
PO10 <i>Development</i> provides for a <i>road</i> network that: (a) integrates with the external <i>road</i> network and provides safe and convenient access to transport routes; (b) provides high levels of internal accessibility for vehicles, pedestrians and cyclists; (c) creates a permeable and legible street pattern; (d) minimises through traffic on residential streets; (e) can accommodate public transport services; and (f) has sufficient capacity to safely and efficiently accommodate the likely traffic generation of the <i>development</i>.	AO10 No acceptable outcome provided.
PO11 Access to existing or future public transport services is provided where practicable and reasonably necessary having regard to the location of the <i>site</i> and access to public transport.	AO11 All lots are located within 500 metres (radial distance) of an existing or potential public transport route.
PO12 A network of pedestrian and cycle ways is provided having regard to: (a) opportunities to conveniently and safely link open space networks, and community facilities, including public transport stops, local activity centres and schools; (b) topography; (c) cyclist and pedestrian safety; (d) the principles of crime prevention through environmental design; (e) likely user volumes and types; (f) convenience; and (g) accessibility.	AO12 No acceptable outcome.

Performance outcomes	Acceptable outcomes
PO13 Rear <i>lot</i> access is appropriately managed to reduce vehicular conflict and provide legal access.	AO13.1 The minimum width of an access handle for rear lots is: (a) 6 metres for residential activities; and (b) 8 metres for other activities. AO13.2 The maximum length of an access handle for a rear allotment is 50 metres. AO13.3 Access easements are established over common access driveways to rear lots.
Open space	
PO14 <i>Development</i> provides for public open space that: (a) is in accordance with the <i>Local Government Infrastructure Plan</i>; (b) is of a physical standard that enables the park to be used for its intended purpose; (c) is appropriately located, sized, and shaped to satisfy the local, district and/or regional recreational needs of the community; (d) contributes to the establishment and maintenance of local and regional open space network; (e) facilitates appropriate measures for stormwater and flood management; and (f) contributes to the retention of significant vegetation, watercourses and wetlands, and other habitat areas and associated <i>buffers</i> and linkages/corridors.	AO14 Public open space is provided in accordance with Part 4 – <i>Local Government Infrastructure Plan</i>. AO14.2 Parks have a direct <i>road</i> frontage for 75 percent of the park perimeter.
PO15 Parks are embellished to a standard that enables the park to be used for its intended purpose.	AO15 No acceptable outcome provided.
Proximity to Transport Noise Corridors	
PO16 Sensitive land uses are protected from the adverse effects of transport corridor noise. Editor's Note – Refer to the Department of Transport and Main Roads' <i>Policy for Development on Land Affected by Environmental Emissions from Transport and Transport Infrastructure (version 2, 10 May 203)</i>.	AO16 No acceptable outcome provided.

Table 8.3.4.3.B—Minimum lot sizes and dimensions

Zone/Precinct	Minimum Lot Size	Minimum frontage
Centre zone	200 square metres	6 metres
General residential zone (other than the park residential precinct)	600 square metres; or minimum lot size of 450 square metres where part of a planned estate with a diversity of lot sizes.	18 metres
General residential zone - park residential precinct	4,000 square metres	40 metres
Industry zone	1,000 square metres	20 metres
High impact industry zone	1 hectare	100 metres
Community facilities zone	N/A	N/A
Recreation and open space zone	N/A	N/A
Township zone	1,000 square metres where reticulated sewerage is available 1,500 square metres otherwise	20 metres
	400 square metres where located in Somerset Dam	
Rural residential zone	4,000 square metres	50 metres
Rural zone	100 hectares	300 metres
Emerging community zone	10 hectares	200 metres

8.3.5 Services, works and infrastructure code

8.3.5.1 Application

This code applies to assessing development where the Services, works and infrastructure code has been identified as an applicable code.

8.3.5.2 Purpose

- (1) The purpose of the services, works and infrastructure code is to ensure that development is provided with the type and level of services and infrastructure that meet accepted standards and prevent unacceptable *off-site* impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *development* infrastructure and services are provided in a cost-effective, efficient and coordinated manner that maintains and protects environmental values;
 - (b) infrastructure and services are constructed to acceptable standards that maximise the whole of lifecycle cost of the works and infrastructure provided;
 - (c) the design and capacity of stormwater and drainage works do not *adversely impact on water quality* or detrimentally impact on hydraulic regimes;
 - (d) sewer, water, telecommunications and electricity services provided are of a standard consistent with the locality in which *development* is located;
 - (e) vegetation is managed to ensure the protection of ecological values, landscape character and amenity; and
 - (f) the operation of existing infrastructure and services is not compromised or damaged by adjacent works or nearby construction activities.

8.3.5.3 Assessment benchmarks

Part A— Requirements for accepted development and assessment benchmarks for assessable development

Table 8.3.5.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
PO1 Premises have an adequate volume and supply of water that: (a) meets the needs of users; (b) is adequate for fire fighting purposes. (c) ensures the health, safety and convenience of the community; and (d) minimises adverse impacts on the receiving environment.	AO1.1 Where the <i>site</i> is located in a reticulated water supply <i>service catchment</i> area, the <i>development</i> is connected to the reticulated water supply. OR AO1.2 Where the <i>site</i> is not located in a reticulated water supply <i>service catchment</i> area, the <i>development</i> is provided with a potable water supply. OR AO1.3 Where the <i>site</i> is not located in a reticulated water supply <i>service catchment</i> area, the <i>development</i> is provided with a potable water supply from a tank with a minimum storage capacity of 45,000 litres per <i>dwelling</i> .

Performance outcomes	Acceptable outcomes
	OR AO1.4 Where the <i>site</i> is not located in a reticulated water supply <i>service catchment</i> area, the <i>development</i> is connected to a potable water supply from an approved bore, and has a tank with a minimum storage capacity of 10,000 litres, per <i>dwelling</i>.
PO2 Provision is made for the treatment and disposal of sewage and effluent to protect public health and prevent contamination of soils, ground water or surface water or <i>adversely impact on water quality</i>.	AO2.1 Where the <i>site</i> is located in a reticulated sewerage <i>service catchment</i> area, the <i>development</i> is connected to the reticulated sewerage supply. OR AO2.2 Where the <i>site</i> is not located in a reticulated sewerage <i>service catchment</i> area, the development is connected to an on-site and efficient on-site waste water disposal system in accordance with <i>Queensland, Plumbing and Wastewater Code</i> and <i>Australian Standard A3500</i>.
PO3 Reticulated water and sewerage systems are designed and constructed in accordance with accepted standards.	AO3.1 Water supply systems and connections are designed and constructed in accordance with the Central SEQ Distributor-Retailer Authority (QUU) standards AO3.2 Sewerage systems and connections are designed and constructed in accordance with the Central SEQ Distributor-Retailer Authority (QUU) standards.
PO4 Safe and reliable electricity supply is provided to the <i>development</i>.	AO4 Other than in the Rural zone, <i>development</i> is connected to a reticulated electricity supply.
PO5 Reliable telecommunications is provided to the <i>development</i>.	AO5 Other than in the Rural zone, <i>development</i> is connected to a telecommunications network.
Vegetation clearing	
PO6 Vegetation must be protected to ensure that:	AO6.1 No vegetation clearing (unless <i>minor operational work</i>). OR

(a) vegetation of historical, cultural or visual significance is retained; (b) vegetation is retained for erosion prevention and slope stabilisation; (c) the character of the local area is maintained; (d) pedestrian shading is maintained; (e) the conservation of natural biodiversity is assisted.	AO6.2 Vegetation clearing is essential for carrying out work authorised or required under another Act. OR AO6.3 Vegetation clearing is within the path of, or within three metres of road, water supply, sewage or stormwater drainage works. OR AO6.4 Vegetation clearing is within three metres (as measured from the centre of the diameter of the tree's trunk, at ground level) of an existing building or structure. OR AO6.5 Vegetation clearing is authorised by Council and is considered as one or more of the following: (a) actually or potentially dangerous as a result of being dead, dying or diseased, structurally unsound, or having a growth form or habit which is hazardous; (b) a threat to the safety of persons or property or the environment integrity; (c) restricting the habitability of the dwelling on the site. OR AO6.6 Vegetation clearing is essential for the survey of the property boundary by a licensed cadastral surveyor. OR AO6.7 Vegetation clearing is undertaken to: (a) maintain an existing fire break; (b) undertake works in order to implement an approved fire management plan; or (c) establish a fire break during a fire event or to contain fire in some other way during a fire event.
PO7 Vegetation cleared from the site is disposed of in a manner that does not result in smoke being released into an <i>urban area</i> which would likely cause an impact on human health and safety.	AO7.1 Vegetation is transported off-site for disposal or reuse. OR AO7.2 Vegetation is processed on site for use in landscaping or erosion and sedimentation control.

For assessable development	
Works for infrastructure (gates and grids)	
PO8 The installation of gates and grids across public roads is undertaken to ensure that they do not interfere with: (a) the safe movement of pedestrians and vehicles; or (b) the proper maintenance of the public road.	AO8 No acceptable outcome provided.
Protection of infrastructure	
PO9 <i>Development</i> near utility services does not: (a) adversely affect the function of the service; (b) protects the infrastructure from physical damage; and (c) allows ongoing necessary access for maintenance purposes.	AO9 No acceptable outcome provided.
Stormwater quantity	
PO10 Drainage and stormwater management systems: (a) are designed and constructed to ensure all lots are free draining; (b) do not adversely impact on the flooding or drainage performance of downstream properties; (c) direct stormwater to a point of lawful discharge; (d) protect the design flood immunity levels of infrastructure and other <i>development</i>; (e) provide security of tenure for rights to convey and/or discharge stormwater through easements; and (f) protects the downstream built or natural environment.	AO10.1 A site based stormwater management plan (SBSMP) is prepared in accordance with PSP4 – Design Standards.
Water quality objectives	
PO11 <i>Development</i> implements stormwater quality treatment measures that do not <i>adversely impact on water quality</i> .	AO11.1 A site-based stormwater quality management plan (SQMP) is prepared, and provides for achievable stormwater quality treatment measures that meet design objectives listed in Table 8.3.5.3.B (SQMP Construction Phase) and Table 8.3.5.3.C (SQMP Post Construction Phase), or current best practice environmental management.

Point source wastewater discharge (other than contaminated stormwater and sewage)	
PO12 Where <i>wastewater</i> discharge to <i>watercourses</i>, <i>waterbodies</i> and <i>wetlands</i> cannot be avoided, <i>development</i> does not discharge <i>wastewater</i> unless demonstrated to be best practice environmental management for that <i>site</i> having regard to: (a) ecological values of receiving waters; (b) cumulative effects including impacts on ecosystem health; and (c) the applicable water quality objectives for the receiving waters.	AO12.1 A wastewater management plan (WWMP) is prepared by a suitably qualified person and addresses: (a) wastewater type and (b) climatic conditions; and (c) water quality objectives; and (d) best-practice environmental management. AND AO12.2 The WWMP provides that wastewater is managed in accordance with a waste management hierarchy that: (a) avoids wastewater discharges to waterways; or (b) if wastewater discharge to waterways cannot practicably be avoided, minimises wastewater discharge to waterways by re-use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater.
PO13 <i>Wastewater</i> discharge to <i>watercourses</i>, <i>waterbodies</i> and <i>wetlands</i> from nutrient hazardous areas or saline areas is managed in a way that maintains ecological processes, riparian vegetation, integrity, and downstream ecosystem health and does not <i>adversely impact on water quality</i>	AO13 No acceptable outcome provided.
Erosion and sediment control	
PO14 Construction and operation does not adversely impact on water quality.	AO14 An erosion and sediment control plan (ESCP) is prepared by a suitably qualified person.
Water cycle management	
PO15 The design and management of the <i>development</i> integrates water cycle elements so that: (a) potable water demand is reduced; (b) <i>wastewater</i> generation is minimised; (c) stormwater peak discharges and runoff volumes are not worsened; (d) natural drainage lines and hydrological regimes are maintained as far as practicable;	AO15 No acceptable outcome provided.

(e) large, uninterrupted impervious surfaces are minimised; (f) reuse of stormwater and grey water is encouraged where public health and safety will not be compromised; and (g) water is used efficiently.	

Table 8.3.5.3.B—SQMP Construction Phase

Issue		Design Objectives
Drainage control	Temporary drainage works	(a) Design life and design storm for temporary drainage works: • Disturbed area open for <12 months – 50% AEP flood event • Disturbed area open for 12-24 months – 20% AEP flood event • Disturbed area open for >24 months – 10% AEP flood event (b) Design capacity excludes minimum 150mm <i>freeboard</i> (c) Temporary culvert crossing – minimum 1 in 1 year ARI hydraulic capacity
Erosion control	Erosion control measures	(a) Minimise exposure of disturbed soils at any time (b) Divert water run-off from undisturbed areas around disturbed areas (c) Determine the erosion risk rating using local rainfall erosivity, rainfall depth, soil-loss rate or other acceptable methods (d) Implement erosion control methods corresponding to identified erosion risk rating
Sediment control	Sediment control measures Design storm for sediment control basins Sediment basin dewatering	(a) Determine appropriate sediment control measures using: • potential soil loss rate, or • monthly erosivity; or • average monthly rainfall (b) Collect and drain stormwater from disturbed soils to sediment basin for design storm events: • Design storm for sediment basin sizing is 80th five day event or similar (c) Site discharge during sediment basin dewatering: • TSS < 50mg/L TSS; and • Turbidity not >10% receiving waters turbidity; and • pH 6.5-8.5
Water quality	Litter and other waste, hydrocarbons and other contaminants	(a) Avoid wind-blown litter; remove gross pollutants (b) Ensure there is no visible oil or grease sheen on released waters (c) Dispose of waste containing contaminants at authorised facilities

Waterway stability and flood flow management	Changes to the natural waterway hydraulics and hydrology	(a) For peak flow for the 100% AEP flood event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site

Table 8.3.5.3.C—SQMP Post Construction Phase

Design Objectives				Application
Minimum reductions in mean annual load from unmitigated development (%)				
Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5mm	
80	60	45	90	Development for urban purposes within population centres greater than 3000 persons.
N/A	N/A	N/A	N/A	Development that is less than 35% impervious. In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets for all Queensland regions is 1.5% of the contributing catchment area.
Waterway stability management Limit the peak 10% AEP flood event discharge within the receiving waterway to the pre-development peak 1 year ARI event discharge.				Catchments contributing to un-lined receiving waterway. For peak flow for the 10% AEP flood event, co-located storages to attenuate site discharge rare of stormwater is used.

8.3.6 Transport, access and parking code

8.3.6.1 Application

This code applies to assessing development where the Transport, access and parking code has been identified as an applicable code.

8.3.6.2 Purpose

- (1) The purpose of the transport, access and parking code is to ensure the safety and efficiency of the transport network is maintained and the appropriate transport and end of trip facilities are provided by development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) *development* provides safe, efficient and accessible movement networks for vehicles, public transport, pedestrians and cyclists;
 - (b) *development* is consistent with the transport network and functional *road* hierarchy;
 - (c) the efficiency and safety of identified transport network is not diminished by incompatible *development*;
 - (d) *development* enhances accessibility to, and connectivity with active and public transport modes, wherever practicable;
 - (e) adequate provision for service vehicles and on-site parking is provided to meet the reasonable needs of the *development*;
 - (f) access, parking, servicing and associated manoeuvring areas are designed to be safe, functional, and avoid modal conflict;
 - (g) car parking areas do not dominate the street or detract from the streetscape character; and
 - (h) adverse impacts on the environment and *sensitive land uses* are avoided.

8.3.6.3 Assessment benchmarks

Part A – Requirements for accepted development and assessment benchmarks for assessable development

Table 8.3.6.3.A—Requirements for accepted development and assessment benchmarks for assessable development

Performance outcomes	Acceptable outcomes
For accepted development subject to requirements and assessable development	
Parking of <i>non-domestic vehicles</i> associated with a <i>dwelling house</i>	
PO1 The parking of <i>non-domestic vehicles</i> in association with a <i>dwelling house</i> does not: (a) occur in urban residential areas; (b) detrimentally impact on the visual amenity of the residential street; (c) cause environmental nuisance to nearby <i>sensitive land uses</i> ; and (d) impact on the safe operation of the road network.	AO1.1 A maximum of one (1) <i>non-domestic vehicle</i> is parked on the <i>premises</i> at any time in the following zones: (a) Centre zone; (b) General residential zone— Park residential precinct only ; (c) Rural residential zone; and (d) Township zone. AO1.2 <i>Non-domestic vehicles</i> must be parked on <i>premises</i> where: (a) the site area is a minimum 2,000 square metres; (b) the vehicle is parked behind the rear building line of <i>dwelling house</i> ; and

Performance outcomes	Acceptable outcomes
	(c) the vehicle can enter and leave the premises in a forward gear.
All weather access in the Rural zone	
PO2 A suitable standard of access is provided to the <i>dwelling house</i> .	AO2 <i>All weather access</i> is provided to each <i>dwelling house</i> in the Rural zone.
Vehicle parking and servicing	
PO3 The amount of on-site car parking and service vehicle loading/ unloading is consistent with: (a) the nature of the use; (b) the traffic generation of the use; (c) the loading/ unloading needs of the use; (d) the availability of street parking in the Centre zone; and (e) the impact of the <i>road</i> network. Car parks, service vehicle access, loading and manoeuvring areas are of suitable standard for the intended use.	AO3.1 The minimum number of car parking spaces complies with Table 8.3.6.3.B– Minimum car parking requirements . AO3.2 The service vehicle complies with Table 8.3.6.3.B– Minimum loading vehicle requirements . AO3.3 The service vehicle is able to enter and leave the <i>site</i> in forward gear. AO3.4 Service vehicles stand entirely within the <i>site</i> while unloading/ loading.
For assessable development	
Impacts on residential streets	
PO4 Non-residential activities do not impact on the amenity of land zoned or intended for residential purposes.	AO4 Non-residential activities do not use residential streets for access or haulage purposes.
Site access	
PO5 Vehicular access points are positioned along the frontage where they do not impact on the safety, capacity and operation of the existing <i>road</i> network having regard to: (a) the amount and type of vehicular traffic; (b) the type of use and traffic generation; (c) the current and future on-street parking arrangements; (d) proximity to intersections; and (e) available sight distances.	AO5.1 Where the <i>site</i> has two street frontages, vehicular access is provided from the minor street. AO5.2 Direct access is not provided to an arterial or higher order <i>road</i> .
PO6 The number of crossovers and design standard is appropriate to the use, expected traffic volumes, vehicle types, and function of the <i>road</i> .	AO6 The maximum number of crossovers is two for non-residential activities and one for residential activities.
Car parking locations and treatments	
PO7	AO7.1 Car parking is located behind or within a building.

Performance outcomes	Acceptable outcomes
Car parking location minimises impacts on the streetscape and contributes to the intended character of the zone and locality.	AO7.2 The location of visitor parking is discernible from the street or alternatively appropriate signage is provided.
PO8 Car parking areas are sensitively designed to minimise impacts on <i>sensitive land uses</i> and visually soften and provide shade to ground parking.	AO8 Screen fencing is provided next to any vehicle movement or vehicle parking areas along the side or rear boundary of a <i>site</i> .
Bicycle parking	
PO9 The provision of bicycle parking, storage and end of trip facilities is appropriate having regard to the nature and scale of the <i>development activity</i> .	AO9 Bicycle parking is provided in accordance with the <i>Australian Standards AS2890.3</i> and <i>AUSTROADS Guide to Traffic Management Part 11: Parking</i> .
Vehicle standing and manoeuvring areas	
PO10 Vehicle standing and manoeuvring areas are of suitable standard for the intended use and the areas are constructed to a standard that avoids <i>environmental nuisance</i> .	AO10 Internal manoeuvring and standing areas of the <i>site</i> are sealed.
PO11 Long driveways are designed and treated to soften their visual appearance when viewed from the street frontage.	AO11 Internal driveways (except in the Rural zone) do not exceed 50 metres in length.
Refuse storage and collection	
PO12 On-site facilities are located in areas that: (a) provide reasonable standards of amenity to <i>sensitive land uses</i> ; (b) maintains the amenity of <i>adjoining premises</i> ; (c) are not visually obtrusive when viewed from the street; (d) are carefully sited so as to promote a cohesive streetscape in the Centre zone; and (e) can be conveniently accessed by contractors.	AO12.1 In the Centre zone refuse storage areas are located behind the front building line and are screened from view. AO12.2 For <i>multiple dwellings</i> refuse storage consists of: (a) wheelie bins for up to 10 <i>dwellings</i> ; or (b) a suitably sized bulk refuse bin(s) where there is more than 10 <i>dwellings</i> . AO12.3 The refuse storage area: (a) is provided within the building and situated close to the point of collection; or (b) is an outdoor area that is: (i) no closer than 3 metres to any frontage and 1.5 metres to any other <i>site</i> boundary;

Performance outcomes	Acceptable outcomes
	(ii) enclosed on three sides with a screen wall extending 0.2 metres above the height of the refuse receptacles; (iii) screened by dense planting with or without mounding; and (iv) separated from <i>sensitive land uses</i> by a minimum of 10m so as to avoid any undesirable impact of odour or noise from refuse storage and collection services.
Loading and unloading	
PO13 Loading and unloading activities do not impact on the amenity of the <i>sensitive land uses</i> .	AO13 Where there are adjoining <i>sensitive land uses</i> , refuse collection and other loading and unloading activities occurs during the following period: (a) 7.00am and 6.00pm Monday to Friday; and (b) 8.00am to 5.00pm Saturday and Sunday.
Pick up/ set-down areas	
PO14 Car parking and pick-up/set-down areas are located in areas and designed in a way that does not detract from the amenity of streetscape and maintains the safety of users.	AO14 Car parking and pick-up/set-down areas are located so that: (a) they are visible from the <i>road</i> ; (b) they can be overlooked from the use's buildings or associated outdoor spaces; (c) they maintain the amenity of the street and adjacent properties; and (d) pedestrians are not required to cross the pick-up/set-down areas to gain access to the building.
Vehicular and pedestrian conflict minimisation	
PO15 The design and arrangement of access, car parking and vehicle movements on the <i>site</i> facilitates the safe and convenient use by delivery vehicles, staff and customers.	AO15 Public access areas of the <i>site</i> are clearly separated from any area set aside for servicing the building.
Active transport	
PO16 <i>Development</i> contributes to an <i>active transport</i> movement network incorporating pedestrian pathways and cycleways.	AO16 No acceptable outcome provided
Road design standards and associated works	
PO17 <i>Development</i> provides for a safe, legible and efficient <i>road</i> network.	AO17 No acceptable outcome provided.
Service stations	

Performance outcomes	Acceptable outcomes
PO18 The layout of the service station provides for sufficient on-site queuing that does not impact on the safe operation of the street network.	AO18 Minimum <i>on-site</i> queuing space, clear of any other access or manoeuvring path, is provided for 3 vehicles on the entry of any car wash bay or fuel pump.

Table 8.3.6.3.B—Minimum car parking and service vehicle requirements

Use	Minimum car parking requirements	Minimum bicycle parking requirements	Minimum service vehicle requirements
Adult Store	One (1) space per 25m ² GFA.	Nil	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Agricultural Supplies Store	One (1) space per 25m ² GFA.	Nil.	AV.
Air Services	No specific rate.	Nil.	No specific rate.
Animal Husbandry	Nil.	Nil.	No specific rate.
Animal Keeping	One (1) space per employee 'Full Time Equivalent' (FTE).	Nil.	Nil.
Aquaculture	One (1) space per employee (FTE).	Nil.	No specific rate.
Caretaker's accommodation	1 space.	Nil.	Nil.
Car wash	No specific rate.	Nil.	No specific rate.
Cemetery	30 spaces plus one (1) space per two (2) employees (FTE) on the premises at any one time.	Nil.	Nil.
Child care centre	One (1) space per five (5) children.	Nil.	Nil.
Club	0.3 space per patron.	One (1) space per 100 square metres of GFA where ≥400 square metres.	SRV.
Community care centre	No specific rate.	One (1) space per 100 square metres of GFA where ≥400 square metres.	Nil.
Community residence	Two (2) parking spaces.	Nil.	Nil.
Community use	0.4 space per patron.	One (1) space per 100 square metres of GFA where ≥400 square metres.	No specific rate.
Crematorium	No specific rate.	Nil.	No specific rate.
Cropping	Nil.	Nil.	Nil.
Dual occupancy	Two (2) parking spaces per dwelling.	Nil.	Nil.
Dwelling house	Two (2) spaces.	Nil.	Nil.
Educational establishment	One (1) space per two (2) staff.	One (1) space per 100 square metres of GFA where ≥400 square metres.	SRV.
Emergency services	No specific rate.	Nil.	No specific rate.
Extractive industry	No specific rate.	Nil.	Nil.
Food and drink outlet	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and one (1) space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	One (1) space per 100 square metres of GFA where ≥400 square metres.	SRV.
Function facility	0.4 space per patron.	One (1) space per 100 square metres of GFA where ≥400 square metres.	No specific rate.
Funeral parlour	0.3 space per seat or to each square metre of GFA whichever is greater.	Nil.	SRV.
Garden centre	One (1) space per 40m ² GFA.	Nil.	HRV.
Hardware and trade supplies	One (1) space per 40m ² GFA.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.

Use	Minimum car parking requirements	Minimum bicycle parking requirements	Minimum service vehicle requirements
Health care services	Five (5) spaces for each practitioner on the premises at any one time.	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	One (1) ambulance vehicle pick-up and set-down space if more than two (2) practitioners work from the <i>site</i> at any one time.
High impact industry	One (1) space for every 2 workers at the time of peak accumulation (two heaviest over-lapping shifts) or two (2) spaces for every 100 square metres or part thereof of the total floor area, whichever is greater.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Home based business	For a bed and breakfast, and in addition to a dwelling house, 1 car space for each accommodation room separate to the owner/lessee's car parking area. Otherwise, and in addition to a dwelling house: - One (1) space if the area upon which the home business is conducted is more than 20 square metres; or - Two (2) spaces where an employee is engaged.	Nil.	Nil.
Hospital	One (1) space for every 4 beds, and in addition one (1) space for every 2 employees and one (1) space for every staff doctor.	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	No specific rate.
Hotel	One (1) space for each 15 square metres or part thereof of the net bar room area, the net lounge area and beer garden floor area, and a further one space for each guest suite, and one (1) further space for each 3 employees.	Nil.	AV.
Indoor sport and recreation	One (1) space for every 20 square metres or part thereof of <i>gross floor area</i> .	One (1) space per 100 square metres of GFA.	No specific rate.
Intensive animal industry	Nil.	Nil.	No specific rate.
Intensive horticulture	Nil.	Nil.	No specific rate.
Low impact industry	One (1) space for every 2 workers at the time of peak accumulation (two heaviest over-lapping shifts) or two (2) spaces for every 100 square metres or part thereof of the total floor area, whichever is greater.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Market	No specific rate.	Nil.	No specific rate.
Medium impact industry	One (1) space for every 2 workers at the time of peak accumulation (two heaviest over-lapping shifts) or two (2) spaces for every 100 square metres or part thereof of the total floor area, whichever is greater.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Motor sport facility	No specific rate.	Nil.	No specific rate.
Multiple dwelling	Dwelling no. of bedrooms	One (1) space per five (5) dwellings.	SRV where more than 10 units.
	One bedroom		
	Two bedroom		
	Three bedroom		
	Visitors parking		
Nightclub entertainment facility	One (1) space per 5m ² GFA; plus 0.5 space per staff member (FTE).	Nil.	No specific rate.
Non-resident workforce accommodation	No specific rate.	Nil.	Nil.

Use	Minimum car parking requirements	Minimum bicycle parking requirements	Minimum service vehicle requirements
Office	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and 1 space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Outdoor sales	One (1) space per 150m ² of total use area.	Nil	AV.
Outdoor sport and recreation	One (1) space per 20 square metres or part thereof of <i>gross floor area</i> for a clubhouse, plus four (4) spaces per court, plus ten (10) spaces per 0.4 hectares of sports field, plus thirty (30) parking spaces for a bowling green, plus one (1) space for every 40 square metres of public swimming pool area.	One (1) space per hectare of site area.	Nil.
Park	No specific rate.	One (1) space per hectare of site area.	Nil.
Permanent plantation	Nil.	Nil.	Nil.
Place of worship	One (1) space for every 10 seats or places.	Nil.	SRV.
Relocatable home park	One (1) per dwelling, plus one (1) visitor space for every five (5) dwellings where developments contain five (5) or more dwellings.	One (1) space per five (5) dwellings.	No specific rate.
Renewable energy facility	No specific rate.	Nil.	
Residential care facility	0.3 space per lodging room.	Nil.	No specific rate.
Retirement facility	One (1) per dwelling, plus one (1) visitor space for every five (5) dwellings where development contains five (5) or more dwellings.	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	No specific rate.
Roadside stall	Three (3) spaces	Nil.	Nil.
Rooming accommodation	0.5 space per Rooming Unit, plus 0.25 visitor space per Rooming Unit, plus one (1) space for an on-site manager (if applicable).	One (1) space per five (5) rooms.	Nil.
Rural industry	One (1) space per 100m ² GFA.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Rural workers accommodation	No specific rate.	Nil.	No specific rate.
Sales office	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and one (1) space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	Nil.	Nil.
Service industry	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and one (1) space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Service station	Four (4) spaces (plus car parking required for any commercial component).	Nil.	AV.
Shop	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and one (1) space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Shopping centre	One (1) space per 25 square metres <i>gross floor area</i> at <i>ground level</i> and one (1) space per 50 square metres <i>gross floor area</i> above <i>ground level</i> .	One (1) space per 100 square metres of GFA where ≥ 400 square metres.	No specific rate.

Use	Minimum car parking requirements	Minimum bicycle parking requirements	Minimum service vehicle requirements
Short-term accommodation	One (1) car parking space for each accommodation unit. One (1) car parking space per three (3) accommodation units for employees where involving three (3) or more accommodation units.	One (1) space per five (5) dwellings/sites.	SRV.
Showroom	One (1) spaces per 40m ² GFA.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Telecommunications facility	No specific rate.	Nil.	No specific rate.
Temporary use	No specific rate.	Nil.	No specific rate.
Tourist attraction	No specific rate.	One (1) space per hectare of site area.	No specific rate.
Tourist park	One (1) space having a hard standing surface for each caravan site for the occupants vehicle, and provision is made for car washing bays on the basis of one bay per 100 sites with a maximum of four bays to be provided in any caravan park. Such bays are paved and drained. Provision is made for hard stand boat, car, caravan or trailer storage within the caravan park on the basis of an equivalent area to one car space for every 25 (or 100) sites.	One (1) space per five (5) dwellings/sites.	SRV.
Utility installation	No specific rate.	Nil.	No specific rate.
Veterinary services	Five (5) spaces for each practitioner (FTE) on the premises at any one time.	Nil.	SRV.
Warehouse	One (1) space for every 2 employees.	Nil.	(1) Less than 500 square metres GFA – HRV. (2) 500 square metres – 1,999 square metres GFA – AV. (3) 2,000 square metres GFA plus – No specific rate.
Winery	One (1) space per 25m ² of retail GFA plus three (3) spaces per 100m ² of manufacturing GFA.	Nil.	No specific rate.
Any other use not specified in this table	Sufficient space to accommodate the amount of vehicular traffic likely, in the opinion of the Council, to be generated by the particular development.	Sufficient space to accommodate the amount of bicycle traffic likely, in the opinion of the Council, to be generated by the particular development.	Sufficient space to accommodate the amount of vehicular traffic likely, in the opinion of the Council, to be generated by the particular development.

Note:

- (1) 'No specific rate' – means the required number of parking spaces (or facilities for service vehicles) will be based on the circumstances of the specific proposal and assessed against the Performance Criteria and information provided with the application.
- (2) SRV - means Small Rigid Vehicle (for vehicle dimensions and manoeuvring requirements see Australian Standard AS 2890.2 – Off Street Parking – Commercial Vehicle Facilities).
- (3) HRV - means Heavy Rigid Vehicle (for vehicle dimensions and manoeuvring requirements see Australian Standard AS 2890.2 – Off Street Parking – Commercial Vehicle Facilities).
- (4) AV - means Articulated Vehicle (for vehicle dimensions and manoeuvring requirements see Australian Standard AS 2890.2 – Off Street Parking – Commercial Vehicle Facilities).

Editor's Note - All proposed access to a State-controlled Road requires approval from the Department of Transport and Main Roads

Schedule 1 Definitions

SC1.1 Use definitions

- (1) Use definitions have a particular meaning for the purpose of the planning scheme.
- (2) Any use not listed in table SC1.1.2, column 1, is an undefined use.
Note—Development comprising a combination of defined uses is not considered to be an undefined use.
- (3) The use definitions listed here are the definitions used in this planning scheme.
- (4) A use listed in table SC1.1.2, column 1, has the meaning set out beside that term in column 2.
- (5) Column 3 of table SC1.1.2 identifies examples of the types of activities that are consistent with the use identified in column 1.
- (6) Column 4 of table SC1.1.2 identifies examples of activities that are not consistent with the use identified in column 1.
- (7) Columns 3 and 4 of table SC1.1.2 are not exhaustive lists.
- (8) Uses listed in table SC1.1.2 columns 3 and 4 which are not listed in column 1 form part of the definition.

Table SC1.1.1 – Index of use definitions

Index of use definitions		
1. Adult store	32. Hardware and trade supplies	60. Place of worship
2. Agricultural supplies store	33. Health care services	61. Relocatable home park
3. Air service	34. High impact industry	62. Renewable energy facility
4. Animal husbandry	35. Home based business	63. Research and technology industry
5. Animal keeping	36. Hospital	64. Residential care facility
6. Aquaculture	37. Hotel	65. Resort complex
7. Bar	38. Indoor sport and recreation	66. Retirement facility
8. Brothel	39. Intensive animal industry	67. Roadside stall
9. Bulk landscape supplies	40. Intensive horticulture	68. Rooming accommodation
10. Caretaker's accommodation	41. Landing	69. Rural industry
11. Car wash	42. Low impact industry	70. Rural workers accommodation
12. Cemetery	43. Major electricity infrastructure	71. Sales office
13. Child care centre	44. Major sport, recreation and entertainment facility	72. Service industry
14. Club	45. Market	73. Service station
15. Community care centre	46. Medium impact industry	74. Shop
16. Community residence	47. Motor sport facility	75. Shopping centre
17. Community use	48. Multiple dwelling	76. Short-term accommodation
18. Crematorium	49. Nature based tourism	77. Showroom
19. Cropping	50. Nightclub entertainment facility	78. Special industry
20. Detention facility	51. Non-resident workforce accommodation	79. Substation
21. Dual occupancy	52. Office	80. Telecommunications facility
22. Dwelling house	53. Outdoor sales	81. Theatre
23. Dwelling unit	54. Outdoor sport and recreation	82. Tourist attraction
24. Educational establishment	55. Outstation	83. Tourist park
25. Emergency services	56. Park	84. Transport depot
26. Environment facility	57. Parking station	85. Utility installation
27. Extractive industry	58. Party house	86. Veterinary services
28. Food and drink outlet	59. Permanent plantation	87. Warehouse
29. Function facility		88. Wholesale nursery
30. Funeral parlour		89. Winery
31. Garden centre		

Editor's note: The following terms and definitions within schedule 3 of the Planning Regulation 2017 have not been included in the planning scheme due to the applicability to an inland, non-coastal LGA:

- Marine industry
- Port services

Table SC1.1.2 – Use definitions as per the regulated requirements

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Adult store	adult store means the use of premises for the primary purpose of displaying or selling— (a) sexually explicit materials; or (b) products and devices that are associated with, or used in, a sexual practice or activity.	Sex shop	Shop, newsagent, registered pharmacist or video hire, where the primary use of these are concerned with: (a) the sale, display or hire of printed or recorded matter (not of a sexually explicit nature); or (b) the sale or display of underwear or lingerie; or (c) the sale or display of an article or thing primarily concerned with or used in association with a medically recognised purpose.
Agricultural supplies store	agricultural supplies store means the use of premises for the sale of agricultural supplies and products.	animal feed, bulk veterinary supplies, chemicals, farm clothing, fertilisers, irrigation materials, saddlery, seeds	Bulk landscape supplies, garden centre, outdoor sales, wholesale nursery
Air service	air service means the use of premises for— (a) the arrival or departure of aircraft; or (b) housing, servicing, refuelling, maintaining or repairing aircraft; or (c) the assembly and dispersal of passengers or goods on or from an aircraft; or (d) training and education facilities relating to aviation; or (e) aviation facilities; or (f) an activity that— (i) is ancillary to an activity	Airport, airstrip, heliport, public or private airfield	

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	or facility stated in paragraphs (a) to (e); and (ii) directly services the needs of aircraft passengers.		
Animal husbandry	animal husbandry means the use of premises for— (a) producing animals or animal products on native or improved pastures or vegetation; or (b) a yard, stable, temporary holding facility or machinery repairs and servicing, if the use is ancillary to the use in paragraph (a)	Cattle studs, grazing of livestock, non-feedlot dairying	Animal keeping, aquaculture, intensive animal industry, feedlots, piggeries
Animal keeping	animal keeping means the use of premises for— (a) boarding, breeding or training animals; or (b) a holding facility or machinery repairs and servicing, if the use is ancillary to the use in paragraph (a).	Aviaries, catteries, kennels, stables, wildlife refuge	Animal husbandry, aquaculture, cattle studs, <i>domestic pets</i> , feedlots, grazing of livestock, non-feedlot dairying, piggeries, poultry meat and egg production
Aquaculture	aquaculture means the use of premises for cultivating, in a confined area, aquatic animals or plants for sale.	Pond farms, tank systems, hatcheries, raceway system, rack and line systems, sea cages	Intensive animal industry

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Bar	bar means the use of premises, with seating for 60 or less people, for— (a) selling liquor for consumption on the premises; or (b) an entertainment activity, or preparing and selling food and drink for consumption on the premises, if the use is ancillary to the use in paragraph (a).		Club, hotel, nightclub entertainment facility, tavern
Brothel	brothel means premises made available for prostitution by two or more prostitutes at the premises. Note – these the <i>Prostitution Act 1999, schedule 4</i> .		Adult store, club, nightclub, shop
Bulk landscape supplies	bulk landscape supplies means the use of premises for the bulk storage and sale of mainly non-packaged landscaping and gardening supplies, including for example, soil, gravel, potting mix or mulch.		Garden centre, outdoor sales, wholesale nursery
Caretaker's accommodation	caretaker's accommodation means the use of premises for a dwelling for a caretaker of a non-residential use on the same premises.		Dwelling house
Car wash	car wash means the use of premises for the commercial cleaning of motor vehicles.		Service station
Cemetery	cemetery means the use of premises for the interment of bodies or ashes after death.	Burial ground, columbarium, crypt, lawn cemetery, mausoleum, pet cemetery	Crematorium, funeral parlour
Child care centre	childcare centre means the use of premises for the care, education and minding, but not residence, of children.	Outside hours school care, crèche, early childhood centre, kindergarten	Educational establishment, home based child care, family day care

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Club	club means the use of premises for— (a) an association established for social, literary, political, sporting, athletic or other similar purposes; or (b) preparing and selling food and drink, if the use is ancillary to the use in paragraph (a).	Club house, guide and scout clubs, surf lifesaving club, RSL bowls club	Hotel, nightclub entertainment facility, place of worship, theatre
Community care centre	community care centre— (a) means the use of premises for (i) providing social support to members of the public; or (ii) providing medical care to members of the public, if the use is ancillary to the use in subparagraph (i); but (b) does not include the use of premises for providing accommodation to members of the public.	Disability support services, drop in centre, respite centre, integrated Indigenous support centre	Child care centre, family day care, home based child care, health care services, residential care facility
Community residence	community residence— (a) means the use of premises for residential accommodation for— (i) no more than 6 persons requiring assistance or support with daily living needs; and (ii) no more than 1 support worker; and (b) includes a building or structure that is reasonably associated with the use in paragraph (a).	Hospice	Dwelling house, dwelling unit, hostel, residential care facility, short-term accommodation

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Community use	community use means the use of premises for— (a) providing artistic, social or cultural facilities or community services to the public; or (b) preparing and selling food and drink, if the use is ancillary to the use in paragraph (a)	Art gallery, community centre, community hall, library, museum	Cinema, club, hotel, nightclub entertainment facility, place of worship
Crematorium	crematorium means the use of premises for the cremation or aquamation of bodies.		Cemetery
Cropping	cropping means the use of premises for— (a) growing and harvesting plants, or plant material, that are cultivated in soil, for commercial purposes; or (b) harvesting, storing or packing plants or plant material grown on the premises, if the use is ancillary to the use in paragraph (a); or (c) repairing and servicing machinery used on the premises, if the use is ancillary to the use in paragraph (a).	Fruit, nut, vegetable and grain production, forestry for wood production, fodder and pasture production, plant fibre production, sugar cane growing, vineyard	Permanent plantations, intensive horticulture, rural industry
Detention facility	detention facility means the use of premises for the lawful detention of persons.	Prison, detention centre, youth detention centre	Police station, court cell complex
Dual occupancy	dual occupancy— (a) means a residential use of premises for 2 households involving (i) 2 dwellings (whether attached or detached) on a single lot or 2	Duplex, two dwellings on a single lot (whether or not attached), two dwellings within one single community title scheme under the <i>Body Corporate and Community</i>	Dwelling house, multiple dwelling

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	dwelling (whether attached or detached) on separate lots that share a common property; and (ii) any domestic outbuilding associated with the dwellings; but (b) does not include a residential use of premises that involves a secondary dwelling.	<i>Management Act 1997</i> , two dwellings within the one body corporate to which the <i>Building Units and Group Title Act 1980</i> continues to apply	
Dwelling house	<i>dwelling house</i> means a residential use of premises involving— (a) 1 dwelling for a single household and any domestic outbuildings associated with the dwelling; or (b) 1 dwelling for a single household, a secondary dwelling, and any domestic outbuildings associated with either dwelling.		Caretaker's accommodation, dual occupancy, rooming accommodation, short-term accommodation, student accommodation, multiple dwelling
Dwelling unit	<i>dwelling unit</i> means the use of premises containing a non-residential use for a single dwelling, other than a dwelling for a caretaker of the non-residential use.	'Shop-top' apartment	Caretaker's accommodation, dwelling house
Educational establishment	<i>educational establishment</i> means the use of premises for— (a) training and instruction to impart knowledge and develop skills; or (b) student accommodation, before or after school care, or vacation care, if the use is	Pre-preparatory, preparatory and primary school, secondary school, special education, college, university, technical institute, outdoor education centres	Child care centre, home based child care, family day care

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	ancillary to the use in paragraph (a).		
Emergency services	emergency services means the use of premises by a government entity or community organisation to provide— (a) essential emergency services; or (b) disaster management services; or (c) management support facilities for the services.	State emergency service facility, ambulance station, rural fire brigade, auxiliary fire and rescue station, urban fire and rescue station, police station, emergency management support facility, evacuation centres	Community use, hospital, residential care facility
Environment facility	environment facility— (a) means the use of premises for a facility for the appreciation, conservation or interpretation of an area of cultural, environmental or heritage value; but (b) does not include the use of premises to provide accommodation for tourists and travellers	Nature-based attractions, walking tracks, seating, shelters, boardwalks, observation decks, bird hides	
Extractive industry	extractive industry means the use of premises for— (a) extracting or processing extractive resources; and (b) any related activities, including, for example, transporting the resources to market.	Quarry	

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Food and drink outlet	food and drink outlet means the use of premises for— (a) preparing and selling food and drink for consumption on or off the premises; or (b) providing liquor for consumption on the premises, if the use is ancillary to the use in paragraph (a).	Bistro, café, coffee shop, drive-through facility, kiosk, milk bar, restaurant, snack bar, take-away, tea room,	Bar, club, hotel, nightclub entertainment facility , shop,
Function facility	function facility means the use of premises for— (a) receptions or functions; or (b) preparing and providing food and liquor for consumption on the premises as part of a reception or function.	Conference centre, reception centre	Community use, hotel
Funeral parlour	funeral parlour— (a) means the use of premises for— (i) arranging and conducting funerals, memorials and other similar events; or (ii) a mortuary; or (iii) storing and preparing bodies for burial or cremation; but (b) does not include the use of premises for the burial or cremation of bodies.		Cemetery, crematorium, place of worship
Garden centre	garden centre means the use of premises for— (a) selling plants; or (b) selling gardening and landscape products and supplies that are mainly in pre-packaged form; or	Retail plant nursery	Bulk landscape supplies, wholesale nursery ,outdoor sales

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(c) a food and drink outlet is ancillary to the use in paragraph (a).		
Hardware and trade supplies	hardware and trade supplies means the use of premises for selling, displaying or hiring hardware and trade supplies, including, for example, house fixtures, timber, tools, paint, wallpaper or plumbing supplies.		Shop, showroom, outdoor sales and warehouse
Health care services	health care service means the use of premises for medical purposes, paramedical purposes, alternative health therapies or general health care, if overnight accommodation is not provided on the premises.	Dental clinics, medical centres, natural medicine practices, nursing services, physiotherapy clinic	Community care centre, hospital
High impact industry	high impact industry means the use of premises for an industrial activity— (a) that is the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products, and (b) that a local planning instrument applying to the premises states is a high impact industry; and (c) that complies with any thresholds for the activity stated in a local planning instrument applying to the premises, including, for example, thresholds relating to the number of products manufactured or the level of emissions	Abattoirs, concrete batching plant, boiler making and engineering and metal foundry Note : For additional examples also refer to SC1.1.2 industry thresholds.	Tanneries, rendering plants, oil refineries, waste incineration, manufacturing or storing explosives, power plants, manufacturing fertilisers, service industry, low impact industry, medium impact industry, special industry

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	produced by the activity		
Home based business	home-based business means the use of a dwelling or domestic outbuilding on premises for a business activity that is subordinate to the residential use of the premises.	Bed and breakfast, farm stay, home office, home based child care	Hobby, office, shop, warehouse, transport depot
Hospital	hospital means the use of premises for— (a) the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or (b) providing accommodation for patients; or (c) providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraph (a) or (b).		Health care services, residential care facility
Hotel	hotel — (a) means the use of premises for— (i) selling liquor for consumption on the premises; or (ii) a dining or entertainment activity, or providing accommodation to tourists or travellers, if the use is ancillary to the use in subparagraph (i); but (b) does not include a bar	Pub, tavern	Bar, Nightclub entertainment facility
Indoor sport and recreation	indoor sport and recreation means the use of premises for a leisure, sport or recreation activity	Amusement parlour, bowling alley, enclosed tennis courts, gymnasium, squash courts	Cinema, hotel, nightclub entertainment facility, theatre

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	conducted wholly or mainly indoors.		
Intensive animal industry	<i>intensive animal industry</i>— (a) means the use of premises for— (i) the intensive production of animals or animal products, in an enclosure, that requires food and water to be provided mechanically or by hand; or (ii) storing and packing feed and produce, if the use is ancillary to the use in subparagraph (i); but (b) does not include the cultivation of aquatic animals.	Feedlots, piggeries, poultry and egg production	Animal husbandry, aquaculture, drought feeding, milking sheds, shearing sheds, weaning pens
Intensive horticulture	<i>intensive horticulture</i>— (a) means the use of premises for— (i) the intensive production of plants or plant material carried out indoors on imported media; or (ii) the intensive production of plants or plant material carried out outside using artificial lights or containers; or (iii) storing and packing plants or plant material grown on the premises, if the use is ancillary to a use in subparagraph (i) or (ii); but	Greenhouse and shade house plant production, hydroponic farms, mushroom farms	Wholesale nursery

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(b) does not include the cultivation of aquatic plants.		
Landing	landing means the use of premises for a structure— (a) for mooring, launching, storing and retrieving vessels; and (b) from which passengers embark and disembark.	Boat ramp, jetty, pontoon	Marina
Low impact industry	low impact industry means the use of premises for an industrial activity— (a) that is the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products; and (b) that a local planning instrument applying to the premises states is low impact industry; and (c) that complies with any thresholds for the activity states in a local planning instrument applying to the premises, including, for example, thresholds relating to the number of products manufactured or the level of emissions produced by the activity.	Repairing motor vehicles, fitting and tuning workshop. Note :Additional examples also refer to SC1.1.2 industry thresholds.	Panel beating, spray painting or surface coating, tyre recycling, drum re-conditioning, wooden and laminated product manufacturing, service industry, medium impact industry, high impact industry, special industry
Major electricity infrastructure	major electricity infrastructure— (a) means the use of premises for— (i) a transmission grid or supply network; or	Powerlines greater than 66kV	Minor electricity infrastructure, substation

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(ii) a telecommunication facility, if the use is ancillary to the use in subparagraph (i); but (b) does not include the use of premises for a supply network or private electricity works stated in schedule 6 [Development local categorising instrument is prohibited from stating is assessable development], section 26(5), unless the use involves— (i) a new zone substation or bulk supply s the augmentation of a zone substation or bulk supply substation that significantly increases the input or output standard voltage		
Major sport, recreation and entertainment facility	major sport, recreation and entertainment facility means the use of premises for large-scale events, including, for example, major sporting, recreation conference or entertainment events.	Convention and exhibition centres, entertainment centres, sports stadiums, horse racing	Indoor sport and recreation, local sporting field, motor sport, park, outdoor sport and recreation
Market	market means the use of premises on a regular basis for— (a) selling goods to the public mainly from temporary structures, including, for example, stalls,	Car boot sales, farmers market, flea market	Shop, roadside stall

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	booths or trestle tables; or (b) providing entertainment, if the use is ancillary to the use in paragraph (a).		
Medium impact industry	medium impact industry means the use of premises for an industrial activity— (a) that is the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products; and (b) that a local planning instrument applying to the premises states is a medium impact industry; and (c) that complies with any thresholds for the activity stated in a local planning instrument applying to the premises, including, for example, thresholds relating to the number of products manufactured or the level of emissions produced by the activity.	Spray painting and surface coating, wooden and laminated product manufacturing (including cabinetmaking, joining, timber truss making or wood working), Note: For additional examples also refer to SC1.1.2 industry thresholds.	Concrete batching plant, chemically treating timber and plastic product manufacture, high impact industry, low impact industry, metal recovery (involving a fragmentiser), service industry, textile manufacture, tyre manufacturing and retreading, special industry.
Motor sport facility	motor sport facility means the use of premises for— (a) organised or recreational motor sports; or (b) facilities for spectators, including, for example, stands, amenities or food and drink outlets, if the use is ancillary to the use in paragraph (a).	Go-karting, lawn mower race tracks, 4WD and all terrain parks, motocross tracks, motorcycle or car race tracks, off road motorcycle facility, trail bike parks	Major sport, recreation and entertainment facility, outdoor sport, recreation

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Multiple dwelling	multiple dwelling means a residential use of premises involving 3 or more dwellings, whether attached or detached, for separate households.	Apartments, flats, townhouses, units, row housing	Dual occupancy, duplex, granny flat, residential care facility, retirement facility, rooming accommodation
Nature-based tourism	nature-based tourism means the use of premises for a tourism activity, including accommodation for tourists, for the appreciation, conservation or interpretation of— (a) an area of environmental, cultural or heritage value; or (b) a local ecosystem; or (c) the natural environment. •	Environmentally responsible accommodation facilities including lodges, cabins, huts and tented camps	Environment facility
Nightclub entertainment facility	nightclub entertainment facility means the use of premises for— (a) providing entertainment that is cabaret, dancing or music; or (b) selling liquor and preparing and selling food, for consumption on the premises; if the use is ancillary to the use in paragraph (a).		Club, hotel, indoor sport and recreation, pub, tavern, concert hall
Non-resident workforce accommodation	non-resident workforce accommodation means the use of premises for— (a) accommodation for non-resident workers; or (b) recreation and entertainment facilities for persons residing at the premises and their visitors, if the use is ancillary to the use in paragraph (a).	Construction camp, contractor's camp, single person's quarters, temporary workers accommodation	Relocatable home park, short-term accommodation, tourist park

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Office	office— (a) means the use of premises for— (i) providing an administrative, financial, management or secretarial service or function; or (ii) the practice of a profession; or (iii) providing business or professional advice or services; but (b) does not include premises used for making, selling or hiring goods.	Bank, real estate agent, administration building	Home based business, home office, outdoor sales, shop
Outdoor sales	outdoor sales means the use of premises for— (a) displaying, selling, hiring or leasing vehicles, boats, caravans, machinery, equipment or other similar products, if the use is mainly conducted outdoors; or (b) repairing, servicing, selling or fitting accessories for the products stated in paragraph (a), if the use is ancillary to the use in paragraph (a).	Agricultural machinery sales yard, motor vehicles sales yard	Bulk landscape supplies, market
Outdoor sport and recreation	outdoor sport and recreation means the use of premises for— (a) a recreation or sporting activity that is carried on outdoors and requires areas of open space; or (b) providing and selling food and drink, change room facilities or storage facilities, if the use is	Cricket oval, driving range, football ground, golf course, pony club, swimming pool, tennis courts	Major sport, recreation and entertainment facility, motor sport, park, community use

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	ancillary to the use in paragraph (a).		
Outstation	outstation means the use of premises for— (a) cultural or recreation activities by Aboriginal people or Torres Strait Islanders; or (b) facilities for short-term or long-term camping activities, if the use is ancillary to the use in paragraph (a).	Indigenous camp site	Dwelling house, hostel, multiple dwelling, relocatable home park, short term accommodation, tourist park
Park	park means the use of premises, accessible to the public free of charge, for sport, recreation and leisure activities and facilities.	Urban common	Outdoor sport and recreation, tourist attraction
Parking station	parking station means the use of premises for parking vehicles, other than parking that is ancillary to another use.	Car park, 'park and ride', bicycle parking	
Party house	party house means premises containing a dwelling that is used to provide, for a fee, accommodation or facilities for guests if— (a) guests regularly use all or part of the premises for parties (bucks parties, hens parties, raves, or wedding receptions, for example); and (b) the accommodation or facilities are provided for a period of less than 10 days; and (c) the owner of the premises does not occupy the premises during that period		
Permanent plantation	permanent plantation means the use of premises for growing, but not harvesting, plants for the carbon sequestration,	Permanent plantations for carbon sequestration, biodiversity or	Biofuel production, forestry for wood production

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	biodiversity, natural resource management or another similar purpose.	natural resource management	
Place of worship	<i>place of worship</i> means the use of premises for— (a) organised worship and other religious activities; or, (b) social, education or charitable activities, if the use is ancillary to the use in paragraph (a).	Chapel, church, mosque, synagogue, temple	Community use, child care centre, funeral parlour, crematorium
Relocatable home park	<i>relocatable home park</i> means the use of premises for— (a) relocatable dwellings for long-term residential accommodation; or (b) amenity facilities, food and drink outlets, a manager's residence, or recreation facilities for the exclusive use of residents, if the use is ancillary to the use in paragraph (a).		Tourist park
Renewable energy facility	<i>renewable energy facility</i> — (a) means the use of premises for the generation of electricity or energy from a renewable energy source, including, for example, sources of bio-energy, geothermal energy, hydropower, ocean energy, solar energy or wind energy; but (b) does not include the use of premises to generate electricity or energy that is to be used mainly on the premises.	Solar farm, tidal power, wind farm, hydroelectric power, geothermal power	Wind turbine or solar panels supplying energy to domestic or rural activities on the same site
Research and technology industry	<i>research and technology industry</i>	Aeronautical engineering,	

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	means the use of premises for an innovative or emerging industry that involves designing and researching, assembling, manufacturing, maintaining, storing or testing machinery or equipment.	computer component manufacturing, medical laboratories, computer server facility	
Residential care facility	<i>residential care facility</i> means the use of premises for supervised accommodation, and medical and other support services, for persons who— (a) can not live independently; and (b) require regular nursing or personal care.	Convalescent home, nursing home	Community residence, dual occupancy, dwelling house, hospital, multiple dwelling, retirement facility
Resort complex	<i>resort complex</i> means the use of premises for— (a) tourist and visitor accommodation that includes integrated leisure facilities; or <i>Examples of integrated leisure facilities—</i> bars, meeting and function facilities, restaurants, sporting and fitness facilities (b) staff accommodation that is ancillary to the use in paragraph (a); or (c) transport facilities for the premises, including, for example, a ferry terminal or air service.	Island resort	
Retirement facility	<i>retirement facility</i> means a residential use of premises for— (a) accommodation for older members of the community, or retired	Retirement village	Residential care facility

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	persons, in independent living units or services units; or (b) amenity and community facilities, a manager's residence, health care and support services, preparing food and drink or staff accommodation, if the use is ancillary to the use in paragraph (a).		
Roadside stall	roadside stall means the use of premises for the roadside display and sale of goods in a rural area.	Produce stall	Market
Rooming accommodation	rooming accommodation means the use of premises for— (a) residential accommodation, if each resident— (i) has a right to occupy 1 or more rooms on the premises; and (ii) does not have a right to occupy the whole of the premises; and (iii) does not occupy a self-contained unit, as defined in the <i>Residential Tenancies and Rooming Accommodation Act 2008</i>, schedule 2, or has only limited facilities available for private use; and (iv) shares other rooms, facilities, furniture or equipment outside of the resident's room with 1 or	Boarding house, hostel, monastery, off-site student accommodation	Hospice, community residence, dwelling house, short-term accommodation, multiple dwelling

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	more other residents, whether or not the rooms, facilities, furniture or equipment are on the same or different premises; or (b) a manager's residence, an office or providing food or other services to residents, if the use is ancillary to the use in paragraph (a).		
Rural industry	rural industry means the use of premises for— (a) storing, processing or packaging products from a rural use carried out on the premises or adjoining premises; or (b) selling products from a rural use carried out on the premises or adjoining premises, if the use is ancillary to the use in paragraph (a).	Packing shed	Abattoir, agricultural supply store, intensive animal husbandry, intensive horticulture, roadside stall, wholesale nursery, winery
Rural workers accommodation	rural worker's accommodation means the use of premises as accommodation, whether or not self-contained, for employees of a rural use, if— (a) the premises, and the premises where the rural use is carried out, are owned by the same person; and (b) the employees are not non-resident workers	Farm workers accommodation	Short-term accommodation building, caretaker's accommodation, dual occupancy, dwelling house, nature or rural based tourist accommodation, non-resident workers accommodation, multiple dwelling
Sales office	sales office means the use of premises for temporary display of land parcels or buildings that—	Display dwelling	Bank, office

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(a) are for sale or proposed to be sold; or (b) can be won as a prize in a competition		
Service industry	service industry means the use of premises for an industrial activity that— (a) does not result in off-site air, noise or odour emissions; and (b) is suitable for location with other non-industrial uses.	Audio visual equipment repair, bicycle repairs, clock and watch repairs, computer repairs, dry cleaning, film processing, hand engraving, jewellery making, laundromat, locksmith, picture framing, shoe repairs, tailor	Cabinet making, high impact industry, low impact industry, medium impact industry, special industry, shop fitting, sign writing, small engine mechanical repair workshop, tyre depot
Service station	service station means the use of premises for— (a) selling fuel, including, for example, petrol, liquid petroleum gas, automotive distillate or alternative fuels or (b) a food and drink outlet, shop, trailer hire, or maintaining, repairing, servicing or washing vehicles, if the use is ancillary to the use in paragraph (a).	Electric vehicle charging station	Car wash
Shop	shop means the use of premises for— (a) displaying, selling or hiring goods; or (b) providing personal services or betting to the public.	Betting agencies, department store, discount department store, discount variety store, hairdresser, liquor store, supermarket, corner store	Adult shop, food and drink outlet, showroom, market
Shopping centre	shopping centre means the use of premises for an integrated shopping complex consisting mainly of shops.		
Short-term accommodation	short-term accommodation — (a) means the use of premises for (i) providing accommodation	Backpackers, cabins, motel, serviced apartments, hotel accommodation,	Hostel, rooming accommodation, tourist park

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	of less than 3 consecutive months to tourists or travellers; or (ii) a manager's residence, office, or recreation facilities for the exclusive use of guests, if the use is ancillary to the use in subparagraph (i); but (b) does not include a hotel, nature-based tourism, resort complex or tourist park.	farm stay, serviced apartment	
Showroom	showroom means the use of premises for the sale of goods that are of— (a) a related product line; and (b) a size, shape or weight that requires— (i) a large area for handling, display or storage; and (ii) direct vehicle access to the building that contains the goods by members of the public to enable the loading and unloading of the goods.	Bulky goods sales, motor vehicles sales showroom, bulk stationary supplies	Food and drink outlet, shop, outdoor sales
Special industry	special industry means the use of premises for an industrial activity— (a) that is manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating products; and (b) that a local planning instrument applying to the premises states is a special industry; and	Tanneries, rendering plants, oil refineries, waste incineration, manufacturing or storing explosives, power plants, manufacturing fertilisers Note—additional examples may be shown in SC1.1.2 industry thresholds.	Low impact industry, medium impact industry, high impact industry, service industry

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(c) that complies with any thresholds for the activity states in a local planning instrument applying to the premises, including, for example, thresholds relating to the number of products manufactured or the level of emissions produced by the activity.		
Substation	substation means the use of premises— (a) as part of a transmission grid or supply network to— (i) convert or transform electrical energy from one voltage to another; or (ii) regulate voltage in an electrical circuit; or (iii) control electrical circuits; or (iv) switch electrical current between circuits; or (b) for a telecommunications facility for— (i) works, as defined under the Electricity Act, section 12(1); or workforce operational and safety communications	Substations, switching yards	Major electricity infrastructure, <i>minor electricity infrastructure</i>
Telecommunications facility	telecommunications facility means the use of premises for a facility that is capable of carrying communications and signals by guided or unguided electromagnetic energy.	Telecommunication tower, broadcasting station, television station	Aviation facility, 'low impact telecommunications facility' as defined under the <i>Telecommunications Act 1997</i>
Theatre	theatre means the use of premises for— (a) presenting movies, live entertainment or music to the public; or	Cinema, movie house, concert hall, dance hall, film studio, music recording studio	Community hall, hotel, indoor sport and recreation facility, temporary film studio

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	(b) the production of film or music; or (c) the following activities or facilities, if the use is ancillary to a use in paragraph (a) or (b) — (i) preparing and selling food and drink for consumption on the premises; (ii) facilities for editing and post-production; (iii) facilities for wardrobe, laundry and make-up; (iv) set construction workshops; (v) sound stages.		
Tourist attraction	<i>tourist attraction</i> means the use of premises for— (a) providing entertainment to, or a recreation facility for, the general public; or (b) preparing and selling food and drink for consumption on the premises, if the use is ancillary to the use in paragraph (a).	Theme park, zoo	Hotel, major sport, recreation and entertainment facility, nightclub entertainment facility
Tourist park	<i>tourist park</i> means the use of premises for— (a) holiday, accommodation in caravans, self-contained cabins, tents or other similar structures; or (b) amenity facilities, a food and drink outlet, a manager's residence, offices, recreation facilities for the use of occupants and their visitors, or staff accommodation, if the use is ancillary to the use in paragraph (a).	Camping ground, caravan park, holiday cabins	Relocatable home park, short-term accommodation building, tourist attraction, non-resident workforce accommodation

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
Transport depot	transport depot means the use of premises for— (a) storing vehicles, or machinery, that are used for a commercial or public purpose; or (b) cleaning, repairing or servicing vehicles or machinery, if the use is ancillary to the use in paragraph (a).	Premises used for storing buses, taxis, heavy vehicles or heavy machinery, contractors depot	Home based business, low impact industry, service industry, warehouse
Utility installation	utility installation means the use of premises for— (a) a service for supplying or treating water, hydraulic power or gas; or (b) a sewerage, drainage or stormwater service; or (c) a transport service; or (d) a waste management service; or (e) a maintenance depot, storage depot or other facility for a service stated in paragraphs (a) to (d).	Sewerage treatment plant, mail depot, pumping station, water treatment plant	Major electricity infrastructure, <i>minor electricity infrastructure</i> , renewable energy facility, substation, telecommunications tower, transport depot
Veterinary services	veterinary services means the use of premises for— (a) the medical or surgical treatment of animals; or (b) the short-term stay of animals, if the use is ancillary to the use in paragraph (a).		Animal keeping
Warehouse	warehouse means the use of premises for— (a) storing or distributing goods, whether or not carried out in a building; or (b) the wholesale of goods, if the use is	Self-storage sheds	Hardware and trade supplies, outdoor sales, shop, showroom

Regulated requirements		Guidance	
Column 1 Use term	Column 2 Use definition	Column 3 Examples include	Column 4 Does <u>not</u> include the following examples
	ancillary to the use in paragraph (a).		
Wholesale nursery	<i>wholesale nursery</i> means the use of premises for— (a) the wholesale of plants grown on or next to the premises; or (b) selling gardening materials, if the use is ancillary to the use in paragraph (a).		Bulk landscape supplies, garden centre
Winery	<i>winery</i> means the use of premises for— (a) making wine; or (b) selling wine that is made on the premises.		Rural industry

SC1.1.1 Defined activity groups

- (1) Defined uses listed in Table SC1.1.2 are able to be clustered into activity groups.
- (2) An activity group listed in column 1 clusters the defined uses listed in column 2.
- (3) An activity group is able to be referenced in Part 5.
- (4) The activity groups listed here are the defined activity groups for the purpose of the planning scheme.

Table SC1.1.1.1 – Index of defined activity groups

Index of defined activity groups		
- Accommodation activities - Business activities - Centre Activities	- Entertainment activities - Industry activities - Community activities	- Recreation activities - Rural activities - Other activities

Table SC1.1.1.2 – Defined activity groups

Column 1 Activity group	Column 2 Uses
Accommodation activities	- Caretaker's accommodation - Community residence - Detention facility - Dual occupancy - Dwelling house - Dwelling unit - Home based business - Multiple dwelling - Nature based tourism - Non-residential workforce accommodation - Relocatable home park - Residential care facility - Retirement facility - Rooming accommodation - Rural workers accommodation - Short-term accommodation - Tourist park
Business activities	- Adult store - Agricultural supplies store - Food and drink outlet - Garden centre - Hardware and trade supplies - Market - Office - Outdoor sales - Parking station - Sales office - Service station - Shop - Shopping centre - Showroom - Theatre - Veterinary services
Centre Activities	- Bar - Caretaker's accommodation - Child care centre - Community care centre - Community use - Educational establishment (where excluding exclusive outdoor recreation facilities)

Column 1 Activity group	Column 2 Uses
	• Food and drink outlet • Function facility • Health care services • Hospital • Hotel • Market • Multiple dwelling • Nightclub entertainment facility • Office • Parking station • Place of worship • Residential care facility • Retirement facility • Rooming accommodation • Sales office • Service industry • Service station • Shop • Shopping centre • Short-term accommodation • Showroom • Theatre
Community activities	• Cemetery • Child care centre • Community care centre • Crematorium • Community use • Educational establishment • Emergency services • Funeral parlour • Health care services • Hospital • Place of worship
Entertainment activities	• Club • Function facility • Hotel • Nightclub entertainment facility • Tourist attraction
Industry activities	• Extractive industry • High impact industry • Low impact industry • Medium impact industry • Service industry • Transport depot • Warehouse
Recreation activities	• Indoor sport and recreation • Major sport, recreation and entertainment facility • Motor sport facility • Outdoor sport and recreation • Park
Rural activities	• Animal husbandry • Animal keeping • Aquaculture • Cropping • Intensive animal industry • Intensive horticulture • Permanent plantation • Roadside stall • Rural industry • Wholesale nursery

Column 1 Activity group	Column 2 Uses
	• Winery
Other activities	• Air services • Major electricity infrastructure • Renewable energy facility • Substation • Telecommunications facility • Utility installation

SC1.1.2 Industry thresholds

- (1) The industry thresholds listed below are to be used in conjunction with the defined uses listed in Table SC1.1.2-low impact industry, medium impact industry, high impact industry and special industry.

Table SC1.1.2.1 – Industry thresholds

Use	Additional examples include
Low impact industry	(1) Repairing and servicing motor vehicles, including mechanical components, radiators, electrical components, wheel alignments, exhausts, tyres, suspension or air conditioning, not including spray painting; (2) Repairing and servicing lawn mowers and outboard engines; (3) Fitting and turning workshop; (4) Assembling or fabricating products from sheet metal or welding steel, producing less than 10 tonnes a year and not including spray painting; (5) Assembling wood products not involving cutting, routing, sanding or spray painting; (6) Dismantling automotive or mechanical equipment, not including debonding brake or clutch components.
Medium impact industry	(1) Metal foundry producing less than 10 tonnes of metal castings per annum; (2) Boiler making or engineering works producing less than 10 000 tonnes of metal product per annum; (3) Abrasive blasting facility using less than 10 tonnes of abrasive material per annum; (4) Enamelling workshop using less than 15 000 litres of enamel per annum; (5) Galvanising works using less than 100 tonnes of zinc per annum; (6) Anodising or electroplating workshop where tank area is less than 400 square metres; (7) Powder coating workshop using less than 500 tonnes of coating per annum; (8) Spray painting workshop (including spray painting vehicles, plant, equipment or boats) using less than 20 000 litres of paint per annum; (9) Scrap metal yard (not including a fragmentiser), dismantling automotive or mechanical equipment including debonding brake or clutch components; (10) Manufacturing clay or ceramic products including bricks, tiles, pipes and pottery goods, less than 200 tonnes per annum; (11) Processing, smoking, drying, curing, milling, bottling or canning food, beverages or pet food, less than 200 tonnes per annum; (12) Vegetable oil or oilseed processing in works with a design production capacity of less than 1000 tonnes per annum; (13) Manufacturing wooden products including cabinet making, joinery, wood working, producing less than 500 tonnes per annum; (14) Manufacturing medium density fibreboard, chipboard, particle board, plywood, laminated board or wood veneer products, less than 250 tonnes per annum; (15) Sawmilling, wood chipping and kiln drying timber and logs, producing less than 500 tonnes per annum; (16) Recycling and reprocessing batteries; (17) Manufacturing substrate for mushroom growing; (18) Recycling or reprocessing tyres including retreading; (19) Transport depot, distribution centre, contractors depot and storage yard; (20) Concrete batching and producing concrete products;

Use	Additional examples include
	(21) Manufacturing fibreglass, foam plastic, composite plastic or rigid fibre-reinforced plastic or plastic products, less than 5 tonnes per annum (except fibreglass boats, tanks and swimming pools); or (22) Reconditioning metal or plastic drums;
High -impact industry	(1) Metal foundry producing 10 tonnes or greater of metal castings per annum; (2) Boiler making or engineering works producing 10 000 tonnes or greater of metal product per annum; (3) Major hazard facility for the storage and distribution of dangerous goods not involving manufacturing processes; (4) Scrap metal yard including a fragmentiser; (5) Manufacturing clay or ceramic products including bricks, tiles, pipes and pottery goods, greater than 200 tonnes per annum; (6) Processing, smoking, drying, curing, milling, bottling or canning food, beverages or pet food, greater than 200 tonnes per annum; (7) Vegetable oil or oilseed processing in works with a design production capacity of greater than 1 000 tonnes per annum; (8) Manufacturing wooden products including cabinet making, joinery, wood working, producing greater than 500 tonnes per annum; (9) Manufacturing medium density fibreboard, chipboard, particle board, plywood, laminated board or wood veneer products, 250 tonnes or greater per annum; (10) Sawmilling, wood chipping and kiln drying timber and logs, producing greater than 500 tonnes per annum; (11) Manufacturing or processing plaster, producing greater than 5000 tonnes per annum; (12) Enamelling workshop using 15 000 litres or greater of enamel per annum; (13) Galvanising works using 100 tonnes or greater of zinc per annum; (14) Anodising or electroplating workshop where tank area is 400 square metres or greater; (15) Powder coating workshop using 500 tonnes or greater of coating per annum; (16) Spray painting workshop (including spray painting vehicles, plant, equipment or boats) using 20 000 litres or greater of paint per annum (17) Treating timber for preservation using chemicals including copper, chromium, arsenic, borax and creosote; (18) Manufacturing soil conditioners by receiving, blending, storing, processing, drying or composting organic material or organic waste, including animal manures, sewage, septic sludges and domestic waste; (19) Manufacturing fibreglass pools, tanks and boats; (20) Manufacturing, fibreglass, foam plastic, composite plastic or rigid fibre-reinforced plastic or plastic products, 5 tonnes or greater per annum (except fibreglass boats, tanks and swimming pools); (21) Manufacturing tyres, asbestos products, asphalt, cement; glass or glass fibre, mineral wool or ceramic fibre; (22) Abattoir; (23) Recycling chemicals, oils or solvents; (24) Waste disposal facility (other than waste incinerator); (25) Recycling, storing or reprocessing regulated waste; (26) Manufacturing batteries; (27) Manufacturing wooden products including cabinet making, joinery, wood working, producing greater than 500 tonnes per annum; or (28) Abrasive blasting facility using 10 tonnes or greater of abrasive material per annum.

SC1.2 Administrative terms and definitions

- (1) Administrative terms and definitions assist with the interpretation of the planning scheme but do not have meaning in relation to a use.
- (2) A term listed in table SC1.2.2 column 1 has the meaning set out beside that term in column 2 under the heading.
- (3) The administrative terms and definitions listed here are the terms and definitions for the purpose of the planning scheme.

Table SC1.2.1 – Index of administrative terms and definitions

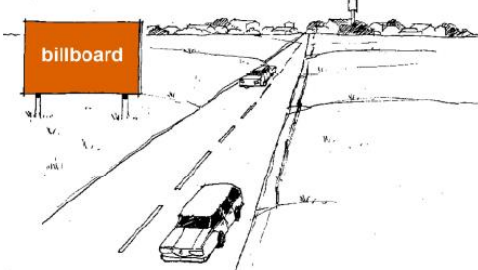
Index of administrative terms and definitions		
• Access strip* • Active transport* • Adjoining premises • Adversely impact on water quality* • Advertising device • Affordable housing • All weather access* • Ancillary * • Animal enclosure* • Annual exceedance probability (AEP)* • Apiculture* • Articulation* • Australian height datum (AHD)* • Average width • Aviary* • Aviation facilities* • Base date • Basement • Bed and breakfast* • Billboard* • Boundary clearance • Buffer* • Building* • Building height • Cattery* • Conductor shadow area (CSA)* • Corner lot* • Council* • Crime prevention through environmental design (CPTED)* • Defined flood event (DFE)* • Defined flood level (DFL)* • Demand unit	• Environmental harm* • Environmental nuisance* • Environmentally relevant activity (ERA)* • Equivalent demand unit* • Filling or excavation* • Floodplain* • Forest practice* • Freeboard* • Free range standards* • Gross floor area • Ground level • Habitable room* • Hazardous materials* • Heritage place* • High bank* • High impact activities* • High impact activity exclusion areas * • Horse keeping* • Home based child care* • Home occupation* • Household • Industrial home enterprise* • Kennel* • Key Resource Area* • Koala habitat tree* • Light refreshment booth* • Lot* • Low impact aquaculture* • Major recreation activities* • Minor building work • Minor electricity infrastructure • Minor filling and excavation* • Minor operational work*	• Non- domestic vehicles* • Non-juvenile koala habitat trees* • Non-resident worker • Outbuilding* • Outermost projection • Overland flow path* • Planning assumption • Plot ratio • Premises* • Primary street frontage* • Private open space* • Projection area* • Public open space* • Rail Trail activity* • Resource based tourism* • Road* • Secondary dwelling • Sensitive land use* • Service catchment • Setback • Site • Site cover • State-controlled road* • Storey • Streetscape* • Structure* • Temporary use • Threatened species* • Total Use Area* • Ultimate development • Urban Area* • Vulnerable uses* • Wastewater* • Waterbody* • Watercourse* • Water netserv plan

Index of administrative terms and definitions		
• Development footprint • Domestic pet* • Domestic outbuilding* • Dwelling	• Minor renewable energy facility* • Native vegetation* • Net developable area	• Wetland*

Note - * denotes where a term and definition is an addition to the Planning Regulation 2017- schedule 4 column 2.

Table SC1.2.2 – Administrative terms and definitions

Column 1 Administrative Term	Column 2 Definition
Access strip*	access strip means that part of a site which is used for providing access to a road.
Active transport*	active transport means Non-motorised travel such as walking and cycling.
Adjoining premises	adjoining premises means premises that share a common boundary, including premises that meet at a single point on a common boundary
Adversely impact on water quality*	adversely impact on water quality has the meaning as referred to Section 2.4 of the <i>Seqwater Development Guidelines – Development Guidelines for Water Quality Management in Drinking Water Catchments</i> (2010).
Advertising device	advertising device- means (a) a permanent sign, structure or other device used, or intended to be used, for advertising; and (b) includes a structure, or part of a building, the primary purpose of which is to support the sign, structure or device.
Affordable housing	affordable housing means housing that is appropriate to the needs of households with low to moderate incomes, if the members of the households will spend no more than 30% of gross income on housing costs.
All weather access*	all weather access means access which is capable of being traversed by a two wheel drive vehicle during and after a storm event with no significant damage or deformation to the Access. Maintenance will be performed to preserve the access as all weather. Drainage structures are to be placed in water courses that have flowing water greater than 200mm in depth during non storm events.
Ancillary*	ancillary means any use or activity incidental to and necessarily associated with the use of the premises.
Animal enclosure*	animal enclosure means a <i>building or structure</i> or other thing used for concentrating animals in a specific place. This can include roofed and unroofed enclosures e.g. pens, stockyards, roundyards, holding yards or stables. It does not include a normal stock fence for a paddock or a stock fence on a property boundary.
Annual exceedance probability (AEP)*	annual exceedance probability (AEP) means the likelihood of occurrence of a flood of a given size or larger in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500 cubic metres per second has an AEP of five percent, it means that there is a five percent risk (i.e. probability of 0.05 or a likelihood of one in 20) of a peak flood discharge of 500 cubic metres per second or larger occurring in any one year. The AEP of a flood event gives no indication of when a flood of that size will occur next. Note – definition from State Planning Policy (December 2013)
Apiculture*	apiculture means the use of premises for the keeping of bees in a hive.
Articulation*	articulation means designing a building, or the façade of a building, with clearly distinguishable parts.

Column 1 Administrative Term	Column 2 Definition
Australian height datum (AHD)*	Australian height datum (AHD) means the survey height datum adopted by the National Mapping Council as the datum to which all vertical control for mapping is to be referred. 0.0 metres AHD approximates mean sea level.
Average width	average width , of a lot, means the distance, measured in metres, between the midpoint on each side boundary of the lot.
Aviary*	aviary means the use of a premises for the keeping (including breeding, boarding or training) of birds, other than keeping a <i>domestic pet</i> .
Aviation facility*	aviation facility means a communication, navigation or surveillance facility identified in Appendix 1 of the State Planning Policy Guideline: Strategic Airports and Aviation Facilities. Note – aviation facilities are provided to assist the safe and efficient movement of aircraft, and may be located either on or off airport.
Base date	base date means the date from which the local government has estimated future infrastructure demand and costs for the local government area.
Basement	basement means a space— (a) between a floor level in a building and the floor level that is immediately below it; and (b) no part of which is more than 1m above ground level.
Bed and breakfast*	bed and breakfast means a home based business that:- (a) is a form of short term accommodation; and (b) is conducted in a dwelling house.
Billboard*	billboard is an advertising device not otherwise governed by Subordinate Local Law 1.4 (Installation of Advertising Devices) 2011 and which is free standing on one or more vertical supports, which is visible from a road or other public place and conveys information or directions of any kind (other than a structure or device displayed pursuant to the authority or requirements of an Act).  <i>Note: This is an indicative illustration</i>
Boundary clearance	boundary clearance means the distance between a building or structure on premises and the boundary of the premises and the boundary of the premises, measured from the part of the building or structure that is closest to the boundary, other than a part that is— (a) an architectural or ornamental attachment; or (b) a rainwater fitting. <i>Examples—</i> 1 If the fascia of a building is the part of the building that is closest to the boundary, the boundary clearance is the distance between the outside of the fascia and the boundary. 2 If a point on the roof of a building is the part of the building that is closest to the boundary, the boundary clearance is the distance between that point on the roof and the boundary.
Buffer*	buffer means an area of the land required for maintaining separation distances: (a) between different land uses; or (b) from a major noise source; or

Column 1 Administrative Term	Column 2 Definition
	(c) from a conservation area or a public recreation area; or (d) from a <i>wetland</i> or watercourse and water body. A buffer is not exclusive of other uses and may incorporate lower intensity activities which assist in mitigating the overall impact on external uses.
Building*	building means: (a) A building is a fixed structure that is wholly or partly enclosed by walls or is roofed. (b) The term includes a floating building and any part of a building. Note—definition from the <i>Building Act 1975</i>.
Building height	building height, of a building, means— (a) the vertical distance, measured in metres, between the <i>ground level</i> of the building and the highest point on the roof of the building, other than a point that is part of an aerial, chimney, flagpole or load-bearing antenna; or (b) the number of storeys in the building above <i>ground level</i>.
Cattery*	cattery means the use of a premises for the keeping (including breeding, boarding or training) of cats, other than keeping a <i>domestic pet</i> .
Conductor shadow area (CSA)*	conductor shadow area (CSA) means the area on the ground vertically below and between the overhead wires.
Corner lot*	corner lot means a lot bounded by two or more roads where the roads intersect or join.
Council*	The Somerset Regional Council.
Crime prevention through environmental design (CPTED)*	CPTED is a crime prevention philosophy based on proper design and effective use of the built environment leading to a reduction in the fear and incidence of crime, as well as an improvement in quality of life. The use of CPTED is intended to reduce crime and fear by reducing criminal opportunity and fostering positive social interaction among legitimate users of space. The emphasis is on prevention rather than apprehension and punishment.
Demand unit	demand unit means a unit of measurement for measuring the level of demand for infrastructure
Defined flood event (DFE)*	defined flood event (DFE) means the event, measured in terms of the likelihood of occurrence, and associated inundation level adopted by the Council to manage development, being the 1% AEP flood event. The level associated with the DFE is predicted to change over time due to the effect of climate change so is specific to a particular point in time or planning period.
Defined flood level (DFL)*	defined flood level means: (a) Where for habitable rooms of buildings: (i) level of the 1% AEP flood event plus 500mm where a 1% AEP flood event inundation line has been approved; or (ii) the highest recorded flood level where no 1% AEP flood event inundation line has been approved. (b) Where for vulnerable uses: (i) level of the 0.2% AEP flood event plus 500mm. (c) Where for non-habitable buildings (except for buildings classified under the Building Code of Australia as Class 7a and Class 10): (i) level of the 1% AEP flood event where a 1% AEP flood event inundation line has been approved; or (ii) the highest recorded flood level where no 1% AEP flood event inundation line has been approved.
Development footprint	development footprint, for development, means a part of the premises that the development relates to, including, for example, any part of the premises that, after the development is carried out, will be covered by— (a) buildings or structures, measured to their outermost projection; or

Column 1 Administrative Term	Column 2 Definition
	(b) landscaping or open space; or (c) facilities relating to the development; or (d) on-site stormwater drainage or wastewater treatment; or (e) a car park, road, access track or area used for vehicle movement; or (f) another area of disturbance.
Domestic pet*	domestic pet means an animal which is being kept: (a) in or about a <i>dwelling</i> for the interest, enjoyment or protection of residents of the dwelling; and (b) in accordance with the thresholds in Column 2 (Circumstances in which the keeping of animal or animals is prohibited) of Schedule 1 in Subordinate Local Law No. 2 (Animal Management) 2011. (c) in accordance with:- (i) Local Law No. 2 (Animal Management) 2011; (ii) Subordinate Local Law No. 2 (Animal Management) 2011; and (iii) Subordinate Local Law No. 1.5 (Keeping of Animals) 2011.
Domestic outbuilding	domestic outbuilding means a non-habitable class 10a building that is— (a) a shed, garage or carport; and (b) ancillary to a residential use carried out on the premises where the building is.
Dwelling	dwelling means all or part of a building that— (a) is used, or capable of being used, as a self-contained residence; and (b) contains— (i) food preparation facilities; and (ii) a bath or shower; and (iii) a toilet; and (iv) a wash basin; and (v) facilities for washing clothes
Environmental harm*	environmental harm means Any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance. Environmental harm may be caused by an activity: (a) whether the harm is a direct or indirect result of the activity; or (b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors. Note—definition from the <i>Environmental Protection Act 1994</i> .
Environmental nuisance*	environmental nuisance means an unreasonable interference or likely interference with an environmental value caused by: (a) noise, dust, odour, light; or (b) an unhealthy, offensive or unsightly condition because of contamination; or (c) another way prescribed by regulation. Note—definition from the <i>Environmental Protection Act 1994</i> .
Environmentally relevant activity (ERA)*	environmentally relevant activity means: (a) an agricultural ERA as defined under section 75 of the <i>Environmental Protection Act 1994</i> ; or (b) a mining activity as defined under section 147 of the <i>Environmental Protection Act 1994</i> ; or (c) a chapter 5A activity as defined under section 309A of the <i>Environmental Protection Act 1994</i> ; or (d) another activity prescribed under section 19 of the <i>Environmental Protection Act 1994</i> as an environmentally relevant activity. Note—definition from the <i>Environmental Protection Act 1994</i> .

Column 1 Administrative Term	Column 2 Definition
Equivalent demand unit*	A standard of unit measurement representing the consumption of capacity of a trunk infrastructure network by one detached dwelling.
Filling and excavation*	filling and excavation means removal or importation of material to, from or within a lot that will change the ground level of the land.
Floodplain*	floodplain means an area of land adjacent to a creek, river, estuary, lake, dam or artificial channel, which is subject to inundation by the defined flood event.
Forest practice*	forest practice means planting trees, or managing, felling and removing standing trees, on freehold land or indigenous land on which the State does not own the trees, for an ongoing forestry business in a - (a) plantation; or (b) native forest, if, in the native forest – i. all the activities are conducted in a way that is consistent with the accepted development vegetation clearing code applying to conducting a native forest practice; or ii. if the code does not apply to the activities, all the activities are conducted in a way that- A. ensures restoration of a similar type, and to the extent, of the removed trees; and B. ensures trees are only felled for the purpose of being sawn into timber or processed into another value added product (other than woodchips for an export market); and C. does not cause land degradation. The term includes carrying out limited associated work, including, for example, drainage, construction and maintenance of roads or vehicular tracks, and other necessary engineering works. The term does not include clearing vegetation for the initial establishment of a plantation.
Freeboard*	freeboard means 300mm above the <i>defined flood level</i> , which accounts for matters such as wave action and localised hydraulic behaviour which may cause a flood level to rise above the <i>defined flood level</i> .
Free range standards*	Free range standards means intensive animal industry, where for at least part of the day, poultry are able to roam within outdoors enclosures.
Gross floor area (GFA)*	gross floor area, for a building, means the total floor area of all of the building, measured from the outside of the external walls or corner posts and the centre of any common walls of the building, for all open structure, measured between the supporting points other than areas used for— (a) building services, plant or equipment; or (b) access between levels; or (c) a ground floor public lobby; or (d) a mall; or (e) parking, loading or manoeuvring vehicles; or (f) unenclosed private balconies, whether roofed or not

Column 1 Administrative Term	Column 2 Definition
Ground level	ground level means— (a) the level of the natural ground; or (b) if the level of the natural ground has changed, the level as lawfully changed
Habitable room*	habitable room means a room used for normal domestic activities, and: (a) includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom; but (b) excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods. Note—definition from the Building Code of Australia.
Hazardous materials*	hazardous material means a substance with potential to cause harm to persons, property or the environment because of one or more of the following: (a) the chemical properties of the substance (b) the physical properties of the substance (c) the biological properties of the substance Note - definition from SPP (2017) Note – reference should also be given to the <i>Dangerous Goods Safety Management Act 2001</i>
Heritage place*	heritage place means a place, area, land, landscape, building or work which is of cultural heritage significance. Note – refer to Planning Scheme Policy 2 – Local Heritage Places in Schedule 6.
High bank*	high bank means “outer bank” as defined by the <i>Water Act 2000</i> .
High impact activities*	high impact activities means any of the following uses: (a) animal keeping (kennel); (b) intensive animal industry (where over 150 standard cattle units, 1000 standard sheep units, 400 pig units, 1000 birds) (c) extractive industry (except where undertaken within a Key Resource Area or Local Resource Area as depicted on Extractive Resources Overlay OM005); or (d) motorsport facility.
High impact activity management areas*	high impact activity management areas means an areas shown as a High impact activity management area on the High impact activities management area overlay maps OM007a-b
Horse keeping*	horse keeping means the use of a premises for the keeping (including breeding, boarding or training) of horses, other than keeping a <i>domestic pet</i> .
Home based child care*	home based child care means <i>premises</i> used for the caring of a maximum of four non-resident children in a <i>dwelling</i> .
Home occupation*	home occupation means a <i>home based business</i> that: (a) is conducted only by residents of the <i>dwelling</i> ; (b) is located in the <i>dwelling</i> , <i>secondary dwelling</i> or <i>domestic outbuilding</i> ; (c) does not exceed a <i>gross floor area</i> of 20m ² or 10% whichever is the greater; (d) does not include any outside activity; (e) does not involve clients visiting the <i>premises</i> ; and (f) does not involve signage associated with the activity.

Column 1 Administrative Term	Column 2 Definition
Household	household means 1 or more individuals who— (a) live in a dwelling with the intent of living together on a long-term basis; and (b) make common provision for food and other essentials for living.
Industrial home enterprise*	industrial home enterprise means a home based business that involves one or more of the following activities:- (a) any form of vehicle repairs, services, detailing; (b) panel beating; (c) spray painting; (d) engine reconditioning, repairs; (e) wood working/manufacturing involving the use of power tools; (f) furniture manufacturing; (g) metal work; (h) welding.
Kennel*	kennel means the use of a premises for the keeping (including breeding, boarding or training) of dogs, other than keeping a <i>domestic pet</i> .
Key resource area*	key resource area means an area that contains extractive resources of state or regional significance and shown on the SPP Interactive Mapping System. This term includes the resource/processing area for the KRA, the separation area for the KRA and any associated transport route and transport route separation area. Note—definition from State Planning Policy (2017)
Koala habitat tree	koala habitat tree means a tree of any of the following genera— (a) <i>Angophora</i> ; (b) <i>Corymbia</i> ; (c) <i>Eucalyptus</i> ; (d) <i>Lophostemon</i> ; (e) <i>Melaleuca</i> . (Nature Conservation (Koala) Conservation Plan 2006)
Light refreshment booth*	light refreshment booth means a structure used to serve hot and cold food and drinks ancillary to a temporary <i>indoor sport and recreation</i> or <i>outdoor sport and recreation</i> use. A <i>light refreshment booth</i> may be a temporary structure or a permanent structure used intermittently, with a floor area not larger than 12m ² .
Lot*	lot means: (a) a lot under the <i>Land Title Act 1994</i> ; or (b) a separate, distinct parcel of land for which an interest is recorded in a register under the <i>Land Act 1994</i> ; or (c) common property for a community titles scheme under the <i>Body Corporate and Community Management Act 1997</i> ; or (d) a lot or common property to which the <i>Building Units and Group Titles Act 1980</i> continues to apply; or (e) a community or precinct thoroughfare under the <i>Mixed Use Development Act 1993</i> ; or (f) a primary or secondary thoroughfare under the <i>Integrated Resort Development Act 1987</i> or the <i>Sanctuary Cove Resort Act 1985</i> . Note—definition from the Act.
Low impact aquaculture*	low impact aquaculture means aquaculture that: (a) involves freshwater only; (b) where involving tanks, involves a total production area of not more than 2,000m (or 750m ² where oxygen injection is used); (c) where involving freshwater ponds, involves a total surface area of not more than 5 hectares; (d) does not cause discharge of waste into a natural waterway or waterbody including the release of water, material or products used in, or resulting from, the aquaculture activity.

Column 1 Administrative Term	Column 2 Definition
Major recreation activities*	major recreation activities means whether a recreation activity is a major recreation activity will be determined in conjunction with SRC having regard to the type, scale and intensity of the recreation activity.
Minor building work	minor building work means building work that increases the gross floor area of a building by no more than the lesser of the following— (a) 50m ² ; (b) an area equal to 5% of the gross floor area of the building
Minor electricity infrastructure	minor electricity infrastructure means development stated in the Planning Regulation 2017, schedule 6 <u>section 26(5)</u> .
Minor operational work*	minor operational work means any of the following is minor operational work: • Landscape work where: – not involving a structure other than a fence or boundary fence; or – not exceeding a cumulative site area of fifty square metres (over any period) where not in association with a material change of use or reconfiguring a lot; or – for the conservation or restoration of natural areas; or – associated with a <i>Dwelling House</i> (not involving a structure other than a fence or boundary fence); and – not involving land in an Extreme flood hazard area or High flood hazard area identified on Flood Hazard Overlay Map OM-006 except where the fence or boundary fence is not less than 50% permeable; • Vegetation clearing where: – essential management or routine management as defined and permitted by the <i>Planning Regulation 2017</i>; or – not involving vegetation in a protected area, wildlife habitat, regulated vegetation or legally secured offset area identified on Biodiversity Areas Overlay Maps OM-003; and – not involving vegetation in a watercourse buffer area identified on Catchment management overlay maps OM005a-b; and – not involving vegetation in a <i>wetland</i> buffer area identified on Biodiversity Areas Overlay Maps OM-003; and – not involving vegetation in a bushland koala habitat - primary habitat area or bushland koala habitat – secondary habitat area identified on Biodiversity Areas Overlay – Koala Conservation Maps OM-003c-d; and – not involving vegetation in a Catchment Management Buffer Area identified on Catchment management overlay maps OM005a-b; and – not involving vegetation in a High Scenic Amenity Area or Scenic Route Section Buffer Area identified on Scenic Amenity Overlay Map OM-012; and – not involving vegetation in a Landslide Hazard Area identified on Landslide Hazard Overlay Maps OM010a-b; and – exempt under any State legislation; and – associated with an existing <i>Dwelling House</i> and is necessary for the establishment of any ancillary <i>building, structure or infrastructure</i> and vegetation clearing will not exceed 1,000m² in area; and/or – associated with an existing <i>Rural Activity</i> and is necessary for the establishment of any ancillary <i>building, structure or infrastructure</i> and vegetation clearing will not exceed 5,000m² in area; and/or

Column 1 Administrative Term	Column 2 Definition
	– under a development approval for a material change of use or reconfiguring a lot if on a lot of less than 5 hectares in area; and – where for <i>community infrastructure</i>; – removal of vegetation that is not <i>native vegetation</i> where not otherwise protected. • <i>Filling and excavation</i> where: – <i>Minor filling and excavation</i>; and – not involving land in an Extreme flood hazard area or High flood hazard area identified on Flood Hazard Overlay Map OM-007; and • <i>Works for infrastructure</i> where for <i>Minor electricity infrastructure</i>. • <i>Works for infrastructure</i> where for the maintenance or repair of existing infrastructure: – in an on-maintenance period prior to transfer of ownership to a public entity; or – where for lawfully approved private infrastructure; or – where for lawfully approved gates and grids. • <i>Advertising device</i> where not a <i>billboard</i>.
Minor filling and excavation*	<i>minor filling and excavation</i> means: (a) changing the natural ground level by less than 1 metre in depth; (b) where less than: (i) 500m³ of material is filled or excavated in the Rural zone or Emerging community zone where the site is greater than 4 hectares in area; or (ii) 200m³ of material is filled or excavated in the Rural zone or Emerging community zone where the site is less than 4 hectares in area; or (iii) 50m³ of material is filled or excavated in any other zone. (c) is non-structural fill; (d) is not undertaken with a public utilities easement; (e) is not within 3 metres of an adjoining property; (f) is not within 3 metres of a public infrastructure item; (g) is not within an overland flow path; (h) is not within an area that is below an adopted flood level; (i) the fill is clean; (j) the site is not on a local or state heritage register; (k) batters do not exceed 1 in 8; (l) Has any necessary state permits; and (m) By-wash is in the same locations as the natural flow path as it leaves the property. Minor filling and excavation also means the creation of a dam on land which is 4 hectares or more in area and where the dam will have a height of 10 metres or less, a capacity of 750 megalitres or less and be located 5m or more from an adjoining property.
Minor renewable energy facility*	<i>minor renewable energy facility</i> means: (a) ancillary to an existing lawful use; (b) is not free standing e.g. it is attached to the roof of an existing building; (c) is intended to principally supply or offset energy use to the existing lawful use; and (d) does not exceed 5kW in capacity;

Column 1 Administrative Term	Column 2 Definition
Native vegetation*	native vegetation means vegetation as defined under the Vegetation Management Act 1999
Net developable area	net developable area , for premises, means the area of the premises that— (a) is able to be developed; and (b) is not subject to a development constraint, including, for example, a constraint relating to acid sulfate soils, flooding or slope.
Non-domestic vehicles*	non-domestic vehicles means Class 3 and above vehicle types identified in Chapter 5 Traffic Factors and Human Factors (August 2004) -Table 5.16 Austroads Vehicle Types (Main Roads, 2000) in Department of Main Roads Road Planning and Design Manual.
Non-juvenile koala habitat tree*	non-juvenile koala habitat tree means a <i>koala habitat tree</i> which has a height of more than 4m or a trunk with a circumference of more than 31.5cm at a height of 1.3m above ground.
Non-resident worker	non-resident worker means a person who— (a) performs work as part of— (i) a resource extraction project; or (ii) a project identified in a planning scheme as a major industry or infrastructure project; or (iii) a rural use; and (b) lives, for extended periods, in the locality of the project, but has a permanent residence elsewhere. <i>Example of a non-resident worker— a person engaged in fly-in/fly-out, or drive in/drive out, working arrangements</i>
Outbuilding*	outbuilding means a Class 10a building, as defined in the Building Code of Australia.
Outermost projection	outermost projection , of a building or structure, means the outermost part of the building or structure, other than a part that is— (a) a retractable blind; or (b) a fixed screen; or (c) a rainwater fitting; or (d) an ornamental attachment.
Overland flow path*	overland flow path means where a piped drainage system exists, the path where flood waters exceeding the capacity of the underground drainage system would flow. Where no piped drainage system or other form of defined watercourse exists, the path taken by surface run-off from higher parts of the catchment. This does not include a waterway or wetland.
Planning assumption	planning assumption means an assumption about the type, scale, location and timing of future growth in the local government area..
Plot ratio	plot ratio means the ratio of the gross floor area of a building on a site to the area of the site.
Premises*	premises means: (a) a building or other structure; or (b) land, whether or not a building or other structure is situated on the land. Note—definition from the Act.
Primary street frontage*	primary street frontage means: (a) where a lot is vacant, the frontage most commonly addressed by other buildings in the block as the front of the lot; or (b) where a lot is not vacant, the frontage to which the front of the existing building addresses the street.
Private open space*	private open space means an outdoor space for the exclusive use of occupants of a dwelling.
Projection area	projection area means a part of the local government area for which the local government has carried out demand growth projection.

Column 1 Administrative Term	Column 2 Definition
Public open space*	public open space means outdoor spaces that are generally accessible to the community and provide for a range of sport, recreation, cultural, entertainment or leisure pursuits.
Rail Trail activity	Rail Trail activity means outdoor activities allowable on the Brisbane Valley Rail Trail, including non-motorised bicycles, horse riding/carriages and pedestrian.
Resource based tourism*	resource based tourism means a form of short term accommodation that is connected to the natural, rural, cultural or heritage attributes of the setting or connected to recreational activities established at the site.
Road*	road means an area of land, whether surveyed or unsurveyed: (a) dedicated, notified or declared to be a road for public use; or (b) taken under an Act, for the purpose of a road for public use. The term includes: (c) a street, esplanade, reserve for esplanade, highway, pathway, thoroughfare, track or stock route; (d) a bridge, causeway, culvert or other works in, on, over or under a road; (e) any part of a road. Note—definition from the <i>Land Act 1994</i>.
Secondary dwelling	secondary dwelling means a dwelling, whether attached or detached, that is used in conjunction with, and subordinate to, a dwelling house on the same lot.
Sensitive land use*	sensitive land use means each of the following defined uses: (a) child care centre; (b) community care centre; (c) community residence; (d) dual occupancy; (e) dwelling house; (f) educational establishment; (g) health care services; (h) hospital; (i) multiple dwelling; (j) relocatable home park; (k) residential care facility; (l) retirement facility; (m) rooming accommodation; (n) short-term accommodation; (o) tourist park.
Service catchment	service catchment means an area serviced by an infrastructure network.
Setback	setback , for a building or structure, means the shortest distance, measured horizontally, between the outermost projection of the building or structure to the vertical projection of the boundary of the lot where the building or structure is.
Site	site, of development, means the land that the development is to be carried out on. <i>Examples—</i> 1 If development is to be carried out on part of a lot, the site of the development is that part of the lot. 2 If development is to be carried out on part of 1 lot and part of an adjoining lot, the site of the development is both of those parts.
Site cover	site cover , of development, means the portion of the site, expressed as a percentage, that will be covered by a building or structure, measured to its outermost projection, after the development is carried out, other than a building or structure, or part of a building or structure, that is—

Column 1 Administrative Term	Column 2 Definition
	(a) in a landscaped or open space area, including, for example, a gazebo or shade structure; or (b) a basement that is completely below ground level and used for car parking; or (c) the eaves of a building; or (d) a sun shade.
State-controlled road*	state-controlled road means a road or land, or part of a road or land, declared under section 24 [of the <i>Transport Infrastructure Act 1994</i>] to be a State-controlled road, and, for chapter 6, part 5, division 2, subdivision 2 [of the <i>Transport Infrastructure Act 1994</i>], see section 53 [of the <i>Transport Infrastructure Act 1994</i>]. Note—definition from the <i>Transport Infrastructure Act 1994</i>.
Storey	storey— means (a) a space within a building between 2 floor levels, or a floor level and a ceiling or roof, other than— (i) a space containing only a lift shaft, stairway or meter room; or (ii) a space containing only a bathroom, shower room, laundry, toilet or other sanitary compartment; or (iii) a space containing only a combination of the things stated in subparagraph (i) or (ii); or (iv) a basement with a ceiling that is not more than 1m above ground level; and (b) includes— (i) a mezzanine; and (ii) a roofed structure that is on, or part of, a rooftop, if the structure does not only accommodate building plant and equipment.
Streetscape*	streetscape means the collective combination of urban form elements that constitute the view of a street and its public and private domains. These elements include buildings, roads, footpaths, vegetation, open spaces and street furniture.
Structure*	structure means includes a wall or fence and anything fixed to or projecting from a building, wall, fence or other structure. Note—definition from the <i>Building Act 1975</i>.
Temporary use	temporary use means a use that— (a) is carried out on a non-permanent basis; and does not involve the construction of, or significant changes to, permanent buildings or structures.
Threatened species*	threatened species are defined under the Nature Conservation Act 1992.
Total use area*	total use area (TUA) in square metres is the sum of all the areas (exclusive of all walls and columns) of all storeys of a building which are used or intended for use for a particular purpose, plus any other area of a site which is used, or intended to be used, for the same purpose. The term does not include: (a) areas (inclusive of all walls and columns) of any lift wells, lift motor rooms, air conditioning and (b) associated mechanical or electrical plant and equipment rooms; (c) areas of any staircases; (d) areas of any common foyer where these are not being used for commercial or retail purposes; (e) areas of any public toilets; (f) areas of any staff toilets, washrooms, recreation areas and lunchrooms, provided that such areas (g) are not open to persons other than staff; and (h) areas used for the access, parking and associated manoeuvring of motor vehicles.

Column 1 Administrative Term	Column 2 Definition
Ultimate development	ultimate development , for an area or premises, means the likely extent of development that is anticipated in the area, or on the premises, if the area or premises are fully developed.
Urban area*	urban area means an area for urban purposes identified on the Strategic Framework maps (refer Schedule 2) as an <i>urban area</i> . Note- The <i>urban area</i> does not imply that all land included is suitable for development that is otherwise consistent with the Area.
Vulnerable uses*	Vulnerable uses means any one or more of the following: (a) childcare centre; (b) community care centre; (c) community residence; (d) community use; (e) detention facility; (f) educational establishment; (g) emergency services; (h) hospital; (i) non-resident workforce accommodation; (j) relocatable home park; (k) residential care facility; (l) retirement facility; (m) rooming accommodation; (n) rural workers' accommodation; and (o) tourist park.
Wastewater*	wastewater means an aqueous waste, including contaminated stormwater. Note-definition from Schedule 2 of the <i>Environmental Protection (Water) Policy 2009</i>
Waterbody*	waterbody means a dam or large standing area of water (or similar) that is identified as a waterbody on the planning scheme maps.
Watercourse*	watercourse means a creek, river, stream (or similar), that is identified as a watercourse in the planning scheme maps, whether the water is standing or intermittent.
Water netserv plan	water netserv plan means a plan adopted by an SEQ service provider, as defined in the <i>South-East Queensland Water (Distribution and Retail Restructuring) Act 2009</i> , under section 99BJ of that Act.
Wetland*	wetland means a physical environmental feature that is identified as "High Ecological Significance Wetlands" or "High Ecological Value Waters (wetlands)" on the Biodiversity overlay maps OM003e-f .

Schedule 2 Mapping

SC2.1 Map index

The table(s) below list any strategic framework, zoning and overlay maps applicable to the planning scheme area.

Editor's note—mapping for the LGIP is contained within Schedule 3 of the planning scheme.

Table SC2.1.1—Map index

Map number	Map title	Gazettal date	Amendment date
Strategic framework maps			
SFM-001	Settlement Pattern	5 February 2016	
SFM-001a	Settlement Pattern	5 February 2016	2 November 2020
SFM-001b	Settlement Pattern	5 February 2016	2 November 2020
SFM-001c	Settlement Pattern	5 February 2016	2 November 2020
SPM-001d	Desired Settlement Pattern: Emerging Community Areas	5 February 2016	
SPM-001e	Desired Settlement Pattern: Emerging Community Areas	5 February 2016	2 November 2020
SPM-001f	Desired Settlement Pattern: Emerging Community Areas	5 February 2016	2 November 2020
SPM-001g	Desired Settlement Pattern: Emerging Community Areas	5 February 2016	2 November 2020
SPM-001h	Desired Settlement Pattern: Emerging Community Areas	5 February 2016	
SFM-001i	Glamorgan Vale Urban Investigation Area Notional Development Scenario	5 February 2016	2 November 2020
SFM-002	Natural Environment	5 February 2016	
SFM-002a	Natural Environment	5 February 2016	2 November 2020
SFM-002b	Natural Environment	5 February 2016	2 November 2020
SFM-002c	Natural Environment	5 February 2016	2 November 2020
SFM-003A	Community Identity and Regional Landscape Character	5 February 2016	
SFM-003Aa	Community Identity and Regional Landscape Character	5 February 2016	2 November 2020
SFM-003Ab	Community Identity and Regional Landscape Character	5 February 2016	2 November 2020
SFM-003Ac	Community Identity and Regional Landscape Character	5 February 2016	2 November 2020
SFM-003B	Community Identity and Regional Landscape Character	5 February 2016	
SFM-003Ba	Community Identity and Regional Landscape Character	5 February 2016	
SFM-003Bb	Community Identity and Regional Landscape Character	5 February 2016	
SFM-003Bc	Community Identity and Regional Landscape Character	5 February 2016	

Map number	Map title	Gazettal date	Amendment date
SFM-003C	Town Identity – Esk	5 February 2016	
SFM-003D	Town identity – Fernvale	5 February 2016	
SFM-003E	Town Identity – Kilcoy	5 February 2016	
SFM-003F	Town Identity – Lowood	5 February 2016	
SFM-003G	Town Identity - Toogoolawah	5 February 2016	
SFM-004	Economic Development and Natural Resources	5 February 2016	2 November 2020
SFM-004a	Economic Development and Natural Resources	5 February 2016	2 November 2020
SFM-004b	Economic Development and Natural Resources	5 February 2016	2 November 2020
SFM-004c	Economic Development and Natural Resources	5 February 2016	2 November 2020
SFM-005	Access, Mobility and Infrastructure	5 February 2016	2 November 2020
SFM-005a	Access, Mobility and Infrastructure	5 February 2016	2 November 2020
SFM-005b	Access, Mobility and Infrastructure	5 February 2016	2 November 2020
SFM-005c	Access, Mobility and Infrastructure	5 February 2016	
SFM-006	Water Supply	5 February 2016	
SFM-007	Tourism Strategy	5 February 2016	
Zone maps			
ZM-001a	Regional Zone Map	5 February 2016	2 November 2020
ZM-001b	Regional Zone Map	5 February 2016	2 November 2020
ZM-002	Esk	5 February 2016	2 November 2020
ZM-003	Fernvale	5 February 2016	2 November 2020
ZM-004	Kilcoy	5 February 2016	2 November 2020
ZM-005	Lowood	5 February 2016	2 November 2020
ZM-006	Toogoolawah	5 February 2016	2 November 2020
ZM-007a	Coominya, Glamorgan Vale, Harlin, Jimna and Linville	5 February 2016	2 November 2020
ZM-007b	Minden, Moore, Somerset Dam and Tarampa	5 February 2016	2 November 2020
ZM-008	Minden North Rural Residential	5 February 2016	
Overlay maps			
OM-01a	Agricultural Land Overlay	5 February 2016	
OM-01b	Agricultural Land Overlay	5 February 2016	
OM-002	Air Transport Overlay	5 February 2016	2 November 2020
OM-003a	Biodiversity Overlay	5 February 2016	2 November 2020
OM-003b	Biodiversity Overlay	5 February 2016	2 November 2020
OM-003c	Biodiversity Overlay —Koala Conservation	5 February 2016	
OM-003d	Biodiversity Overlay —Koala Conservation	5 February 2016	

Map number	Map title	Gazettal date	Amendment date
OM-003e	Biodiversity Overlay —Wetlands	5 February 2016	
OM-003f	Biodiversity Overlay —Wetlands	5 February 2016	
OM-004a	Bushfire Hazard Overlay	5 February 2016	2 November 2020
OM-004b	Bushfire Hazard Overlay	5 February 2016	2 November 2020
OM-005a	Catchment Management Overlay	5 February 2016	2 November 2020
OM-005b	Catchment Management Overlay	5 February 2016	2 November 2020
OM-006a	Extractive Resources Overlay	5 February 2016	
OM-006b	Extractive Resources Overlay	5 February 2016	
OM-007a	Flood Hazard Overlay	5 February 2016	2 November 2020
OM-007b	Flood Hazard Overlay	5 February 2016	2 November 2020
OM-007c	Flood Hazard Overlay— Esk	5 February 2016	2 November 2020
OM-007d	Flood Hazard Overlay—Fernvale	5 February 2016	2 November 2020
OM-007e	Flood Hazard Overlay— Kilcoy	5 February 2016	2 November 2020
OM-007f	Flood Hazard Overlay— Lowood	5 February 2016	2 November 2020
OM-007g	Flood Hazard Overlay— Toogoolawah	5 February 2016	2 November 2020
OM-008a	High Impact Activities Management Area Overlay	5 February 2016	
OM-008b	High Impact Activities Management Area Overlay	5 February 2016	
OM-009a	Infrastructure Overlay	5 February 2016	
OM-009b	Infrastructure Overlay	5 February 2016	
OM-009c	Infrastructure Overlay	5 February 2016	
OM-009d	Infrastructure Overlay	5 February 2016	2 November 2020
OM-009e	Infrastructure Overlay	5 February 2016	
OM-009f	Infrastructure Overlay	5 February 2016	2 November 2020
OM-009g	Infrastructure Overlay: Kilcoy, Esk, Toogoolawah, Lowood and Fernvale	5 February 2016	2 November 2020
OM-0010a	Landslide Hazard Overlay	5 February 2016	
OM-0010b	Landslide Hazard Overlay	5 February 2016	
OM-011a	Local Heritage Register Overlay	5 February 2016	
OM-011b	Local Heritage Register Overlay	5 February 2016	
OM-011c	Local Heritage Register Overlay	5 February 2016	
OM-011d	Local Heritage Register Overlay	5 February 2016	
OM-012a	Scenic Amenity Overlay	5 February 2016	
OM-012b	Scenic Amenity Overlay	5 February 2016	
OM-013a	Stock Route Overlay	5 February 2016	2 November 2020
OM-013b	Stock Route Overlay	5 February 2016	

SC2.2 Strategic framework maps

Refer to Volume 2 of the planning scheme for strategic framework maps.

SC2.3 Zone maps

Refer to Volume 2 of the planning scheme for zone maps.

SC2.4 Local plan maps

There are no local plan maps.

SC2.5 Overlay maps

Refer to Volume 2 of the planning scheme for overlay maps.

SC2.6 Other plans maps

There are no other plans maps.

Schedule 3 Local government infrastructure plan mapping and tables

SC3.1 Planning assumption tables

Table SC3.1.1—Existing and projected population

Column 1 Projection Area	Column 2 LGIP development type	Column 3 Existing and projected population					
		2011 (Existing)	2016	2021	2026	2031	Ultimate development (capacity)
Esk	Single dwelling	915	926	947	977	1,057	1,687
	Multiple dwelling	20	20	20	21	23	36
	Other dwelling	30	30	31	32	34	55
	Total	964	976	998	1,030	1,114	1,778
Fernvale	Single dwelling	1,518	2,030	2,607	3,086	3,050	2,972
	Multiple dwelling	32	43	56	66	65	64
	Other dwelling	49	66	85	100	99	97
	Total	1,600	2,140	2,747	3,252	3,214	3,132
Kilcoy	Single dwelling	2,003	2,219	2,400	2,552	2,608	2,894
	Multiple dwelling	43	47	51	55	56	62
	Other dwelling	65	72	78	83	85	94
	Total	2,111	2,338	2,529	2,690	2,749	3,050
Lowood	Single dwelling	1,820	2,419	3,054	3,722	3,694	3,660
	Multiple dwelling	39	52	65	80	79	78
	Other dwelling	59	79	99	121	120	119
	Total	1,918	2,549	3,218	3,923	3,893	3,857
Toogoolawah	Single dwelling	985	1,009	1,035	1,051	1,114	1,483

Column 1 Projection Area	Column 2 LGIP development type	Column 3					
		Existing and projected population					
		2011 (Existing)	2016	2021	2026	2031	Ultimate development (capacity)
	Multiple dwelling	21	22	22	22	24	32
	Other dwelling	32	33	34	34	36	48
	Total	1,039	1,063	1,090	1,107	1,175	1,563
Inside PIA (total)	Single dwelling	7,241	8,603	10,041	11,388	11,524	12,695
	Multiple dwelling	155	184	215	244	247	272
	Other dwelling	235	280	326	370	374	413
	Total	7,631	9,067	10,582	12,002	12,145	13,379
Outside PIA (total)	Single dwelling	14,218	15,703	17,216	18,611	21,132	31,791
	Multiple dwelling	304	336	368	398	452	680
	Other dwelling	462	510	559	605	687	1,033
	Total	14,984	16,549	18,143	19,614	22,271	33,504
Somerset Regional Council	Single dwelling	21,459	24,306	27,257	29,999	32,656	44,486
	Multiple dwelling	459	520	583	642	699	952
	Other dwelling	697	790	886	975	1,061	1,446
	Total	22,616	25,616	28,726	31,616	34,416	46,883

Table SC3.1.2—Existing and projected employees

Column 1 Projection Area	Column 2 LGIP development type	Column 3 Existing and projected employees				
		2011 (Existing)	2016	2021	2026	Ultimate
Esk	Retail	24	24	24	25	38
	Commercial	56	57	58	59	94
	Industry	26	26	27	28	45
	Community Purposes	13	13	13	13	20
	Rural and Other Uses	31	31	32	33	52
	Total	150	151	154	158	249
Fernvale	Retail	43	54	66	76	74
	Commercial	151	190	234	271	262
	Industry	95	120	148	171	166
	Community Purposes	25	32	40	46	45
	Rural and Other Uses	65	81	99	114	111
	Total	379	477	587	679	657
Kilcoy	Retail	66	71	75	78	86
	Commercial	153	165	175	183	201
	Industry	330	355	376	394	434
	Community Purposes	47	50	53	56	61
	Rural and Other Uses	119	129	138	145	162
	Total	714	770	817	856	945
Lowood	Retail	44	55	67	80	79
	Commercial	127	159	192	227	224
	Industry	108	135	163	193	191
	Community Purposes	29	36	43	51	50
	Rural and Other Uses	75	95	117	139	137
	Total	383	480	583	691	680
Toogoolawah	Retail	26	27	27	27	37

Column 1 Projection Area	Column 2 LGIP development type	Column 3				
		Existing and projected employees				
		2011 (Existing)	2016	2021	2026	Ultimate
	Commercial	68	69	70	71	93
	Industry	45	46	47	48	63
	Community Purposes	23	24	24	24	32
	Rural and Other Uses	38	39	40	41	55
	Total	201	205	209	211	279
Inside PIA (total)	Retail	202	230	260	287	313
	Commercial	555	639	729	811	875
	Industry	604	682	761	833	897
	Community Purposes	137	155	173	191	208
	Rural and Other Uses	328	376	426	472	516
	Total	1,827	2,083	2,349	2,595	2,810
Outside PIA (total)	Retail	400	423	447	469	703
	Commercial	699	772	846	916	1,655
	Industry	754	809	868	924	1,538
	Community Purposes	390	410	431	451	629
	Rural and Other Uses	960	1,044	1,131	1,211	1,839
	Total	3,202	3,459	3,724	3,971	6,363
Somerset Regional Council	Retail	602	653	707	756	1,016
	Commercial	1,254	1,412	1,575	1,727	2,530
	Industry	1,358	1,491	1,629	1,758	2,435
	Community Purposes	526	565	605	642	838
	Rural and Other Uses	1,288	1,420	1,557	1,684	2,355
	Total	5,029	5,541	6,073	6,566	9,174

Table SC3.1.3—Planned density and demand generation rate for a trunk infrastructure network

Column 1 Zone	Column 2 Precinct	Column 3 Planned density		Column 4 Demand generation rate for a trunk infrastructure network		
		Non-residential density (floor space/net dev Ha)	Residential density (dwellings/ net dev ha)	Transport network (EDUs/ net dev ha)	Stormwater network (EDUs / Lot)	Public Parks and community land network (EDUs/ net dev ha)
Residential development						
Emerging Community		Refer to relevant assumptions for the Zone or Precinct that appropriately reflects the intended land use outcome as per the Strategic Framework in Section 3.3.2.2 of the Planning Scheme.				
General Residential			9.33	9	1	9
General Residential	Park Residential		2	2	NA	2
Rural Zone			0.01	1	NA	1
Rural Residential			2	2	NA	2
Township Zone			5	5	1	5 (Residential lots only)
Non-residential development						
Centre		Retail – 60% Commercial – 80%		44	1	NA
Industry		60%		22	1	NA
High Impact Industry		60%		22	1	NA
Community Facilities		80%		Determined at time of assessment	1	NA

Table SC3.1.4—Existing and projected residential dwellings

Column 1 Projection Area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings					
		2011 (Existing)	2016	2021	2026	2031	Ultimate development (capacity)
Esk	Single dwelling	349	360	372	390	429	700
	Multiple dwelling	11	11	12	12	13	22
	Other dwelling	15	15	16	17	18	30
	Total	375	386	399	419	460	752
Fernvale	Single dwelling	580	788	1,024	1,232	1,237	1,234
	Multiple dwelling	18	24	32	38	38	38
	Other dwelling	25	34	44	53	53	53
	Total	623	846	1,099	1,323	1,328	1,325
Kilcoy	Single dwelling	765	862	943	1,019	1,058	1,201
	Multiple dwelling	24	27	29	32	33	37
	Other dwelling	33	37	40	44	45	51
	Total	822	925	1,012	1,094	1,136	1,290
Lowood	Single dwelling	695	939	1,200	1,486	1,498	1,519
	Multiple dwelling	22	29	37	46	46	47
	Other dwelling	30	40	51	63	64	65
	Total	746	1,008	1,288	1,595	1,609	1,631
Toogoolawah	Single dwelling	376	392	406	419	452	616
	Multiple dwelling	12	12	13	13	14	19
	Other dwelling	16	17	17	18	19	26
	Total	404	421	436	450	485	661
Inside PIA (total)	Single dwelling	2,766	3,340	3,944	4,546	4,674	5,271

Column 1 Projection Area	Column 2 LGIP development type	Column 3					
		Existing and projected residential dwellings					
		2011 (Existing)	2016	2021	2026	2031	Ultimate development (capacity)
	Multiple dwelling	86	103	122	141	145	163
	Other dwelling	118	143	169	194	200	225
	Total	2,970	3,587	4,235	4,881	5,018	5,659
Outside PIA (total)	Single dwelling	5,432	6,097	6,763	7,429	8,570	13,199
	Multiple dwelling	168	189	209	230	265	408
	Other dwelling	232	261	289	317	366	564
	Total	5,832	6,547	7,261	7,977	9,202	14,171
Somerset Regional Council	Single dwelling	8,198	9,438	10,707	11,975	13,244	18,469
	Multiple dwelling	254	292	331	371	410	572
	Other dwelling	350	403	458	512	566	789
	Total	8,802	10,133	11,496	12,857	14,219	19,830

Table SC3.1.5—Existing and projected non-residential floor space

Column 1 Projection Area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m ² GFA)				
		2011 (Existing)	2016	2021	2026	Ultimate
Esk	Retail	591	596	606	620	945
	Commercial	1,127	1,138	1,158	1,188	1,889
	Industry	3,901	3,942	4,017	4,129	6,720
	Community Purposes	252	254	258	264	401
	Rural and Other Uses	2,490	2,515	2,559	2,625	4,158
	Total	8,362	8,446	8,598	8,826	14,113
Fernvale	Retail	1,065	1,340	1,649	1,906	1,845
	Commercial	3,014	3,800	4,685	5,420	5,245
	Industry	14,321	18,024	22,190	25,653	24,831
	Community Purposes	505	644	799	928	897
	Rural and Other Uses	5,167	6,468	7,931	9,148	8,859
	Total	24,072	30,275	37,253	43,056	41,678
Kilcoy	Retail	1,648	1,771	1,874	1,961	2,156
	Commercial	3,062	3,296	3,493	3,659	4,030
	Industry	49,435	53,219	56,397	59,076	65,073
	Community Purposes	936	1,006	1,065	1,115	1,227
	Rural and Other Uses	9,525	10,351	11,045	11,629	12,938
	Total	64,605	69,643	73,873	77,439	85,423
Lowood	Retail	1,096	1,380	1,681	1,998	1,969
	Commercial	2,544	3,172	3,838	4,539	4,474
	Industry	16,224	20,251	24,519	29,013	28,594
	Community Purposes	575	715	863	1,018	1,004
	Rural and Other Uses	6,008	7,626	9,341	11,146	10,978
	Total	26,448	33,144	40,242	47,714	47,018
Toogoolawah	Retail	651	664	678	686	918

Column 1 Projection Area	Column 2 LGIP development type	Column 3				
		Existing and projected non-residential floor space (m ² GFA)				
		2011 (Existing)	2016	2021	2026	Ultimate
	Commercial	1,358	1,381	1,407	1,423	1,858
	Industry	6,788	6,912	7,047	7,132	9,405
	Community Purposes	466	474	483	489	638
	Rural and Other Uses	3,072	3,133	3,200	3,241	4,363
	Total	12,335	12,565	12,816	12,972	17,182
Inside PIA (total)	Retail	5,051	5,751	6,488	7,171	7,833
	Commercial	11,104	12,788	14,581	16,230	17,495
	Industry	90,669	102,349	114,170	125,002	134,622
	Community Purposes	2,734	3,093	3,468	3,814	4,167
	Rural and Other Uses	26,263	30,093	34,076	37,790	41,296
	Total	135,822	154,073	172,782	190,007	205,414
Outside PIA (total)	Retail	10,005	10,586	11,176	11,726	17,579
	Commercial	13,980	15,450	16,926	18,315	33,096
	Industry	113,086	121,373	130,250	138,653	230,646
	Community Purposes	7,791	8,202	8,625	9,021	12,586
	Rural and Other Uses	76,778	83,498	90,453	96,902	147,089
	Total	221,640	239,109	257,430	274,616	440,995
Somerset Regional Council	Retail	15,056	16,337	17,664	18,897	25,412
	Commercial	25,085	28,238	31,507	34,544	50,591
	Industry	203,755	223,721	244,420	263,655	365,268
	Community Purposes	10,525	11,295	12,093	12,835	16,753
	Rural and Other Uses	103,041	113,591	124,528	134,692	188,385
	Total	357,462	393,182	430,212	464,623	646,409

SC3.2 Schedules of works

Table SC3.2.1A – Transport (Roads) schedule of works

MAP REFERENCE	ASSET TYPE	ROAD NAME	HIERARCHY	LENGTH (m)	TIMING	ESTABLISHMENT ¹⁹ COST	Tonoonlawah (TR1)	Esk (TR2)	Lowood (TR3)	Fernvale (TR4)	Kilcoy (TR5)	Remainder of Shire
TRF01	Road	McCulkins La	Dual Carraigeway	600	2015	\$1,264,244				Y		
TRF02	Road	Vogler Rd	Trunk Collector	454	2021	\$596,912				Y		
TRF03	Road	Beeston Dr	Collector Street	406	2016	\$423,361				Y		
TRF04	Road	Allen Rd	Collector Street	596	2012	\$595,211				Y		
TRF05	Road	Future Link #4	Trunk Collector	1,864	2021	\$3,269,186				Y		
TRF06	Road	Kerr St	Collector Street	1,189	2041	\$1,817,801					Y	
TRF07	Road	Carseldine St	Collector Street	794	2041	\$1,213,814					Y	
TRF08	Road	Glenhaven Drive	Collector Street	759	2036	\$1,160,326					Y	
TRF09	Road	Northern Link Road	Trunk Collector	1,321	2041	\$2,391,942					Y	
TRF10	Road	Hedley Drive	Collector Street	575	2016	\$852,794					Y	
TRF11	Road	Northern Link Road	Trunk Collector	3,321	2041	\$6,014,596					Y	
TRF12	Road	Muckerts Lane	Dual Carraigeway	227	2031	\$619,720				Y		
TRF13	Road	Future Link #4	Trunk Collector	796	2021	\$1,396,419				Y		
TRF14	Road	Future Link #4	Trunk Collector	447	2036	\$612,635				Y		
TRF15	Road	Unnamed Road	Collector Street	694	2021	\$1,029,151				Y		
TRF16	Road	Beeston Dr	Collector Street	142	2016	\$148,117				Y		
TRF17	Road	Chatham St	Collector Street	341	2021	\$356,280				Y		
TRF18	Road	Chatham St	Collector Street	495	2021	\$516,619				Y		
TRF19	Road	Graham Rd	Collector Street	342	2021	\$357,240				Y		
TRF20	Road	Mcculkins La	Dual Carraigeway	809	2041	\$1,851,966				Y		
TRF21	Road	Millar Road	Dual Carraigeway	66	2041	\$150,932				Y		
TRF22	Road	Millar Road	Dual Carraigeway	544	2041	\$1,244,095				Y		
TRF23	Road	Fairney View - Fernvale Rd	Dual Carraigeway	145	2041	\$331,864				Y		
TRF24	Road	Fairney View - Fernvale Rd	Trunk Collector	1,404	2021	\$1,845,246				Y		
TRF25	Road	Sea Eagle Drive - Peregrine Drive Connection	Collector Street	595	2016	\$882,572			Y			
TRF27	Road	Muckerts Lane	Dual Carraigeway	1,377	2041	\$3,151,047				Y		

¹⁹The establishment cost is expressed in current cost terms as at the base date.

MAP REFERENCE	ASSET TYPE	ROAD NAME	HIERARCHY	LENGTH (m)	TIMING	ESTABLISHMENT ¹⁹ COST	Toogoolawah (TR1)	Esk (TR2)	Lowood (TR3)	Fernvale (TR4)	Kilcoy (TR5)	Remainder of Shire
TRF28	Road	Muckerts Lane	Dual Carraigeway	728	2041	\$1,665,657				Y		
TRF29	Road	Northern Link Road	Trunk Collector	1,321	2041	\$1,810,878					Y	
TRF30	Road	New Road	Collector Street	90	2031	\$98,445				Y		
TRF31	Road	Winya Road	Collector Street	864	2021	\$901,550	Y	Y	Y	Y	Y	Y
TRF32	Road	Winya Road	Collector Street	222	2021	\$231,334	Y	Y	Y	Y	Y	Y
TRF33	Road	Carseldine Street	Collector Street	173	2041	\$187,927					Y	
TRF34	Road	Lindemans Road	Trunk Collector	161	2031	\$220,635			Y			
TRF35	Road	Allen Rd	Collector Street	146	2021	\$152,365				Y		
TRF36	Road	Brouff Road	Trunk Collector	410	2031	\$562,105				Y		
TRF37	Road	Muckerts Lane	Dual Carraigeway	786	2031	\$1,798,170				Y		
TRF38	Road	Vogler Rd	Trunk Collector	248	2021	\$325,625				Y		
TRF39	Road	Kerr St	Collector Street	50	2021	\$52,239					Y	
TRF40	Road	Kerr St	Collector Street	91	2021	\$94,918					Y	
TRF41	Road	Kerr St	Collector Street	112	2021	\$116,377					Y	
TOTAL						\$42,312,317						

Table SC3.2.1B – Transport (Intersections) schedule of works

MAP REFERENCE	ASSET TYPE	ROAD NAME	TIMING	ESTABLISHMENT ²⁰ COST	Toogoolawah (TR1)	Esk (TR2)	Lowood (TR3)	Fernvale (TR4)	Kilcoy (TR5)	Remainder of Shire
INTF04	Prioritised Intersection	Graham Rd and Fairney View-Fernvale Rd	2021	\$218,575				Y		
INTF06	Prioritised Intersection	No Name Available	2021	\$218,575				Y		
INTF18	Prioritised Intersection	No Name Available	2036	\$228,078				Y		
INTF20	Prioritised Intersection	Honeywood Dr and Fairney View-Fernvale Rd	2021	\$218,575				Y		
INTF21	Prioritised Intersection	Chatham St and Clive St	2021	\$218,575				Y		
INTF22	Prioritised Intersection	Honeywood Dr and Fernvale Rd	2016	\$218,575				Y		

²⁰ The establishment cost is expressed in current cost terms as at the base date.

MAP REFERENCE	ASSET TYPE	ROAD NAME	TIMING	ESTABLISHMENT ²⁰ COST	Toogoolawah (TR1)	Esk (TR2)	Lowood (TR3)	Fernvale (TR4)	Kilcoy (TR5)	Remainder of Shire
INTF23	Prioritised Intersection	Muckerts La and Fernvale Rd	204 1	\$228,078				Y		
INTF24	Prioritised Intersection	Vogler Rd, Natan Rd and Brouff Rd	201 6	\$218,575				Y		
INTF25	Prioritised Intersection	Old Fernvale Rd and Vogler Rd	203 1	\$228,078				Y		
INTF26	Prioritised Intersection	Muckerts La and Old Fernvale Rd	203 1	\$228,078				Y		
INTF27	Prioritised Intersection	No Name Available	203 1	\$228,078				Y		
INTF29	Prioritised Intersection	No Name Available	203 6	\$228,078					Y	
INTF30	Prioritised Intersection	No Name Available	204 1	\$228,078					Y	
INTF31	Prioritised Intersection	William St and Mary St	202 6	\$228,078					Y	
INTF34	Prioritised Intersection	No Name Available	204 1	\$228,078					Y	
INTF37	Prioritised Intersection	Hedley Drive and Northern Link Road	204 1	\$228,078					Y	
TOTAL				\$3,592,230						

Table SC3.2.1C – Transport (Bridges / Structures) schedule of works

MAP REFERENCE	ASSET TYPE	ROAD NAME	SPANS	LANES	TIMING	ESTABLISHMENT COST	Toogoolawah (TR1)	Esk (TR2)	Lowood (TR3)	Fernvale (TR4)	Kilcoy (TR5)	Remainder of Shire
STRF01	Culvert	No Name Available	5	2	2041	\$2,280,781					Y	
STRF02	Culvert	Carseldine St Extension	5	2	2041	\$2,280,781					Y	
STRF03	Bridge	Brouff Rd - Clive St Link Road	2	2	2021	\$874,299				Y		
TOTAL						\$5,435,862						

Table SC3.2.2 – Public parks and community land schedule of works²¹

MAP REFERENCE	PARK NAME / PROJECT DESCRIPTION	PARK TYPE	AREA	TIMING	ESTABLISHMENT COST	Toogoolawah (PPCL1)	Esk (PPCL2)	Lowood (PPCL3)	Fernvale (PPCL4)	Kilcoy (PPCL5)	Remainder of LGA (PPCL6)
OSF001	Fernvale 1	Local	5,000	2031	\$433,772				Y		
OSF002	Fernvale 3	Local	5,000	2026	\$198,049				Y		
OSF003	Fernvale 4	Local	5,000	2036	\$433,772				Y		
OSF004	Fernvale 2	Local	5,000	2016	\$427,976				Y		
OSF005	Lowood 1	Local	5,000	2011	\$422,179			Y			
OSF006	Fernvale 6	Township Sports	100,000	2016	\$3,000,000			Y	Y		Y
OSF007	Lowood 2	Local	5,000	2036	\$433,772			Y			
OSF009	Lowood 4	Local	5,000	2021	\$427,976			Y			
OSF010	Parlsow Park	Local	5,139	2016	\$34,242				Y		
OSF013	Lakeview Park	Local	19,738	2011	\$73,170		Y				
OSF014	Stumer Park	Township Sports	42,052	2026	\$408,979			Y	Y		Y
OSF015	Stumer Park	Township Sports	42,052	2012	\$189,545			Y	Y		Y
OSF016	Fernvale Camp Draft & Recreation Reserve	Shire Destination	82,147	2026	\$869,511	Y	Y	Y	Y	Y	Y
OSF018	Lowood Recreation Reserve	Township Sports	73,934	2026	\$600,000			Y	Y		Y
OSF019	Lowood Recreation Reserve	Township Sports	10,000	2016	\$900,000			Y	Y		Y
OSF020	Lowood Bend	Shire Destination	10,131	2016	\$895,789	Y	Y	Y	Y	Y	Y
OSF021	Lowood Reservoir Park	Township	19,701	2026	\$512,000			Y	Y		Y
OSF022	Fielding Reserve	Shire Destination	35,249	2020	\$703,457	Y	Y	Y	Y	Y	Y
OSF023	Fielding Reserve	Shire Destination	35,249	2015	\$183,970	Y	Y	Y	Y	Y	Y
OSF024	Esk Showground Reserve	Shire Destination	264,344	2026	\$934,737	Y	Y	Y	Y	Y	Y
OSF025	Mill End Park	Local	619	2026	\$136,655		Y				
OSF026	Unnamed Park	Open Space	1,194	2026	\$42,572	Y	Y	Y	Y	Y	Y
OSF027	Toogoolawah Lions Park	Local	8,699	2026	\$32,233	Y					
OSF028	Childrens's Park, Toogoolawah	Local	5,430	2026	\$74,012	Y					
OSF029	Toogoolawah Showgrounds	Shire Destination	214,322	2026	\$0	Y	Y	Y	Y	Y	Y
OSF031	Coominya Railway Community Centre & Park	Village	127,339	2011	\$28,572						Y
OSF033	Tennis Courts & Park, Moore	Village Sports	2,565	2026	\$493,073						Y
OSF034	Minden Village Park	Village	48,044	2026	\$55,206						Y
OSF035	Minden Park	Village	19,841	2026	\$75,844						Y
OSF036	Good Family Park	Village	1,385	2026	\$98,067						Y

²¹ The establishment cost is expressed in current cost terms as at the base date.

MAP REFERENCE	PARK NAME / PROJECT DESCRIPTION	PARK TYPE	AREA	TIMING	ESTABLISHMENT COST	Toogoolawah (PPCL1)	Esk (PPCL2)	Lowood (PPCL3)	Fernvale (PPCL4)	Kilcoy (PPCL5)	Remainder of LGA (PPCL6)
OSF037	Hills Reserve	Shire Destination	46,008	2026	\$934,310	Y	Y	Y	Y	Y	Y
OSF038	Nerremman Reserve	Shire Destination	40,597	2026	\$934,737	Y	Y	Y	Y	Y	Y
OSF039	Colinton Memorial Park	Village	1,854	2026	\$88,631						Y
OSF040	Gravel Pit Park	Local	5,411	2026	\$126,012			Y			
OSF041	Langton Park, Toogoolawah	Local	4,898	2026	\$139,118	Y					
OSF042	Edith Maude Park, Coominya	Village	3,918	2026	\$92,080						Y
OSF043	Plumb Park	Village	650	2026	\$94,874					Y	Y
OSF044	Len Haines Park	Village	4,914	2026	\$89,157						Y
OSF046	Wells Park	Village	16,452	2026	\$139,118						Y
OSF047	Monsildale Reserve	Village	75,634	2026	\$139,118						Y
OSF048	Brisbane Valley Pony Club	Local	500,728	2026	\$139,118						Y
OSF049	Poll Crandall (B.E.M) Park, Toogoolawah	Rest Area	30,637	2026	\$31,489	Y	Y	Y	Y	Y	Y
OSF050	Sim Lord Park	Village	6,218	2026	\$102,020						Y
OSF051	Haslingden Park North	Local	2,592	2026	\$139,118			Y			
OSF052	Haslingden Park	Local	3,715	2026	\$139,118			Y			
OSF054	Fernvale To Lowood Trail	Shire Destination	211,593	2026	\$934,737	Y	Y	Y	Y	Y	Y
OSF056	Jensen Swamp Environmental Reserve	Township	188,158	2026	\$455,744			Y	Y		Y
OSF057	Lowood Skate Park	Township	2,728	2026	\$403,967			Y	Y		Y
OSF058	Wilf Dargush Park Toogoolawah	Open Space	19,488	2026	\$42,572	Y	Y	Y	Y	Y	Y
OSF059	Coominya Recreation Reserve (Syd Linde Oval)	Village Sports	18,180	2026	\$513,901		Y	Y	Y		Y
OSF060	Coominya Recreation Reserve	Village	119,963	2026	\$139,118						Y
OSF061	Esk Lions Park	Local	12,320	2026	\$139,118		Y				
OSF062	Twin Bridges Precinct	Shire Destination	192,115	2015	\$856,842	Y	Y	Y	Y	Y	Y
OSF063	Toogoolawah Skate Park	Township	49,104	2026	\$541,648			Y	Y		Y
OSF064	McConnell Park, Toogoolawah	Township	27,476	2026	\$541,648			Y	Y		Y
OSF065	Fernvale Memorial Park	Township	34,299	2026	\$584,584			Y	Y		Y
OSF066	Fernvale Memorial Park	Township	34,299	2012	\$90,591			Y	Y		Y
OSF067	Savages Crossing	Shire Destination	11,030	2020	\$699,129	Y	Y	Y	Y	Y	Y
OSF068	Savages Crossing	Shire Destination	11,030	2015	\$183,970	Y	Y	Y	Y	Y	Y
OSF069	Somerset Dam Park and Camping Ground Precinct	Shire Destination	85,462	2026	\$0	Y	Y	Y	Y	Y	Y
OSF070	Moore Pony & Hack Club	Village	51,604	2026	\$139,118						Y
OSF071	Lowood Railway Precinct	Township	45,691	2026	\$1,074,046			Y	Y		Y
OSF072	Esk Sport and Recreation Precinct	Shire Destination	263,857	2011	\$412,376	Y	Y	Y	Y	Y	Y

MAP REFERENCE	PARK NAME / PROJECT DESCRIPTION	PARK TYPE	AREA	TIMING	ESTABLISHMENT COST	Toogoolawah (PPCL1)	Esk (PPCL2)	Lowood (PPCL3)	Fernvale (PPCL4)	Kilcoy (PPCL5)	Remainder of LGA (PPCL6)
OSF073	Esk Sport and Recreation Precinct	Shire Destination	263,857	2011	\$220,534	Y	Y	Y	Y	Y	Y
OSF074	New Park - Near Kilcoy-Murgon Road	Local	7,600	2041	\$407,843					Y	
OSF075	Yowie Park	Township	47,453	2015	\$0					Y	Y
OSF076	Hedley Drive	Local	33,555	2015	\$0					Y	
OSF077	Fernvale 2	Local	5,000	2011	\$422,179				Y		
OSF078	Brown Street Park	Local	3,785	2015	\$261,357					Y	
OSF079	New Park - Creek Corridor - Sheep Station Ck	Local	5,000	2036	\$315,911					Y	
OSF080	New Park - Creek Corridor - Kilcoy Ck	Local	7,600	2031	\$407,843					Y	
OSF081	New Park - Creek Corridor - Sheep Station Ck	Local	5,000	2041	\$315,911					Y	
TOTAL					\$26,551,835						

SC3.3 Local government infrastructure plan maps

Refer to Volume 2 of the planning scheme (Somerset Region Planning Scheme Maps) for local government infrastructure plan maps.

Schedule 4 Notations required under the Planning Act 2016

SC4.1 Notation of decisions affecting the planning scheme under section 89 of the Act

Table SC4.1.1—Notation of decisions under section 89 of the Act

Date of decision	Location (real property description)	Decision type	File/Map reference
12 April 2017	Lot 315 on SP178650	Decision to approve a Request to apply superseded planning scheme to a new development proposal for 97 residential lots with a balance lot	DA17198

Editor's note—this schedule must include:

- development approvals that are substantially inconsistent with the planning scheme;
- variation approvals ;
- decisions agreeing to a superseded planning scheme request to apply to a superseded scheme to a particular development .

SC4.2 Notation of resolution(s) under Chapter 4, Part 2, Division 2 of the Act

Table SC4.2.1—Notation of resolutions under Chapter 4, Part 2, Division 2 of the Act

Date of resolution	Date of effect	Details	Contact information
29 June 2011	1 July 2011		For more information contact Council on (07) 5424 4000
11 July 2012	11 July 2012	Adopted Charges Resolution 2012	
26 February 2014	26 February 2014	Adopted Infrastructure Charges Resolution 2014	
16 June 2015	16 June 2015	Charges Resolution June 2015	
1 March 2016	1 March 2016	Charges Resolution (No. 1) 2016	
31 August 2016	31 August 2016	Charges Resolution (No. 2) 2016	
24 May 2017	24 May 2017	Charges Resolution (No. 1) 2017	
28 June 2018	2 July 2018	Charges Resolution (No. 1) 2018	

SC4.3 Notation of registration for urban encroachment provisions under section 267 of the Act

Table SC4.3.1—Notation of registrations made under section 267 of the Act

Date of registration of the premises	Location of premises (real property description)	Details of registration	Terms of registration

Schedule 5 Designation of premises for development

Table SC5.1—Designation of premises for development infrastructure under section 42 of the Act

Date the designation, amendment, extension or repeal takes effect	Location of premises (real property description)	Street address (including the relevant local government area if the notation is outside the planning scheme area)	Type of infrastructure
22 February 2010	Insofar as the community infrastructure designation relates to the Somerset Regional Council area; part of: Lot 64 on CA311285 Lot 62 on CA311284 Lot 63 on CA311284 #2128 Road AP16436 Lot 59 on CA311284 Lot 68 on RP12462 Buaraba Creek South Branch AP16437 Lot 78 on CA31627 Lot 90 on CA31905 Palm Tree Road AP16437 Lot 2 on CA311356 Kavanaghs Road AP16438 Buaraba Creek (North Branch) AP16439 Unnamed Road AP16439 Lot 80 on CA31750 Lot 68 on CA311356 #2131 Road AP16440 Lot 3 on CSH1612 Esk Hampton Road AP16441 Lot 528 on FTY1041 Little Oak Creek AP16442 Lot 58 on CSH2241 Lot 9 on SP117255 Lot 10 on SP117255	Various	(k) operating works under the <i>Electricity Act 1994</i>
The type of community infrastructure for which the land has been designated is operating works under the <i>Electricity Act 1994</i> . Specifically, these operating works are Powerlink's proposed			

Date the designation, amendment, extension or repeal takes effect	Location of premises (real property description)	Street address (including the relevant local government area if the notation is outside the planning scheme area)	Type of infrastructure
Springdale to Halys 500 kilovolt (kV) transmission lines and the new Halys 500/275 kV substation.			

3 October 2011	Insofar as the community infrastructure designation relates to the Somerset Regional Council area; part of: Lot 2 on RP139532 Bumsteads Road AP17042 Lot 8 on RP139532 Lot 9 on RP139532 Lot 5 on RP139532 Lot 11 on RP139532 Lot 6 on RP139532 Lot 7 on RP139532 Lot 12 on RP139532 Lot 2 on RP31150 Bichels Road AP20536 Lot 2 on RP203631 Lot 1 on RP31162 Lot 2 on RP32228 Prenzlau Road AP20535 Lot 390 on CH31915 Lot 2 on RP31197 Plain Creek AP17040 Lot 2 on CC2169 Lowood Minden Road AP17039 Lot 601 on RP853835 Lot 1 on RP157220 Lot 28 on RP32356 Reinke Road AP17038 Lot 27 on RP32356 Frohloffs Road AP17037 Lot 43 on RP32359 Lot 42 on RP32355 Lot 20 on RP227736 Lot 40 on RP32355 Lot 39 on RP32355 Lot 38 on RP32355 Lot 37 on RP32355 Proposed Road AP17036 Lot 663 on CH31841 Lot 2 on SP139976 Lot 470 on CC2052 Lot 534 on CC2221 Marburg Road AP17035 Lot 32 on SP103149 Lot 1 on RP123346 Linnings Road AP17034	Various	(k) operating works under the <i>Electricity Act 1994</i>

Date the designation, amendment, extension or repeal takes effect	Location of premises (real property description)	Street address (including the relevant local government area if the notation is outside the planning scheme area)	Type of infrastructure
	Lot 370 on SP154103 Lot 318 on CH31257 Claus Road AP17033 Lot 3 on SP225629 Proposed Road AP17032 Lot 216 on CH3117 Lot 215 on CH3117 Lot 214 on CH3117		
The type of community infrastructure for which the land has been designated is operating works under the <i>Electricity Act 1994</i>. Specifically, these operating works are ENERGEX's Abermain to Lockrose 110 kilovolt (kV) Network Upgrade Project which consists of: • Refurbishment and upgrading of ENERGEX's existing 34.7 kilometre 110 kV distribution line connecting to Powerlink's Abermain and ENERGEX's Lockrose substations. This refurbishment will be undertaken in two stages. Firstly, ENERGEX will construct a new 6.85 kilometre double circuit 110 kV line connecting Abermain substation to Velvet St, Pine Mountain. Secondly, ENERGEX will refurbish the existing 110 kV line by replacing existing poles and upgrading the line from a single to double circuit configuration. • ENERGEX's 110kV assets within the Abermain substation. • The Lockrose substation operating at 110 kV and lower voltages.			
15 November 2012	Insofar as the community infrastructure designation relates to the Somerset Regional Council area; part of: Hannah Lane Lot 214 on CH3117 Lot 215 on CH3117 Lot 216 on CH3117 Lot 217 on CH3117 Unnamed Road Lot 3 on SP225629 Claus Road Lot 318 on CH31257 Lot 370 on SP154103 Lot 697 on CH311891 Linnings Road Lot 1 on RP123346 Lot 32 on SP103149 Lot 3 on SP103149 Marburg Road Lot 534 on CC2221 Lot 470 on CC2052 Lot 2 on SP139976 Lot 663 on CH31841 Unnamed Road Lot 37 on RP32355	Various	(k) operating works under the <i>Electricity Act 1994</i>

Date the designation, amendment, extension or repeal takes effect	Location of premises (real property description)	Street address (including the relevant local government area if the notation is outside the planning scheme area)	Type of infrastructure
	Lot 38 on RP32355 Lot 39 on RP32355 Lot 40 on RP32355 Lot 20 on RP227736 Lot 42 on RP32355 Lot 43 on RP32359 Frohloffs Road Lot 27 on RP32356 Reinke Road Lot 28 on RP32356 Lot 1 on RP157220 Lot 601 on RP853835 Lot 30 on RP140441 Lowood Minden Road Lot 1 on RP35911 Lot 4 on CC2169 Plain Creek Lot 2 on CC2242 Lot 2 on CC2169 Lot 2 on RP31197 Lot 1 on RP31197 Lot 390 on CH31915 Prenzlau Road Lot 4 on RP894689 Schulz Road Lot 2 on RP32228 Bichels Road Lot 1 on RP31162 Lot 2 on RP32227 Lot 1 on RP32227 Lot 2 on RP31151 Petrea Road Lot 1 on RP31151 Lot 1 on RP31152 Lot 1 on RP31159 Lot 1 on SP201340 Lot 6 on SP201340 Court Avenue Lot 108 on CH311698 Lot 106 on SP176180 McLaughlans Lane Lot 2 on SP176180 Lot 1 on N25425 Lot 1 on RP31183 Lot 2 on RP31183 Brightview Road Lot 459 on CC184 Lot 458 on CC184		
The type of community infrastructure for which the land has been designated is operating works under the <i>Electricity Act 1994</i> . Specifically, these operating works are Powerlink Queensland's			

Date the designation, amendment, extension or repeal takes effect	Location of premises (real property description)	Street address (including the relevant local government area if the notation is outside the planning scheme area)	Type of infrastructure
proposed Springdale to Blackwall 500kV transmission line project, planned to be initially energised at 275kV, approximately 50.5 kilometres in length.			
05 August 2013	Lot 130 on CC3041 Lot 216 on CC3041	1605 Brisbane Valley Highway, Fernvale	4 community and cultural facilities, including facilities where an education and care service under the Education and Care Services National Law (Queensland) is operated or a child care service under the Child Care Act 2002 is conducted, community centres, meeting halls, galleries and libraries. 6 education facilities 15 storage and works depots and the like including administrative facilities associated with the provision or maintenance of the community infrastructure
The land has been designated for the Fernvale State School and Kindergarten and Associated facilities.			

Schedule 6 Planning scheme policies

SC6.1 Planning scheme policy index

The table below lists all the planning scheme policies applicable to the planning scheme area.

Table SC6.1.1—Planning scheme policy index

SC6.2 – Planning Scheme Policy 1 – Ecological Assessment Guidelines

SC6.3 – Planning Scheme Policy 2 – Heritage Places

SC6.4 – Planning Scheme Policy 3 – Catchment Management Analysis Guidelines

SC6.5 – Planning Scheme Policy 4 – Design Standards

SC6.2 Planning Scheme Policy 1 – Ecological Assessment Guidelines

SC6.2.1 Introduction

The Somerset Regional Council area includes tracts and patches of remnant vegetation and associated habitat with high conservation value. While some of these values are already protected in the conservation estate, many are found outside of areas that are explicitly protected. This includes tracts of remnant and regrowth vegetation and the watercourses and wetlands that not only provide habitat for native plants and animals but also corridors between conservation reserves.

The **Biodiversity Areas Overlay Maps OM-003a-f** delineate the known location of these and other ecological values present in the Somerset Regional Council area. However, as this mapping is derived from existing knowledge it is likely that some ecological features have not been adequately represented. As such, there is a need to undertake on ground assessments so that development can respond to prevailing ecological values.

SC6.2.2 Application

This planning scheme policy is for the specific purpose of assessing ecological values within the Somerset Regional Council area as triggered by the **Biodiversity Areas Overlay Maps OM-003a-f**. The policy does not aim to replace assessments triggered by or undertaken in response to other government legislation or policy. For instance, the guideline should not be used to assess Matters of National Significance for the purposes of the *Environmental Protection and Biodiversity Conservation Act 1999* and will not discount the need for the assessment against the provisions of the *Vegetation Management Act 1999* or *Nature Conservation Act 1992*. However assessments undertaken for any other purpose will assist in the preparation of an ecological assessment prepared in accordance with these guidelines.

SC6.2.3 Ecological Assessment

SC6.2.3.1 Type of Assessment

The type of assessment required at a site triggered by the **Biodiversity Areas Overlay Maps OM-003a-f** and where required by the Biodiversity Overlay Code in **Part 8.2** will be largely dictated by the values mapped for the site and prevailing diversity and integrity of vegetation associations.

Desktop assessments are an integral component of all ecological assessments. The level of effort applied to desktop assessments should remain relatively constant irrespective of the level of field assessment required.

Whilst it is acknowledged that a spectrum of field survey effort can be considered, this ecological assessment guideline categorises two levels:

- 1) **Basic** - Assessment is undertaken over the period of a day or less. Trapping is not undertaken, although diurnal searches for fauna are desirable. Vegetation structure is likely to be readily assessed using Quaternary sites, although transect information may be useful in some situations. All prevailing environments are assessed.
- 2) **Detailed** - Assessment is undertaken over a five day / four night period. Trapping is undertaken. To adequately describe vegetation structure a mix of Secondary and Quaternary sites are required. All prevailing environments are assessed. In some instances seasonal survey information may be required (e.g. Summer and Winter surveys).

Listed below are the ecological features delineated in **Biodiversity Areas Overlay Maps OM-003a-f** and the of field level assessment required where development is likely to impact the feature:

Detailed assessments are required where the site is mapped as including one or more of the following features:

- Protected areas;

- Wildlife habitat;
- Regulated vegetation;
- Legally secured offset areas;
- Watercourses;
- Wetlands and
- Bushland Koala Habitat – Primary Habitat Areas.

Basic assessments are required where the site is mapped as including one or more of the following features:

- Biodiversity corridors; and/or
- Bushland Koala Habitat – Secondary Habitat Areas.

For sites where there are features triggering either basic or detailed assessments are present, the level of assessment should be determined by the dominant feature for the site or in consultation with Council.

Assessments should not be restricted to portions of the site mapped as a constraint to the feature, but to the entire site so that spatial extent of ecological features can be accurately determined at the property level.

Whilst this represents a guide for the likely level of assessment required, advice should be sought from Council regarding the proposed approach. For example, a large site supporting a limited area of significant vegetation in a remote corner may not justify a full detailed assessment, whereas a site completely covered in remnant vegetation is likely to trigger assessment. Over time the knowledge of the local environment will improve and as such there may be instances where Council may recommend a greater or reduced effort of survey.

SC6.2.3.2 Recommended Contents

Irrespective of the level of assessment required it will be necessary to establish and describe the following:

- **Author's Qualifications** - The skills and qualifications of the author of the ecological assessment;
- **Trigger for Ecological Assessment** - A description of the values that are mapped for the site in the Biodiversity Overlay maps;
- **Background Information** - Desktop assessment of known and likely values (see section **SC6.2.3.3** for guidance);
- **Methods of Field Assessment** - See section **SC6.2.3.4** for guidance;
- **Description of Habitat Values** - Describe the vegetation communities / regional ecosystems present on site. Identify the known flora and fauna species occurring on or utilising the site as an extension of its habitat. Provide lists of these species. Extent of significant habitat areas and features;
- **Condition** - The condition of the site and the presence of threatening processes such as elements such as weeds;
- **Species / Communities of Conservation Significance** - The known or likely presence of flora and fauna species or ecological communities that are of conservation significance;
- **Water and Drainage** - The presence or otherwise of water features including rivers and streams, freshwater wetlands, estuarine or marine environments;
- **Ecological Corridors** - Location, alignment and width of ecological corridors. This includes regional, local and site based corridors. The degree to which a site contributes to corridor function must be discussed (note, some sites may be entirely located within a corridor);
- **Response to Ecological Values** - How the development proposal considers the identified ecological values;
- **Mitigation** - Mitigation measures associated with the development. Any offset measures proposed; and
- **Impacts** - The likely residual impacts of the development proposal.

It is recommended that the above list forms the basis for a table of contents for the ecological assessment.

The report should include appropriately scaled maps and photographs of the site.

SC6.2.3.3 Desktop Assessment

The following is a list of some of the resources that might be reviewed to inform the field work component and the final written ecological assessment:

- Aerial photography, both current and historical;
- Existing reports that are specific to the site or region;
- Planning scheme overlays;
- Databases (e.g. the Queensland Herbarium's HerbreCs and Corveg, Wildnet, EPBC Protected Matters, Birds Australia and Queensland Museum); and
- Existing mapping resources (e.g. regional ecosystem remnant and regrowth maps, Biodiversity Planning Assessments, geological, waterways and topographic).

If an area is mapped as State, Regional or Local significance an assessment of the criteria that lead to its designation should be made.

SC6.2.3.4 Field Assessment

Flora

All vegetation communities should be assessed in terms of the structure and floristics. The Queensland Herbarium's "Methodology for Survey and Mapping of Vegetation Communities and Regional Ecosystems in Queensland" (Nelder et. al., 2005) provides a framework against which vegetation communities can be delineated and described. A useful method for capturing vegetation structure and dominant floristics elements is the use of Secondary and Quaternary sites. At a property scale delineation of vegetation communities should be at a scale of 1:10,000 or better.

If wetlands are present they should be delineated according to "Part B of the draft Queensland Wetland Definition and Delineation Guideline" (DERM, 2011).

A flora list should be established for the site that adequately samples all vegetation communities present. Threatened species identified in the desktop assessment should be targeted. At a minimum the species list must include the common name, scientific name and status (conservation status or pest status).

Fauna

For basic assessments a description of habitat values should be included. The known or likely occurrence of significant species should be described. Diurnal searches including the following would ideally be undertaken:

- Diurnal bird searches;
- Diurnal ground searches;
- Tracks, scats and other trace analysis; and
- Opportunistic observations.

For detailed assessments the following techniques should be employed:

- Diurnal/nocturnal bird searches;
- Ground searches;
- Elliott trapping;
- Cage trapping where appropriate;
- Pitfall &/or funnel trapping;
- Hair funnel trapping;
- Spotlighting;
- Anabat bat detection;
- Call playback; and
- Habitat assessment.

SC6.2.4 Qualification Requirements to Prepare an Ecological Assessment

Tertiary qualifications in environmental science with skills and/or training in field ecology are required. Preferably the consultant will be a Certified Environmental Practitioner. Individuals undertaking field work should have appropriate licences, approvals and permits required by State Government and the Animal Ethics Committee.

SC6.2.5 How Does the Ecological Assessment Inform Development Design?

The site design should respond to the findings of the ecological assessment. Important ecological features should be retained.

Important ecological features should also be buffered. Buffers to freshwater wetlands, watercourses should follow current best practice.

Where corridors are identified the design should include unencumbered movement paths. For wooded sites these should aim to be at least 350 metres wide. For sites with no to little vegetation provisions should be made to retain and restore the corridor.

Ecological features should be delineated in an opportunities and constraints map. The final ecological assessment should demonstrate how the proposed plan of development responds to site values.

SC6.2.6 Describe the Impacts

The impacts of the development should be described. This should include not only direct impacts such as the clearing of vegetation, but also the indirect impacts affected areas both on and off site (e.g. what the likely edge effects on vegetation or what is the likely impact of storm water runoff to receive sites). Both permanent (e.g. removal of a hollow bearing tree) and temporary (e.g. establishment of a temporary creek crossing) should be discussed.

Not all impacts are negative. A proposal that results in the overall enhancement of the natural environment through ecological restoration or removal of weeds will have a positive impact. A net benefit might also be achieved if an environmental offset (such as those delivered in accordance with current State government policy) results in a net increase in vegetation cover and/or the habitat of a threatened species.

SC6.2.7 References

Department of Environment and Resource Management., 2011, *Queensland Wetland Definition and Delineation Guideline*. Queensland Government, Brisbane.

Neldner, V.J., Thompson, E.J., Bean, A.R. and Dillewaard, H.A. with contributions from Wilson, B.A., Sparshott, K.M., Grimshaw, P., Dowling, R., Stephens, K.M., Price, R. and Stanely, T.D., 2005. *Methodology for Survey and Mapping of Vegetation Communities and Regional Ecosystems in Queensland*. (Ed.s Neldner, V.J., E.J. Thompson, A.R. Bean and H.A. Dillewaard). Queensland Herbarium, Queensland Environmental Protection Agency, Australia.

SC6.3 Planning Scheme Policy 2 – Heritage Places

The Heritage Places listed in Table SC6.5.1 are for the purposes of interpretation of the **Local heritage overlay map OM-0011** and the Local heritage overlay code in Part 8.2.11:

Table SC6.3.1 – Heritage Places

Place ID	Place Name	Street No.	Street Name	Locality	Real Property Description	QLD Heritage Place ID	National Estate Place ID
SRC-HP-001	Dental Surgery	-	Railway Street	Lowood	1RP32261	600496	-
SRC-HP-002	Esk War Memorial and Memorial Park	57	Ipswich Street	Esk	217CSH2144	600494	-
SRC-HP-003	Inverness	58	Fulham Street	Toogoolawah	3RP71417	600498	-
SRC-HP-004	Lockyer Creek Railway Bridge (Clarendon)	-	Mahons Road	Coominya	35SP122398	600495	-
SRC-HP-005	McConnell Park & Toogoolawah War Memorial	-	Gunyah Street	Toogoolawah	1RP167506	600499	-
SRC-HP-006	St Agnes Rectory & Church	-	Ipswich Street	Esk	3SP156225	600493	-
SRC-HP-007	St Andrews Presbyterian Church	-	Ipswich Street	Esk	110E1721	602408	-
SRC-HP-008	St Andrew's Church	-	Mangerton Street	Toogoolawah	1RP7722	600502	-
SRC-HP-009	St Andrew's Rectory	-	Mangerton Street	Toogoolawah	3RP7722	600501	-
SRC-HP-010	St Andrew's Church Hall	-	Mangerton Street	Toogoolawah	1-2RP7722	600500	-
SRC-HP-011	Stonehouse	-	D'Aguilar Highway	Moore	16SP122811	601626	-
SRC-HP-012	Cressbrook Homestead	-	Cressbrook-Caboonbah Road	Cressbrook	100SP127366	600503	-

Place ID	Place Name	Street No.	Street Name	Locality	Real Property Description	QLD Heritage Place ID	National Estate Place ID
SRC-HP-013	Castleholme Homestead	-	Bryden - Crossdale Road	Bryden	164SP119637	600491	-
SRC-HP-014	Bellevue Homestead	-	West Road	Coominya	2RP150954	600492	-
SRC-HP-015	Caboonbah Homestead	-	Esk-Kilcoy Road	Caboonbah	Part of 241SL11000	601139	-
SRC-HP-016	Jimna Fire Tower	-	Murgon-Kilcoy Road	Jimna	207FTY1885	601814	-
SRC-HP-017	Kilcoy Homestead	-	Kilcoy-Murgon Road	Winya	28RP887549	600638	-
SRC-HP-018	Yimbun Railway Tunnel	-	Sinnamons Lane	Gregors Creek	1RP7674 & 2RP7693	602637	-
SRC-HP-019	Harlin Rail Bridge	-	Over Ivory Creek	Harlin	33SP122422 & 41SP122423	602636	-
SRC-HP-020	Jimna Single Men's Barracks (former)	4	Tip Road	Jimna	99LX2541	602685	-
SRC-HP-021	Linville War Memorial	-	George Street	Linville	102SP122432	602701	-
SRC-HP-022	Monsildale Homestead	2532	Monsildale Road	Monsildale	1RP160196	602704	-
SRC-HP-023	Mount Tarampa State School	9	Profkes Road	Mt Tarampa	2SP161914	602853	
SRC-HP-024	Tarampa State School	18	Manthey Road	Tarampa	102N25129	602849	
SRC-HP-025	Prenzlau State School	357	Prenzlau Road	Prenzlau	185CC3501	602856	

SC6.4 Planning Scheme Policy 3 – Catchment Management Analysis Guidelines

SC6.4.1 Introduction

The Somerset Regional Council area includes a number of water resource catchments, including Lake Wivenhoe, Lake Somerset, Lake Atkinson, Lake Cressbrook and the Mid-Brisbane River below Wivenhoe Dam. The ongoing protection of these resources and their catchments is a priority not only for Somerset, but for the broader South East Queensland region.

The **Catchment Management Overlay Maps OM-005** identify the location of water bodies and their catchments within the Somerset Regional Council Area. The **Catchment Management Overlay Maps OM-005** also reflect the statutory Water Supply Buffer Area to principal water storages of Lake Wivenhoe and Lake Somerset.

SC6.4.2 Application

This planning scheme policy is called up by the **Catchment Management Overlay Code**.

This planning scheme policy is for the specific purpose of assessing how development responds to catchment management and water quality within Somerset Region. In this respect, the planning scheme policy seeks that a Catchment Management Analysis be prepared in accordance with the content of the planning scheme policy.

The planning scheme policy contains different sections, which relate to various components that may be addressed in a Catchment Management Analysis. All Catchment Management Analyses shall include a Site Analysis and Site Management Plan (refer section SC6.4.3). A Catchment Management Analysis should also address the sections relevant to the development in terms of Elements and Impacts of Development (refer section SC6.4.4) and/or Specific Land Uses and Activities (refer section SC6.4.5).

The policy does not aim to replace assessments triggered by or undertaken in response to other government legislation or policy. However, assessments undertaken for any other purpose will assist to support a Catchment Management Analysis prepared in accordance with these guidelines.

SC6.4.3 Site Analysis and Site Management Plan

SC6.4.3.1 Purpose

A site analysis and management plan should be undertaken as part of the Catchment Management Analysis to present the necessary baseline information required to demonstrate that the proposal contributes to maintaining and improving water quality.

An ecological assessment prepared in accordance with Planning Scheme Policy 1 – Ecological Assessment Guidelines may also assist in the preparation of a site analysis and management plan.

SC6.4.3.2 Site Analysis

It is recommended that the site analysis contain the following content:

- Contour data at 5 metre intervals for a development parcel and down to 1 metre intervals for the nominated building and/or activity pad/area and any land disposal area(s);
- A slope assessment indicating slopes with gradients between 0-10%, 11-15%, 16-20%, 21-25% and greater than 25%;
- Soil and geology types including areas prone to erosion, instability, dispersive soils, swelling clays, rock outcrops, salinity, acid soils, and areas where chemical residue may occur due to previous activities on the site;

- Poorly draining and seasonally waterlogged areas including springs, wetlands and flood plains, ground water levels, recharge areas and aquifer intake points;
- Existing natural and constructed water bodies;
- Flood heights for the major event nominated under the local government requirements;
- Existing natural and constructed drainage patterns and likely changes to such with management of stormwater quality;
- Extent and condition of any riparian lands and remnant *native vegetation* with management of such illustrated;
- Assessment of slopes, vegetation and the aspect for the site and surrounds with regards to bushfire risk with illustration of the approach for managing development;
- Micro climatic conditions relevant to the site including prevailing winds and rainfall;
- Existing and proposed structures, buildings, and improvements;
- Likely areas/extent of earthworks and clearing, plus recommended envelopes for building pads;
- The envelope for any effluent disposal field/system;
- The approach to any arable and pastoral activities on the site, including keeping of horses and dogs, as relevant to the scale and intensity of the uses;
- Any proposed retention, removal or planting of vegetation proposed to occur, demonstrated through a vegetation management plan that identifies the location and details of retained, removed or new vegetation and provides details of any maintenance and monitoring regime;
- Analysis of how the development responds to the water quality of the applicable catchment and water storages.

The site analysis should include appropriately scaled maps and photographs of the site.

SC6.4.3.3 Site Management Plan

Site Management Plan (SMP) is prepared by a suitably qualified and experienced professional/s to demonstrate the appropriate ongoing management of any use that has the potential to impact on water quality. This plan should include:

- The objectives of the plan;
- The impacts of the development during site works and ongoing operation;
- Ongoing monitoring;
- Progressive restoration;
- All protection and mitigation measures, backed by adequate management, technical and financial resources which ensure commitments for environmental management and timeframes;
- Clean-up and emergency procedures;
- Maintenance programs for machinery and equipment, including measures to prevent contaminants from operation, standing and repair areas;
- Water quality monitoring programs;
- Responsibilities for its implementation and maintenance;
- Processes for notifying the relevant local government and/or state government of any incident (likely/real) of environmental harm; and
- Processes for monitoring the SMP, recommended to occur:
 - 6 monthly testing for water quality (surface and groundwater);
 - Testing of stormwater, wastewater, treated wastewater and irrigation areas;
 - Testing prior to release/irrigation of treated wastewater or fertiliser;
 - Testing post release of treated wastewater and fertiliser;
 - Immediately after rainfall events; and
 - Annual audits of results, practices and site management.

Seqwater are a major stakeholder in relation to catchment management. Seqwater may therefore be consulted in the preparation of a Site Management Plan.

SC6.4.4 Elements and Impacts of Development

SC6.4.4.1 Waste Management

Where waste or other solid or liquid emissions (including dust but excluding noise, light and odour) which may cause an adverse impact on water quality are likely to occur, the Catchment Management Analysis should identify how these emissions are to be managed. The analysis should identify measures proposed to prevent contaminants from entering surface water or groundwater bodies. This should involve the preparation of a Waste Management Plan, which details

- All processes that generate wastes and/or emissions;
- The quantities, storage and handling of materials and by-products;
- The source, quantity and biological/chemical characteristics of the waste or emissions; and
- Options for waste minimisation.

The Waste Management Plan should also consider the characterisation of waste and emissions in terms of their capacity to emit contaminants including through the breakdown of matter, liquid waste, stormwater run-off and airborne contaminants.

In considering the management of waste, the Waste Management Plan should identify the location of land uses and activities relevant to waste management. This may include (but is not limited to) storage and treatment areas. The location of these areas should be informed by the site analysis undertaken, while also locating these uses to:

- Be on land with a low capability of becoming unstable or collapsing; and
- Not be on areas that perform ground water recharge or discharge functions.

The characterisation of waste and emissions should also specifically consider those that have the potential to become airborne. The Waste Management Plan should consider the volume and level of contaminants that may be dispersed based on the nature of emissions and climatic factors. Where the risk is determined to have the potential for an adverse impact on water quality, either by being deposited on surface waters or on land where the emission or waste can be transported to surface water or groundwater bodies, the source is treated to remove this risk.

Where the Waste Management Plan identifies that collection and initial treatment of waste and emissions is required, this is undertaken so that:

- Water use is minimised to reduce effluent volumes;
- Dry methods or high pressure water use is maximized;
- Wash and process wastewater is isolated from stormwater and any cleaner streams;
- Suspended matters and solids are isolated;
- Highly contaminated wastewater is isolated for sufficient pre-treatment in holding tanks with off-site disposal of contaminants by a licensed contractor;
- All areas where contamination may occur (e.g. storage areas, handling areas, wash down areas, servicing/maintenance areas, process areas, waste storage areas) are located in weatherproofed buildings with a perimeter bund;
- Activities avoid kerosene, petrol and organic solvent cleaners and minimise the use of slow degreasers and detergents;
- The installation of substance recovery units in servicing bays allows for maximum reuse followed by collection in secure, weatherproof containers for disposal of used substances by a licensed contractor;
- Collection and storage areas are provided with impervious sealed floors and bunds graded to contain worst case spills and wash water, with discharge to a system of imperviously lined pits/basins and sumps to permit settling of solids, neutralising of heavy metals and separation of oils and emulsifiers for separate, appropriate chemical treatment without threat of overflow; and
- The sizing of collection and initial treatment areas is to accommodate minimal long term volume and back-up storage.

The Waste Management Plan should also identify methods for the treatment and disposal of collected waste and emissions so that:

- Treatment reflects the volumes, strengths and constituents of wastewater (e.g. total suspended solids, nutrients, pH, heavy metals, BOD, salinity);

- Waste is treated through a series of approved systems (e.g. storage/treatment lagoons) designed by a suitably qualified and experienced engineer;
- Provision of sufficient storage capacity is made to allow for maximum first-flush holding capacity to provide for hydraulic and waste loadings (including sufficient *freeboard*) in major storm events;
- Provision of sufficient storage capacity is made for wet weather, maintenance, accidental spills, system down-time and shock loading without necessitating release of untreated wastewater;
- Storage and treatment occurs on existing or created impermeable surfaces to prevent leaching;
- Periodic desludging of storages is undertaken to maximise silt settlement and sludge retention with uncontaminated organic matter recycled in the process or stored. Contaminants are to be removed from the site by a licensed contractor;
- Treated waste that is high in heavy metals, biological parameters, hazardous dusts, by-products, separated oils, grease, hydrocarbons, chemical sludge and floor waste is to be placed in secured, weather proofed containers/tanks in a bunded area and removed by a licensed contractor for disposal at a registered disposal or refuse facility;
- Saline effluent is separated and directed to facilities to permit appropriate removal of salt;
- Where it is practical, wastewater is treated to a standard to allow it to be:
 - Recycled; or
 - Evaporated at a lined evaporation facility; or
 - Irrigated in accordance with an approved irrigation management plan.
- Where effective reuse of wastewater on a site is not possible for water quality or other reasons, provision is made for tertiary treatment prior to discharge;
- No incineration or burial of waste is to be undertaken on-site, with solid waste being collected and stored in weather proofed, sealed waste receptacles, located in roofed and bunded areas, for collection by a licensed contractor for disposal at a licensed facility;
- Provision is made for ongoing monitoring of water in pits and ponds and for the adjustment of practices to optimise treatment and control nutrients; and
- Stockpiling and spreading of waste in a form appropriate as a soil conditioner should be minimised, with such activities occurring in accordance with these Guidelines.

Note-This requirement does not apply to development involving a dwelling where any waste or emissions are generally associated and consistent with this use.

SC6.4.4.2 Water Recycling and Re-Use

Where the proposed development involves the recycling or reuse of water for any purpose, other than other than a system for on-site wastewater treatment and effluent disposal which has a peak design capacity of less than 21 equivalent persons, the proposed system of recycling or reuse, including treatment, storage and reuse components are designed, constructed, operated and maintained so as not to cause any adverse impact on water quality. This may be achieved by:

- Adopting as a minimum, the recommended class of treatment and monitoring requirements for the particular reuse purpose as specified in the Queensland Water Recycling Guidelines;
- Preparing a draft Recycled Water Management Plan which provides an assessment of all risks and associated mitigation strategies for preventing any adverse impact on water quality within the higher risk catchment areas identified in shown on **Catchment Management Overlay Maps OM-005**;
- Ensuring that elements of the recycling or reuse system achieve compliance with the setback requirements of the Catchment Management Overlay Code;
- Preparing a recycled water agreement while recognises the location of the site within a drinking water supply catchment and includes a requirement that any party to the agreement who becomes aware of an actual or potential threat to water quality within the drinking water supply catchment notify Seqwater; and
- Consulting Seqwater where the direct or indirect release of recycled water to surface or groundwater bodies is proposed.

Where a Recycled Water Management Plan is prepared, this plan should provide for the regular monitoring of potentially affected surface or groundwater bodies both upstream and downstream during the design, construction, operation, maintenance and decommissioning of the proposed development. Monitoring should be undertaken in accordance with the DERM Monitoring and Sampling Manual 2009, or the Australian Guidelines for Water Quality Monitoring and Reporting. Where any water quality

parameter measured downstream of the proposal exceeds the result measured upstream by greater than 10%, the results of monitoring should be forwarded to Seqwater.

SC6.4.4.3 Stormwater in Catchments

Where generating a net increase in stormwater runoff, the Catchment Management Analysis should also address stormwater/runoff management. While a Site Based Stormwater Management Plan prepared in accordance with other requirements of the planning scheme is likely to assist in this part of the analysis, the Catchment Management Analysis should also consider how the type, amount and location of stormwater from construction and operation directly impacts on the water quality of water storages and catchments. Stormwater should be able to be captured and treated on-site, ensuring that the scale, location and intensity of development ensure that appropriate capturing and treating of stormwater can occur wholly within the site. Treatment of stormwater should involve best practice stormwater quality control measure including retention and detention as appropriate to the site and the land use. Treatment may be accommodated in features including, but not limited to, basins, swales, traps, buffers strips and wetlands. These features should be appropriately sized to ensure that stormwater impacts associated with the development do not adversely impact on water quality.

SC6.4.4.4 On-Site Wastewater Treatment and Effluent Disposal Requirements

SC6.4.4.4.1 Design and Location

Where development involves on-site treatment of sewage, being associated with a dwelling house or involving a system designed for up to 20 equivalent persons, a site evaluation should be undertaken in combination with a site analysis (refer to SC6.4.3). This evaluation should be undertaken by a suitably qualified person and should address the:

- Depth to bedrock and seasonal groundwater;
- Nature of site water supply;
- Local climatic conditions;
- Site stability;
- Soil profile in accordance with Australian Standard; and
- Soil characteristics, particularly Cation Exchange Capacity, dispersal potential, permeability, depth of topsoil to impermeable layer and structure.

The findings of the site evaluation should inform the location of the on-site wastewater treatment and effluent disposal facilities proposed. These facilities should include the following:

- A disinfection process to achieve the required microbiological quality and processes including: chlorination, UV radiation, oxidation or membrane processes as per the Queensland Plumbing and Wastewater Code, if surface irrigation is the desired disposal method;
- For a dwelling, provide emergency storage capacity of 1,000 litres and adequate buffering for shock loading/down time and the like;
- For other than a dwelling, provide emergency storage capable of holding 3 – 6 hours peak flow of treated effluent in the event of emergencies/overload, with provision for desludging; and
- For other than a dwelling, provide back-up pump installation and backup power capable of dealing with failures. All fittings will be annually certified by a licensed electrician and plumber.

The proposed use should produce a minimum secondary treatment effluent, which is characterised by:

- Biochemical Oxygen Demand (BOD) less than or equal to 20mg/L with no sample over 30mg/L;
- Total Suspended Solids less than 30mg/L with no sample over 45mg/L; and
- Faecal coliforms less than 200cfu/100mL with no sample over 1000cfu/L.

Where a composting or other alternative waste treatment system is to be provided, it should be demonstrated that the treated material does not cause an adverse impact on water quality through material allowing nutrients to enter surface waters or groundwater systems including where the treated material is used for fertiliser or other soil improvement, or disposed of.

Effluent land application areas should be sustainably sized and provided with an irrigation method that prevents any adverse impacts on water quality. Irrigation may be via traditional trench, sub-surface drip

irrigation, surface drip, sand mound or evapotranspiration-absorption *wetland*. Their location should be informed by the site evaluation undertaken with their size taking into account:

- Soil type, texture and permeability;
- Climate conditions, including rainfall, evaporation and evapotranspiration;
- The rate of uptake of nitrogen, phosphorus and soluble salts in soils, allowing no leaching of nutrients to groundwater or surface water.

The location, sizing and design of the application area should not cause risk of salinisation, overland flow, ponding or seepage. The area should therefore be vegetated, with sizing of the area considering vegetation type and capacity for up-take. A reserve land application area of up to 100% of the effluent irrigation design area should also be available on the lot. Both the application area and the reserve area should be located on land that:

- has a low capability of becoming unstable or collapsing during construction/operation;
- is not susceptible to salinisation, unless appropriate soil amelioration with organic matter, gypsum or lime is conducted;
- has a good aspect for enhanced exposure to sunlight and prevailing breezes;
- is free of, or not susceptible to, depressions where runoff may pond on the application area;
- has soils with permeability between 0.06m/day and 3.0 m/day;
- does not contain rock outcrops, faults, areas underlain by fractured rock, coarse alluvium or similar which may short-circuit wastewater to groundwater;
- has a base that is at least 2 metres above the seasonal high water table/bedrock (whichever is the less vertical distance below the base of the application area); and
- is not located in overland flow paths or on areas that perform ground water recharge or discharge functions.

The location of effluent disposal should also not impact on water quality within the catchment. Siting of this facility should therefore be in accordance with the Queensland Plumbing and Wastewater Code and consider the protection of public health and the protection of surface and groundwater quality including diversion mounds upslope of the application area so that these waters do not flow onto or across the application area.

SC6.4.4.2 Management and Monitoring

Once operational, the facility should be subject to ongoing management and monitoring to ensure no additional effect on water quality occurs. Owners and occupiers should:

- be made aware of the ongoing operational requirements of the wastewater treatment and effluent disposal system before the system is operational, or at the time of purchase/occupation where the system is already operational.
- be made aware of actions to be undertaken should the system fail or where failure is imminent.
- maintain the Vegetation Management Plan (refer SC6.4.5) with regard to vegetation in the application area to ensure that nutrients beyond natural state levels do not emit from the site.

Ongoing monitoring should be undertaken annually from the time of commissioning to determine the quality of the waste water produced from the effluent treatment system. Monitoring of the soils, vegetation and groundwater in the application area should also be undertaken every three years to establish that treated effluent is not percolating into groundwater.

Sampling and testing associated with monitoring should be undertaken in accordance with relevant regulatory requirements and manuals such as those provided by the DERM, and testing is undertaken through an accredited Laboratory.

Continuous monitoring should also be undertaken by the system owner for any water on the surface of the application area, down-slope resurfacing, change in plant growth on or around the application area and any other signs of problems, and problems addressed through maintenance.

SC6.4.5 Specific Land Uses and Activities

Certain land uses or activities are likely to generate a higher level of impact on water quality and catchment management. In order to ensure that these land uses and activities contribute to the maintained and improved water quality of the catchments in Somerset Region, a Catchment Management Analysis prepared for specific land uses and activities may require consideration against additional criteria. Specific land uses identified as requiring additional analysis are:

- Filling and Excavation
- Industrial Activities, Business Activities and Utility Installations
- Rural Activities
- Intensive Animal Industry
- Animal Keeping and Animal Husbandry

SC6.4.5.1 Filling and Excavation

During the completion of the works, the location of ancillary activities, such as land disposal of treated wash water and contaminated runoff; buildings, structures, stockpiles, wash down areas, chemical storage/handling areas, loading/unloading areas, ponds/dams, should prevent contamination and/or interference with flows in any surface water or groundwater bodies. This may be achieved by locating these activities:

- On flat to gently sloping land (generally less than 10%) which is not prone to erosion, salinity and seasonal waterlogging;
- Where the seasonal ground water level is more than 3 metres below surface level;
- On predominantly loamy soils with more than 15% clay content and which avoids fractured rock;
- More than 50 metres from a surveyed *high bank* of a river, creek, stream or other waterway or to a groundwater recharge point; and
- Above the 1 in 50 year ARI flood line.

On completion of the works, revegetation of areas subject to these activities should achieve 60% surface coverage after approximately six months and minimise weed invasion.

SC6.4.5.2 Industrial Activities, Business Activities and Utility Installations

In addition to those considerations of the site analysis, these uses may also be sited to:

- Reflect hydrogeological assessments which demonstrates that seepage can be controlled;
- Avoid areas above aquifers or soils that are: highly acidic or alkaline; saline or highly sodic; highly permeable; erosion prone; dispersive or unstable; prone to seasonal waterlogging;
- Ensure the highest seasonal ground water level is 3 metres below surface level;
- Contain development on slopes that are free draining;
- Position all development above known or local government prescribed flood levels;
- Ensure adequate and reliable water supply for drinking, sanitation, processing, fire fighting, dust suppression and the like, which is not saline or needing excessive chemical treatment. Ensure there is adequate storage capacity for water supply;
- Ensure water storage and abstraction do not adversely affect the quality and quantity of water in the water supply catchments;
- Ensure an adequate and reliable power supply, with back-up, that guarantees failures do not undermine the operation of any facility that could impact on water quality; and
- Minimise clearing of *native vegetation* or grasslands which help to control runoff.

Whether the nature or design of the proposal presents a high risk of impact on water quality, setbacks to waterways, groundwater recharge areas, on-site water supplies and urban water supply storages should be informed by detailed hydraulic and nutrient mass balance modelling which establishes zero direct or indirect discharge from the site.

SC6.4.5.3 Rural Activities

A Property Management Plan may be prepared for the proposed use which identifies:

- Slopes with gradients 0-2%, 3-10%, 11-15%, 16-20% and greater than 20%;
- Areas of erosion incidents, dispersive soils, salinity, acidity, contamination, sodicity hazard, stoniness and slope failure;
- Seasonally waterlogged areas, springs, wetlands and flood plains;
- Ground water levels, recharge areas and aquifer intake points;
- Local drainage catchments, watercourses and drainage lines;
- Remnant *native vegetation*;
- Micro climatic conditions (winds/frost);
- Existing structures and farm improvements; and
- Cross sections of proposed structures, storage areas, sediment controls, drainage and water retention networks, and the like.

The ongoing management of the proposed use should be consistent with the details of the plan.

In addition to those considerations of the site analysis, these uses may also be sited to avoid:

- Unstable and constrained areas or soils with poor nutrient retention ability, unless they can be sensitively rehabilitated for sustainable use;
- Land that is regularly inundated (for example more than once in a 20 year period), with buildings having a greater flood immunity in accordance with local government requirements;
- Remnant *native vegetation*;
- Land less than 2 metres above the seasonal high water table;
- Annual cropping on land with slopes over 10% in gradient, with soil conservation procedures for slopes greater than 2-3%; and
- Perennial tree and vine cropping, horticulture and forestry on slopes over 15% in gradient.

SC6.4.5.4 Intensive Animal Husbandry, Animal Keeping and Animal Husbandry

Where for an Intensive Animal Husbandry, Animal Keeping and Animal Husbandry use the management of stormwater in association with the use shall have no adverse impact on water quality. This may be achieved through:

- Clean runoff which is not captured in rain water tanks, being diverted around contaminated or disturbed areas through measures engineered to prevent scour, erosion and ponding, for discharge into storage ponds;
- Clean runoff in storage ponds being reused onsite or discharged
- Sheds are roofed, with impervious floors that are raised above ground level and/or bunded to contain contaminated waters; and
- Pens and animal movement areas are located on compacted, well drained surfaces which provide for the capture of contaminated runoff for appropriate treatment and disposal. Where practical, turf is maintained to reduce the potential for nitrogen to be leached to groundwater and reduce the potential for erosion. Overland flow and natural drainage lines are maintained in a well vegetated state with trails located, formed and maintained to minimise scour and erosion and to avoid banks, steep gullies and erosion prone areas; and
- Contaminated runoff is directed to treatment areas.

Where associated with intensive animal husbandry only, all facilities should be located to minimise potential impact on water quality. This may be achieved, through the location of these uses on land that is:

- Free draining to avoid waterlogging;
- At least 5 metres (for feedlots and piggeries) or 2 metres (for poultry sheds) above the seasonal high groundwater level and outside of groundwater recharge areas;
- Outside potentially unstable and constrained areas (such as soils which are highly impermeable, acidic or contaminated; have swelling clays or rocky outcrops; or are prone to salinity or erosion);

- Provided with reliable water supply for animal health and sanitation (which is not saline or in need of excessive chemical treatment);
- Ensured a water supply (via storage or abstraction) that does not adversely impact on the quality and quantity of water in the water supply catchment;
- Provided with suitable water for fire fighting, dust controls and dilution of effluent waters;
- Connected to an electricity supply with generators for back-up; and
- Provided with all-weather sealed road access onto and off site.

Where treated wastewater associated with the use is discharged via irrigation, the analysis includes MEDLI modelling to assess irrigation rates and sizing of irrigation areas.

SC6.4.8 References

Seqwater. 2012. *Seqwater Development Guidelines 2012: Development Guidelines for Water Quality Management in Drinking Water Catchments*. Seqwater

SC6.5 Planning Scheme Policy 4 – Design Standards

SC6.5.1 INTRODUCTION

The purpose of this planning scheme policy is to provide a uniform standard for works within the Somerset Region.

This planning scheme policy supplements the engineering analyses and judgement that are to be applied to projects and emphasises cost-effective, environmentally conscious and context sensitive design sought to be applied within the Somerset Regional Council local government area. The complexity of projects may sometimes require the designer to make fundamental trade-off decisions that balance competing considerations. Although this adds to the complexity of design, it acknowledges the unique needs of specific projects.

Consultation with Council's design and development manager is encouraged, especially early in the concept or design stages as this will assist in the early identification and resolution of matters and issues that may cause delays in the approval and/or construction of subsequent works.

SC6.5.2 APPLICATION

This planning scheme policy applies to operational work applications where they involve any of the following:

- Earthworks;
- Roads, driveways, pathways and cycleways;
- Stormwater;
- Openspace, public parks and land for community facilities;
- Electricity supply, lighting and telecommunications; or
- Landscaping.

SC6.5.3 ENVIRONMENTAL DESIGN STANDARDS

This section outlines the environmental design standards to be achieved by all works.

SC6.5.3.1 Contaminated Land

Where land to be developed may have been subject to contamination, then investigation and/or clearance in accordance with the "Environmental Protection Act 1994" will be required.

SC6.5.3.2 Noise and Dust

The design and construction is to comply with the "Environmental Protection Act 1994", "Environmental Protection (Noise) Policy 2008", "Part 2A (Environmental Nuisance) Environmental Protection Regulations 2008", "Environmental Protection Agency Queensland's Nuisance Laws" and other relevant State legislation.

SC6.5.3.3 Waste Management

The design and construction is to comply with Environmental Protection (Waste Management) Regulation 2000.

SC6.5.3.3.1 Waste Storage

Skip bins are required for commercial and industrial premises unless the specific use proposed for the premises can demonstrate that the waste output generated will not be of a sufficient quantity to warrant a skip bin. This skip bin must be located on the premises.

SC6.5.4 ENVIRONMENTAL MANAGEMENT PLAN REQUIREMENTS

SC6.5.4.1 General

An Environmental Management Plan (EMP) is to demonstrate that the impacts of development on the environment are adequately controlled. This can include construction, operational and decommissioning stages of a development. This section describes the requirements and provides an example structure of an Environmental Management Plan.

SC6.5.4.2 Applicable Topics

Issues which may be required to be addressed include, but are not limited to, the following:

- (a) Air quality;
- (b) Biting insects;
- (c) Buffer area management;
- (d) Building/structure conservation or retention;
- (e) Energy efficiency and management;
- (f) Erosion and sediment control;
- (g) Management of activities and events, including monitoring and corrective action;
- (h) Management of the impacts of land uses on surrounding sites;
- (i) Natural and cultural heritage preservation/management;
- (j) Noise control;
- (k) Rehabilitation/landscaping;
- (l) Rehabilitation of sites;
- (m) Resource and waste management;
- (n) Stormwater management;
- (o) Vegetation management;
- (p) Visual amenity;
- (q) Water quality/waterway health;
- (r) Weed control.

SC6.5.4.3 Essential components

- (1) Establishment of agreed performance criteria and objectives in relation to environmental and social impacts;
- (2) Detailed prevention, minimisation and mitigation strategies (including design standards) for controlling environmental impacts at specific sites;
- (3) Details of the proposed monitoring of the effectiveness of remedial measures against the agreed performance criteria in consultation with relevant government agencies and the community;
- (4) Details of implementation responsibilities for environmental management;
- (5) Timing (milestones) of environmental management initiatives;
- (6) Reporting requirements and auditing responsibilities for meeting environmental performance objectives; and
- (7) Corrective actions to rectify any deviation from performance standards.

SC6.5.4.4 Introduction Section

- (1) Description of the development proposal;
- (2) The need for the EMP in relation to the development;
- (3) Structure and scope.

SC6.5.4.5 Aim Section

- (1) As a framework for practically addressing and monitoring the significant environmental impacts of the proposal;
- (2) Compliance with legislative requirements and government policies;
- (3) Evidence that the works and operations are being conducted in an environmentally responsible manner.

SC6.5.4.6 Identification Section

- (1) Includes identification of environmental issues or environmentally impacting activities and associated management actions.
- (2) Provide for each issue or environmentally impacting activity details of:
 - Policy for addressing the issue/activity;
 - Performance criteria;

- Implementation strategy;
 - Monitoring program;
 - Details of how reporting will influence mitigation measures and how reporting is to take place.
- (3) A site rehabilitation plan is prepared addressing the following matters:
- After use options, including the most likely or preferred option;
 - Conceptual design of after use infrastructure:
 - Proposed final surface contours;
 - Capping material to be used;
 - Drainage system including final discharge point;
 - Provision for irrigation measures to promote vegetation growth; and
 - Anticipated period of after care.

SC6.5.5 TREE PRESERVATION

All clearing is to be undertaken in accordance with an effective development permit for vegetation clearing, a copy of which is to be available on site upon request. Where clearing is exempt and no development permit was required, written confirmation of the exemption from the relevant state and/or federal government department is required to be available on site upon request.

SC6.5.6 LANDSCAPING ENVIRONMENTAL DESIGN STANDARDS

SC6.5.6.1 General

- (i) All landscape designs are to be prepared by a qualified landscape architect and should give due consideration to all environmental matters.
- (ii) All requirements of the approved ecological assessment report, approved environmental management plan and development conditions are to be met.

SC6.5.6.2 Landscape Vegetation

- (i) All landscape vegetation implemented should be endemic to the development site and consistent with the relevant Regional Ecosystem species assemblage, or the pre-clearing Regional Ecosystem species assemblage. Where it can be demonstrated that vegetation species endemic to the development site are unsuitable for particular landscaping purposes, alternate native (native to Australia) species should be utilised.
- (ii) No vegetation species (introduced or native) with potential to become environmental weeds on the development site, or within the local context, will be accepted.
- (iii) Where landscaping for streetscaping purposes, SC6.5.8.2.1 provides a list of preferred tree species for character consistency across and within Somerset townships.
- (iv) Where landscaping vegetation may potentially impact upon service infrastructure (ie power, water, sewer) written confirmation from the service provider is to be provided demonstrating that selected species will not adversely impact on these services.

Table SC6.5.6.2.1 – Streetscaping Tree Species

TREES	Common Name	Appropriate under powerlines
<i>Aurunticarpa rhombifolia</i>	Hollywood	
<i>Backhousia citriodora</i>	Lemon-scented Myrtle	
<i>Brachychiton bidwilli</i>	Little Kurrajong	
<i>Brachychiton populneus</i>	Kurrajong	
<i>Buckinghamia celsissima</i>	Ivory Curl Flower	✓
<i>Callistemon viminalis (slim narrow variety)</i>	Weeping Bottle-brush (Emblem)	✓
<i>Cupaniosis anacardioides</i>	Tuckaroo	
<i>Fraxinus griffithii</i>	Himalayan Ash	
<i>Harpullia pendula</i>	Tulipwood	
<i>Hymenosporum flavum</i>	Native Frangipani (Emblem)	
<i>Lagerstroemia indica</i>	Crepe-myrtle	

<i>Lophostemon confertus</i>	Brush Box	
<i>Melaleuca irbyana</i> (<i>Callistemon</i>) 'King's Park Special'	Kings Park Bottle Brush	✓
<i>Melaleuca viminalis</i> (slim narrow variety)	Weeping Bottle-brush	✓
<i>Tabebuia Palmeri alba</i>	Pink Trumpet Tree	
<i>Waterhousia floribunda</i>	Creek Lilly Pilly	

SC6.5.6.3 Prominent Local Soil Types

The "Land Management Manuals" published by the State government are to be referenced with regard to local environment and soil types.

SC6.5.7 EARTHWORKS DESIGN STANDARDS

SC6.5.7.1 General

- (i) The development earthworks are to be designed to avoid worsening of any stormwater ponding, or concentration of flow or nuisance to land adjacent to the development.
- (ii) The minimum fall on lots in the General residential zone or General residential zone - park residential precinct is to be 1 in 200 in any direction.
- (iii) No proposed cut or fill is to have a deleterious effect on the visual amenity of adjoining properties.
- (iv) The standards for the provision of Earthworks are to be in accordance with Australian Standard AS 3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments", modified to suit local conditions and practices.

SC6.5.7.2 Materials for Filling

- (i) The following materials are considered unsuitable as structural fill—
 - a. organic soils;
 - b. silts;
 - c. materials prone to dissolving or which undergo physical or chemical changes on exposure to moisture;
 - d. contaminated soil.

Such material, with the exception of contaminated soil, should be confined to non-critical areas, such as parkland.

SC6.5.7.3 Compaction

For areas of structural filling, the minimum relative compaction values are to be those outlined in **Table SC6.5.7.3.1** below.

Table SC6.5.7.3.1 – Minimum Relative Compaction by Development Type

Item	Project	Minimum relative compaction, percentage	
		Minimum dry density ratio (Cohesive Soils) (See Note 1)	Minimum Density index (Cohesionless soils) (See Note 2)
1	Residential Lot fill	95 (3)	65
2	Commercial, fills to support minor loadings	98 (4)	70
3	Roads embankments: (a) > 0.3m below pavement subgrade	95	65
	(b) < 0.3m below pavement subgrade	100	80

Source: adapted from Table 5.1 – AS 3798-2007

Notes:

1. Density ratio may be either dry density ratio (see AS 1289.5.4.1) or Hilt density ratio (see AS 1289.5.7.1) as applicable. These test methods require reporting to the nearest 0.5% and this is assumed in these values.
2. Density index as a means for control of achieved relative compaction may be difficult to use and interpret. Local correlations with other methods may exist and can be used where these are well established.
3. Developments on this fill will be restricted to single and some double storey free standing houses with floor slab average loadings not exceeding 20 Kpa, and strip or pad footings not exceeding bearing pressures of 100 Kpa. Residential developments other than these are considered as commercial. A minimum dry density ratio of 98% or higher may need to be considered if collapse on saturation, excessive settlement, or dispersive soils are likely to occur. Not applicable where differential settlement is likely to occur.
4. Commercial developments are likely to impose loads on fills which will have a more severe effect than those of freestanding houses, even when contact pressures are limited. The engineer must assess the load carrying capacity and associated deformations associated with proposed filling to ensure the fill can perform its required function. Where highly loaded fills are proposed, the minimum relative compaction may need to be increased.

SC6.5.7.4 Imported Filling

No transport of filling operations are to be commenced on Council-controlled roads until the transport route is approved by Council.

SC6.5.7.5 Previously Filled Land

- (i) Where development is to be carried out on land subject to prior filling, then an RPEQ Supervision Certificate and Test Certificates detailing the compaction of the fill to the minimum compaction standards contained in this document and as defined in AS3798 will be required, where available.
- (ii) If certificates and results are unavailable, test pits and density testing is to be carried out with density testing every 300mm until the natural ground surface is reached.
- (iii) 1 Test Pit to natural ground is required for every 1000m² of previously filled area.
- (iv) Any test result indicating compaction less than the specified amount or indicating that deleterious material is present in the fill will necessitate either the removal of all fill from the site and replacement under RPEQ supervision or the provision of an appropriate site classification certificate.
- (v) A minimum interval for testing along previously filled areas of road reserves is 50m.

SC6.5.7.6 Building Pad Requirements

- (i) The minimum building pad level is to be Council's Defined Flood Level (DFL).
- (ii) Refer to **Table SC6.5.7.6.1– Minimum Building Envelope Area by Precinct** below for the minimum Building Pad areas.
- (iii) Building Pad is to have a slope less than 10%. New allotments with a slope of 10% or steeper will need to demonstrate a building pad.
- (iv) Building Pad is to extend a minimum of 3m from buildings
- (v) Building Pad to have a maximum batter slope of 1 in 4.

Table SC6.5.7.6.1 – Minimum Building Envelope Area by Precinct

Zone/Precinct	MINIMUM BUILDING AREA ABOVE DFL FLOOD AREA AND <10% SLOPE
Centre	N/A
Community facilities	N/A
General residential	15m x 15m
General residential - Park residential precinct	1,000m ²
High impact industry	N/A
Industry	N/A
Emerging community	N/A
Recreation and open space	N/A
Rural Residential	1,000m ²
Rural	N/A
Township	17m x 17m

SC6.5.7.7 Filling Below the DFL Flood Level

- (i) Where any filling is to be carried out within the DFL flood line, it must be undertaken in accordance with an approved hydraulic (flood hazard assessment) report. Refer to section **SC6.5.11.1.4** for Hydraulic (Flood Hazard Assessment) Report requirements.

SC6.5.7.8 Filling Over Existing Structures

- (i) Where filling over any Sewer Main occurs refer to section **SC6.5.12**
- (ii) Where filling over any Water Main occurs refer to section **SC6.5.13**

SC6.5.7.9 Spoil Control

- (i) Where excess spoil is generated by the proposed earthworks, it must be nominated in the application detailing the proposed spoil dump site.
- (ii) Where spoil is to be transported along Council-controlled roads, the transport route for the spoil is to be approved by Council.

SC6.5.7.10 Batter Treatments

- (i) Internal allotment boundaries are not to have cut and fill batters steeper than 1 in 4 and external boundaries are not to have batters extending into existing or proposed parkland, bushland areas or road reserves.
- (ii) The toe of any fill batter and the top of any cut batter is to be a minimum 300mm clear of the boundary line of an adjoining property.
- (iii) Batters are not to exceed 1 in 6 in areas to be ultimately maintained by Council
- (iv) Batters to a maximum slope of 1 in 3 will be approved subject to acceptance of the landscaping treatment required by the Landscaping section of this manual.
- (v) Batters to a maximum slope of 1 in 2 will be approved subject to acceptance of the landscaping treatment and geotechnical advices confirming the structural and erosive stability.
- (vi) Batters are acceptable within road reserves in accordance with the Standard Drawing. Steeper gradients within road reserves will require approval with consideration for surface and geotechnical stability.

SC6.5.7.11 Retaining Walls

- (i) Batters steeper than 1 in 4 can be accommodated by a retaining structure with fully detailed design and RPEQ structural certification. All walls or structures are to be constructed 25-150mm from the boundary and contained fully within the allotment which is being serviced. The upper allotment is typically the one being serviced.
- (ii) If the retaining wall is not subject to surcharge (i.e. retaining the earth only and no imposed loads), the detailed design and structural certification is to be provided where the wall height exceeds 1.0m.

SC6.5.7.12 Earthworks in Parks

All earthworks within a proposed park or existing parkland are to be in accordance with the grade requirements stated in the Open Spaces – Parks Landscaping Design Standards section of this manual or an approved landscape design.

SC6.5.8 ROADWORKS DESIGN STANDARDS

SC6.5.8.1 Road Design Standards

SC6.5.8.1.1 General

- (i) This manual is to be read in conjunction with the Standard Drawings as shown in the Appendix.
- (ii) Refer to the following documents for criteria not contained within this manual or the standard drawings.
 - a) IPWEAQ - Queensland Streets Manual.
 - b) Austroads Design Manuals.
 - c) Australian Roads Research Board (ARRB) – Sealed Local Roads Manual.
 - d) Australian Roads Research Board (ARRB) – Unsealed Roads Manual.

- e) Queensland Department of Transport and Main Roads (DTMR) – Standard Drawings.
- f) Queensland Department of Transport and Main Roads (DTMR) – Road Planning and Design Manual.
- g) Queensland Department of Transport and Main Roads (DTMR) – Manual of Uniform Traffic Control Devices (MUTCD).
- h) Australian Standards.

SC6.5.8.1.2 New Roads

- (i) Refer to the Standard Drawings and the following tables for design requirements for the various development types.
- (ii) Except as specifically varied hereafter, the design of Access Streets, Access Places, Local Industrial Streets, Collector Streets, Trunk Collector Streets and Industrial Collector Streets is to be based on Queensland Streets.
- (iii) The maximum length of a cul-de-sac is 250 meters.

Table SC6.5.8.1.2.1 – Design Geometry Locality Requirements

ZONES and PRECINCTS	ROAD TYPE	MIN ROAD RESERVE WIDTH	PAVEMENT WIDTH	EDGE TREATMENT	MIN VERGE WIDTH
		(m)	(Nominal Kerb lines or Pavement edge)	TYPE REQUIRED	
General residential Community facilities Recreation and open space Township	Access Place	16.0	8.0	Layback Kerb	4.0
	Access Street	20.0	8.0	Layback Kerb	4.0
	Collector	20.0	10.0	Layback Kerb	4.0
	Trunk Collector - Single	20.0	12.0	Barrier Kerb	4.0
	Trunk Collector - Dual	25.0	12.0	Barrier Kerb	4.0
	Arterial	25.0	To be determined by Council.		
Rural residential zone Rural Zone General residential - Park residential precinct	Access Place/Place	20.0	8.0 [7.0m bitumen seal]	Standard verge and access profile	4.0
	Collector	20.0	8.0 [7.0m bitumen seal]	Standard verge profile for Collector Roads	4.0
	Trunk Collector - Single	20.0	10.0 [7.0m bitumen seal]	Standard verge profile for Collector Roads	4.0
	Trunk Collector - Dual	25.0	10.0 [7.0m bitumen seal]	Standard verge profile for Collector Roads	4.0
Emerging community	All road types	To be determined by Council.			
Centre	All road types	20.0	10.0	Barrier Kerb	4.0
Industry High impact industry	Industrial road	25.0	13.0	Barrier Kerb	4.0

Note:

- Maximum Street length is to be in accordance with Queensland Streets.
- Bitumen Seal required in Rural subdivisions if three or more lots are proposed.

Table SC6.5.8.1.2.2 – Road Standard by Traffic Volume

Traffic Volume AADT	Surface Type Required	Surface Width	Formation Width
0-50	Gravel	4	8
50-150	Bitumen Seal / Asphalt	7	8
150-500	Bitumen Seal / Asphalt	7	8
500-1000	Bitumen Seal / Asphalt	7	8
>1000	Bitumen Seal / Asphalt	7	10

- (i) A 4m Bitumen seal and 8m formation may be used in rural areas where predicted traffic would not exceed 150 vpd per an approved Traffic Engineering Report. The minimum information required to be provided for a Traffic Engineering Report is listed below.
 - a. The nature of the existing road system servicing the property.

- b. An outline of any existing Traffic Studies affecting the applicable area, undertaken by Council or other bodies.
- c. Assessment of the adequacy of the existing receiving road system to cater for the additional traffic flows generated by the proposed development, and proposed solutions, where required.
- d. Assessment of whether or not the traffic volumes generated would result in the need for a noise attenuation barrier.

Table SC6.5.8.1.2.3 – Design Speed and Number of Dwellings by Road Type

ROAD TYPE	MAXIMUM NUMBER OF DWELLING UNITS SERVED	MAXIMUM DESIGN SPEED (km/hr)
Access Place	10	30
Access Street	75	40
Collector Street	300	60
Trunk Collector	1,000	60 / 70
Arterial Road	As required by relevant authority	
Industry	n/a	60
Rural Road	Site specific solutions apply	

- (i) All vehicles must be able to safely negotiate intersections, roadways, entrances, parking facilities, and such without damaging other vehicles, buildings, infrastructure and roadside furniture. Design vehicles will be used for showing vehicular movements. =
- (ii) Design vehicles are as specified in Austroads Design Vehicles and Turning Templates. Four design vehicles are used for most purposes:
 - a. Passenger vehicle/car/van (5.2m)
 - b. Service Vehicle (8.8m)
 - c. Single unit truck/bus (12.5m)
 - d. Single articulated vehicle/Semi-trailer (19m).
- (iii) Curve widening will be based on the design vehicle for the section of road.
- (iv) For car parks and access to allotments, the use of the design car will be appropriate except where it is known that larger vehicles, such as a refuse collection truck or delivery vehicle, need to be catered for.
- (v) The design is undertaken in accordance with the design vehicle but is checked with a larger vehicle. The “check vehicle” will be chosen according to the potential for such vehicles to use the facility and will be at least the next larger vehicle.
- (vi) The check vehicle may operate with reduced clearances or encroach onto adjacent lanes. Kerbed areas should be mountable or semi-mountable kerbing. Avoid locating road furniture within the swept path of a check vehicle.

Table SC6.5.8.1.2.4 – Selection of design and checking vehicle and the recommended turning radii

Intersecting ROAD TYPE	Design	Checking
Access/Access (Residential)	Service vehicle (8.8m) Radius 9m	Single unit truck/bus (12.5m) Radius 12.5m
Access/Access (Industrial)	Single articulated (19m) Radius 12.5m	Long single articulated (25m) Radius 12.5m or B-double (25m) Radius 12.5m
Collector/Access (Residential)	Service vehicle (8.8m) Radius 9m	Single unit truck/bus (12.5m) Radius 12.5m
Collector/Collector (Residential)	Single unit truck/bus (12.5m) Radius 12.5m	Single articulated (19m) Radius 12.5m
Collector/Collector (Industrial)	Single articulated (19m) Radius 12.5m	Long single articulated (25m) Radius 15m or B-double (25m)

		Radius 15m
Arterial/Local (Residential)	Service vehicle (8.8m) Radius 9m	Single unit truck/bus (12.5m) Radius 12.5m
Arterial/Collector	Single unit truck/bus (12.5m) Radius 12.5m	Single articulated (19m) Radius 12.5m
Rural Roads	Single articulated (19m) Radius 12.5m	Long single articulated (25m) Radius 12.5m or B-double (25m) Radius 12.5m
Arterial/Arterial	As required by relevant authority	

SC6.5.8.1.3 Extractive Industry Haul Route

For an extractive industry, the proposed haul route must have at least a 7 meter bitumen seal and 8 meter formation.

SC6.5.8.1.4 Frontage Requirements

The following are to be provided where they do not already exist at the frontage of the site:

- (i) reinforced concrete industrial crossing or crossings where development is other than for a rural or residential purpose, in accordance with the standard drawings included in the Appendix of this manual;
- (ii) verge formation suitable to site specific conditions;
- (iii) footpath or bicycle path as applicable for the full length of the road frontage or frontages of the land;
- (iv) full width footpath where development is on land within the Centre zone;
- (v) kerb and channelling along the full frontage or frontages of the land other than within the General residential zone – park residential precinct, Rural residential zone and Rural zone;
- (vi) where the road is partly paved, construction and pavement of the carriageway between the existing pavement and the edge of the carriageway along the full frontage or frontages of the land;
- (vii) the alteration or repair of existing roadworks required as a result of the construction works for the development;
- (viii) where the street/road frontage to a development is unsealed or unformed at the time of development approval, it is to be constructed to a standard specified in the conditions of approval or where not specified in the conditions of approval no less than the greater of one half of the full width/road or 5.5 metres from the nominal kerb line to the bitumen edge;
- (ix) an existing sealed frontage street/road to a development is to be reconstructed to one half of the full width of the street/road unless the existing pavement is adequate for the ultimate design conditions, in which case the pavement shall be widened only with kerb and channel provided at the nominated alignment;
- (x) If a maintained gravel road finishes short of the proposed development, then roadworks across the full frontage of the lot and back to the existing Council road within the road reserve are to be carried out in accordance with the standard drawings.
- (xi) 6m x 3 chord truncations are to be created on property boundaries at all road intersections. All improvements and obstructions are to be removed from the area of the corner truncation(s) and area of dedicated road.

SC6.5.8.1.5 Road Crossfall

All streets are to have a minimum 3.0% crossfall and a maximum 5.0% crossfall

SC6.5.8.1.6 Road Longitudinal Grade

- (1) The minimum grade for all Roads which will ultimately include kerb and channel is to be 0.5%;
- (2) The minimum grade for all Roads which will ultimately have earth table drains, is to be 1.0%;
- (3) Maximum 10% grade for all Commercial or Industrial road types;
- (4) Absolute maximum grade is 17.5% for Access Place/Street, 12% for Collector Street, and 10% for Trunk Collector;
- (5) Absolute minimum grade on straights is to be 0.3%;
- (6) Absolute minimum grade on bends is to ensure a minimum 0.3% grade along the invert of the outer length of kerb and channel.

- (7) Grades steeper than 10% are to be bitumen sealed at a minimum.
- (8) Grades steeper than 25% are to be concrete.

SC6.5.8.1.7 Superelevation

Superelevation of the carriageway is required for Trunk Collector roads only in accordance with Austroads, as applicable.

SC6.5.8.1.8 Horizontal Curves

The minimum centreline radius of a roadway in the High impact industry zone and Industry zone is to be 150m.

SC6.5.8.1.9 Vertical Curves

- (i) A minimum 10m vertical curve is to be provided where a side road joins a through road at three way intersections.
- (ii) The tangent point of a vertical curve in the side road is to be located at, or outside of the kerb line of the through road.
- (iii) A crest vertical curve that masks the commencement of a horizontal curve is to be avoided.

SC6.5.8.1.10 Road Widening

- (i) Road widening is to match existing surface treatment type grade and crossfall.
- (ii) Road widening is accepted for Trunk Collector roads and subject to assessment for Collector Streets.
- (iii) Road widening will not be considered for Access Place/Streets.

SC6.5.8.1.11 Vertical Sight Distance

- (i) The minimum sight distance for Access Streets/Places is 40m.
- (ii) The minimum sight distance for Collector Streets is 60m.
- (iii) The minimum sight distance for Trunk Collector Streets is 110m.

SC6.5.8.1.12 Pathways and Bikeways

- (i) Pathways and Bikeways refer to the total corridor width for a pedestrian footpath or Cyclepath not contained within a road reserve.
- (ii) Refer to Standard Drawings for footpath and cyclepath alignments and details within pathways and bikeways.
- (iii) The minimum width of land for a pathway is 4.0m.
- (iv) A 1.8m high screen fence is to be constructed on both sides of the pathway.
- (v) Bollards are to be installed on either end of the pathway to restrict vehicle access.
- (vi) Bikeways are to be in accordance with Austroads Part 6A: Pedestrian and Cyclist Paths and MUTCD Part 9: Bicycle Facilities.
- (vii) The minimum width of land for a bikeway is 5.0m to accommodate a 2.5m wide concrete paved cyclepath.
- (viii) Bikeways located in Parks are to be constructed above the Q₁ storm event.

Table SC6.5.8.1.12.1 – Footpath and Cyclepath Requirements by Road Type

ROAD TYPE	PAVED FOOTPATH REQUIREMENTS	CYCLEPATH REQUIREMENTS
Pedestrian Pathway	1.5m wide	No
Bikeway	N/A	2.5m wide
Access Place	No	No
Access Street	1.5m wide (one side)	No
Collector Street	1.5m wide (one side)	No, but carriageway cycle lane where determined by Council
Trunk Collector (town centre)	Full width	No
Trunk Collector (otherwise)	1.5m wide (both sides)	2.5m wide as a cycle path (on one side) or as a carriageway cycle lane where required (on both sides)
Arterial Road	As required by Main Roads	
Industrial Road	No	No
Rural or Park Residential	No	No

Note: Provision for cyclists is to be considered on all sub-arterial and arterial roads, irrespective of whether off-road bicycle or shared bicycle/pedestrian facilities are also provided on an adjacent verge.

SC6.5.8.1.13 Verges

- (i) Refer to the Standard Drawings and **Table SC6.5.10.1.2.1** above for the cross section widths, grades, service corridors and other requirements of the various development and road types.
- (ii) Absolute minimum verge width is to be 4.0m from invert of kerb.
- (iii) For table drain requirements refer to the section **SC6.5.11** of this policy.
- (iv) All verges to be grassed except in the Centre zone, which is to be full width footpath.
- (v) All tree planting is to be in accordance with the section **SC6.5.14** of this policy.
- (vi) All verges are to be formed to permanent levels and are to be left with a surface of fine grained materials graded to prevent scouring and able to support a good growth of grass.

SC6.5.8.1.14 Access to Allotments

- (i) Refer to standard drawings for access widths, grades and other requirements for various development types.
- (ii) Provide 6m minimum access (3m pavement width) for one allotment.
- (iii) Provide 8m minimum access (5.5m pavement width) to more than one allotment.
- (iv) Access handles are to be sealed in urban areas.
- (v) Access shall be wide enough to contain all drainage and cut/fill slopes.
- (vi) Access shall have non worsening drainage affects on neighbouring properties.
- (vii) Driveway access to have a minimum 50% AEP cross drainage.
- (viii) All Weather Access = Access which is capable of being traversed by a two wheel drive vehicle during and after a storm event with no significant damage or deformation. Maintenance will be performed to preserve the access as all weather by the property owner. Drainage structures are to be placed in water courses that have flowing water greater than 200mm in depth during non-storm events.
- (ix) The location of the driveway shall provide for adequate sight distance to and from the access point in accordance with Australia Standard AS/NZ 2890.1 for sight distance requirements at the access driveway.

Table SC6.5.8.1.14.1 – Access Grades by Use Type

USE TYPE	DESIRABLE GRADE	ABSOLUTE GRADE
Rural	16.6%	20%
Residential	16.6%	25%
Commercial	10%	16.6%
Industrial	10%	16.6%

SC6.5.8.1.15 Vehicle Crossings

All vehicular verge crossings and the necessary adjustments to the kerb & channel are to be constructed in accordance with the standard drawings.

The minimum driveway access distance to an intersection is 10 meters.

SC6.5.8.1.16 Rural Access

- (i) Access onto a gravel road requires:
 - a gravel invert crossing if situated on the crest of a road; or
 - the installation of a concrete stormwater pipe/s placed within the invert of the table drain with concrete headwalls, wingwalls and apron in accordance with the Standard Drawing.
- (ii) A road base material with a minimum CBR 45 is to be used as cover pavement material and is to comply with those pavement material properties specified in this division.

SC6.5.8.1.17 Entry Statements

Pavement Thresholds are acceptable at intersections in Access Place or Access Streets. Contact council prior to detailed design to confirm proposed configuration.

SC6.5.8.1.18 Truncations

Truncations to property boundaries are to be provided as required to maintain minimum verge and roadway widths at any point, particularly at traffic calming devices, intersections, bends, cul-de-sac heads and roundabouts.

SC6.5.8.1.19 Pavement Tapers

- (i) Pavement tapers to existing construction is to be designed in accordance with the current AUSTROADS design manuals based on the design speed of the road.
- (ii) Tapers are to be constructed to the same standard as the proposed full road pavements.

SC6.5.8.1.20 Intersections

- (i) Intersections on state roads are to be designed to the current DTMR Road Planning and Design Manual – Chapter 13 Intersections at grade, Austroads Part 4: Intersections and Crossings – General, and Austroads – Part 4A: Unsignalised and Signalised Intersections.
- (ii) Rural Intersection are to be in accordance with Austroads Part 4A: Unsignalised and Signalised intersections.
- (iii) All other intersections are to be designed and located in accordance with Queensland Streets, except as specifically modified by this manual and the standard drawings.
- (iv) All intersections are preferably to be designed as a three way intersection.
- (v) Where unavoidable, four way intersections are to be designed as roundabouts or be provided with other appropriate traffic control devices.
- (vi) All new turnouts shall be connected to the existing road pavements.

Table SC6.5.8.1.20.1 – Intersection Spacing by Road Type

ROAD TYPE	MINIMUM INTERSECTION SPACING	
	ON SAME SIDE OF THROUGH ROAD	ON OPPOSITE SIDE OF ROAD
Access Place	60m	40m
Collector Street	60m	40m
Arterial Road	As required by the responsible authority	
Other Road	Site Specific conditions apply	

SC6.5.8.1.21 Roundabouts

Roundabouts on state roads, arterial, trunk collector and collector roads are to be designed to the current DTMR – Chapter 14 Roundabouts and Austroads – Part 4B: Roundabouts. All other Roundabouts are to be designed and located in accordance with Queensland Streets, except as specifically modified by this manual.

SC6.5.8.1.22 Cul-De-Sac Heads

- (i) Residential head kerb invert circle radius of 9.0m minimum.
- (ii) Residential approach kerb invert curve radius of 20m minimum.
- (iii) Industrial head kerb invert circle radius of 12.5m minimum.
- (iv) Industrial approach kerb invert curve radius of 30.0m minimum.
- (v) Bin deposition areas are required to be provided for all lots in the cul-de-sac head area.

SC6.5.8.1.23 Kerb and Channel

- (i) Refer to **Table SC6.5.8.1.2.1** for required edge treatments by road type.
- (ii) Park Areas are to be fronted with Barrier Kerb and Channel in all areas.
- (iii) Traffic Islands of all types are to be Semi Mountable Kerb in all areas
- (iv) Refer to Somerset Regional Council standard drawing SRC-ROAD-011 for cross sections and details and the Australian Standard.
- (v) See **Table SC6.5.8.1.2.1** for where kerb and channel is required.
- (vi) Concrete kerb and channel is to be provided on both sides of all streets.
- (vii) For roads, refer to the relevant applicable Standard Drawing to determine if concrete kerb and channel is required.
- (viii) The standard kerb and channel for streets is to be Drive-Over, Type M1 or S1 in accordance with Standard Drawing.
- (ix) Barrier type kerb and channel with 450mm channel (type B1) in accordance with Somerset Regional Council standard drawing SRC-ROAD-011 is to be used in the following cases—
 - (x) in streets adjacent to parks;
 - (xi) industrial streets, where heavy duty barrier type is to be used (i.e. standard barrier type, with additional 50mm base thickness);
 - (xii) Shopping Centres and in locations where high pedestrian volumes are likely or for greater pedestrian safety, e.g. on the frontage of schools, major sporting facilities and parks.
- (xiii) Semi-mountable type kerb is to be used in the following cases—

- (xiv) at Medians and Traffic Islands, semimountable or low profile kerb type SM4 for concrete infilled treatments and type SM5 for landscaped treatments in accordance with Somerset Regional Council standard drawing SRC-ROAD-011.
- (xv) At Roundabouts, kerb type M5 on the outer island and type SM4 on the centre island in accordance with Somerset Regional Council standard drawing SRC-ROAD-011.
- (xvi) Where proposed construction adjoins existing kerb and channel the new construction is to be tapered smoothly to the existing kerb and channel.
- (xvii) The grading of kerb and channel is to conform to the road centreline grading, although at locations where the kerb and channel grading diverts from the centreline grade, such as at intersections or on superelevated curves, the minimum channel grade is to be 0.4%.
- (xviii) At all changes in horizontal alignment, kerbs and kerb and channel are to be constructed with horizontal curves.
- (xix) Kerb ramps are to be provided at all kerb returns and at park entrances.
- (xx) Kerb and channel will be stamped or engraved above each end of under road conduits. Refer to Somerset Regional Council standard drawing SRC-ROAD-024.
- (xxi) Kerb engraving or stamp over conduits shall be W (Water), T (Telephone), E (Electricity), G (Gas). Refer to Somerset Regional Council standard drawing SRC-ROAD-024.

SC6.5.8.1.24 Traffic Calming Devices

- (i) In existing roads, the vertical displacement devices will only be considered where the re-alignment to accommodate for horizontal devices is limited by site constraints.
- (ii) A minimum traffic lane width of 2.75m is required through the calming device.
- (iii) The traffic calming device shall be checked with a Design Vehicle per Section 3.1.2.
- (iv) Speed control should be provided by street alignment wherever possible and the use of speed control devices should be regarded as a last resort. Layout configuration (limiting the extents of straights to 120m) and side friction (landscaping, kerb bulb outs) may be used.
- (v) Traffic calming devices in existing residential areas may result in loss of street parking, increased noise and vehicular emissions next to traffic calming structures due to slowing down and then gathering speed, increased glare at night from car lights and additional street lighting, increased maintenance costs, increased traffic volume in neighbouring streets and slower access for emergency vehicles.

As such, the installation of traffic calming devices in existing residential areas will involve establishing the need (i.e. traffic survey to show warrant of speeding vehicles) and consultation with community (i.e. support of neighbours and at where the devices are proposed).

SC6.5.8.1.25 Street Parking

- (i) Residential low density lots with a frontage of less than 17m will require street parking in accordance with the requirements of Queensland Streets Section 2.
- (ii) Minimum 1.8m wide verge is required to all indented parking areas.

SC6.5.8.1.26 Road Marking

Permanent road markings and road edge guide posts are to be in accordance with DTMR "Manual of Uniform Traffic Control Devices (MUTCD)".

SC6.5.8.1.27 Traffic Islands

- (i) Traffic Islands are to be signed and delineated in accordance with the requirements of the DTMR "Manual of Uniform Traffic Control Devices (MUTCD)".
- (ii) The maximum crossfall on grassed medians on divided roads is to be desirably 1 in 6 with an absolute maximum of 1 in 4.
- (iii) At median openings, the pavement crossfall is not to exceed 5%.
- (iv) Traffic islands are to be indicated by raised kerb islands.
- (v) Islands may include channelling (or directional) islands, roundabouts, median islands, medians, separators, pedestrian refuge islands and are to be classified in accordance with the DTMR "Manual of Uniform Traffic Control Devices".
- (vi) Raised kerbed islands less than 12.0m² or less than 2.0 metres in width between kerb faces are to be constructed with a minimum 100mm thickness N25 reinforced concrete on a compacted sand base.
- (vii) The surface treatment for these islands is to be brushed or stencilled concrete.

- (viii) Raised kerb islands greater than 12.0 m² and wider than 2.0 metres are to be grassed or landscaped in accordance with the approved landscape drawings.
- (ix) A water service conduit is to be installed approximately every 80 metres, with a minimum of one service per median.
- (x) Where the fall across an island is greater than 1 in 4, the island is to be surfaced with brushed or stencilled concrete.
- (xi) Sub-soil drainage (connected to an underground drainage system) is required in all islands where the surface treatment is other than concrete.

SC6.5.8.2 ROAD SUBSOIL DRAINAGE DESIGN STANDARDS

SC6.5.8.2.1 General

Subsoil Drainage is to be provided in the following locations.

- (i) Under all kerb and channel unless the subgrade material is a free draining porous material and the deletion of subsoil drains is approved by Council.
- (ii) Under all traffic islands containing landscaping.
- (iii) Wherever a pavement layer is surrounded by a material of a lower permeability.
- (iv) In all locations where the wet weather water table is above the subgrade.
- (v) Mitre drains are required in all locations where the seepage appears in the centre of the pavement.
- (vi) Trenches are to be a minimum 100mm wider than the nominated outside diameter.

SC6.5.8.2.2 Subsoil Drainage Alignment

- (i) Where kerb and channel has been or is to be constructed, the subsoil drainage is to be located immediately below the back of kerb as detailed on the Somerset Regional Council standard drawing SRC-ROAD-020.
- (ii) The minimum grade is to be 0.2%.
- (iii) Where the underground stormwater piped drainage runs parallel to the kerb and channel, the subsoil drainage can be laid within the sand bedding of the stormwater pipe.

SC6.5.8.2.3 Treatment of Islands and Speed Control Devices

- (i) A Mitre Drain is to be constructed to drain sub-surface water from these structures into the nearest stormwater pit or manhole.
- (ii) Landscaped Islands are to have perimeter sub-soil drainage discharging into the nearest stormwater pit or manhole.

SC6.5.8.2.4 Type of Pipe

- (i) Subsoil drainage pipes are to be Humes "DrainCoil" or similar perforated plastic drainage pipe complying with AS 2439 – Part 1 – Perforated Plastic Pipes and Fittings.
- (ii) Perforations 0.7mm diameter.
- (iii) A subsoil drain crossing a road to outlet is to become an unperforated pipe.

SC6.5.8.2.5 Pipe Sizing

The minimum pipe diameter is 100mm outside diameter.

SC6.5.8.2.6 Bedding and Filter Materials

- (i) A subsoil drain crossing a road to an outlet is to be backfilled with a low permeability material across the pavement subgrade.
- (ii) Generally, the subsoil drain is to be bedded and surrounded with a minimum of 50mm of graded filter material in accordance with the standard drawing.

SC6.5.8.2.7 Outlets

- (i) All sub-soil drainage pipes are to be connected to gully pits, as outlined in the Somerset Regional Council standard drawing SRC-ROAD-021 or open channels below the edge of the road shoulder or at the edge of an embankment.
- (ii) For outlets not connected into gully pits, a concrete headwall is to be provided to the outlet.
- (iii) The headwall is to be at least 100mm thick and is to extend for a minimum of 150mm on all sides of the pipe.
- (iv) The outlets to the pipes are to be fully enclosed by vermin proof flaps.

SC6.5.8.2.8 Clean Outs

- (i) Clean-outs as outlined in the Somerset Regional Council standard drawing SRC-ROAD-021 are to be located at the head of the subsoil drain and at subsequent spacings not exceeding 90m.
- (ii) Clean outs located at gully pits are to be constructed with caps or plugs as outlined in the Somerset Regional Council standard drawing SRC-ROAD-021.
- (iii) A marker is to be installed in the kerb adjacent to clean out points as outlined in the Somerset Regional Council standard drawing SRC-ROAD-021.

SC6.5.8.3 PARKING DESIGN STANDARDS

SC6.5.8.3.1 General

- (i) Location, design and construction of driveways, turning areas, parking spaces and vehicle standing areas are to be generally in accordance with Austroads.
- (ii) The minimum width for all carparks is to be 2.8 meters, or provide justification why it is not able to be achieved.
- (iii) Refer to AS 2890 for criteria not contained within this manual or the standard drawings.
- (iv) All parking areas in urban areas are to be sealed. Parking areas of less than ≤ 10 are to have a minimum bitumen seal. Parking areas >10 are to use concrete, asphalt concrete, and designed by RPEQ.

SC6.5.8.3.2 Minimum Parking Requirements

- (i) Car parking is to be provided in accordance with **Table 8.3.6.3.B** below. Where the number of car parking spaces calculated in accordance with **Table 8.3.6.3.B** is not a whole number then the minimum number of spaces to be provided is to be the whole number next above the calculated number. Further, existing on-street parking does not count towards the minimum requirements specified in **Table 8.3.6.3.B**.
- (ii) Bicycle parking is to be provided in accordance with **Table 8.3.6.3.B**. Where the number of car parking spaces calculated in accordance with **Table 8.3.6.3.B** is not a whole number then the minimum number of spaces to be provided is to be the whole number next above the calculated number.
- (iii) Disabled parking is to be provided in accordance with **Table SC6.5.8.3.2.2** below. Disabled car parking spaces need not be designated (marked) where there will be a total of five (5) or less car parking spaces, but the space must be provided.

Table SC6.5.8.3.2.2 – Minimum disabled car parking requirements

Total Car Spaces	Disabled Spaces
1 - 20	Not less than 1
21 – 50	Not less than 2
Every additional 50 or part there of	Not less than 1

SC6.5.8.4 Road Furniture Design Standards

SC6.5.8.4.1 Lighting

Refer to the Lighting section of this manual for details.

SC6.5.8.4.2 Street Signs

- (i) Regulatory signs are defined in Queensland Transport's "Manual of Uniform Traffic Control Devices" (MUTCD) and include Stop, Give way and Speed Signs.
- (ii) Bikeways are to be signed in accordance with MUTCD – Part 9, Bicycle Facilities.
- (iii) Heights are to be for urban use only and minimum 2m high per MUTCD 1.12.3.5.

SC6.5.8.4.3 Entry Statements

Entry statements are to be fully contained within private property and are not to revert to Council ownership.

SC6.5.8.4.4 Seating

All seating is to be in accordance with AS 1428.2.

SC6.5.8.4.5 Bins

No bins are to be provided by the developer.

SC6.5.8.4.6 Road Edge Guide Posts and Safety Barriers

- (i) Road edge guide posts are to be provided with all roadways where concrete kerb and channel is not constructed (e.g. tapers, ends of roads etc).
- (ii) For the requirements and locations of safety barriers, refer to DTMR – Road Planning and Design Manual – Chapter 8, Safety Barriers and Roadside Furniture.

SC6.5.8.4.7 Acoustic Fencing

Acoustic fencing is to be entirely contained within the private property and is subject to the approval of the relevant authority.

SC6.5.8.5 Flexible Pavement Design Standards

SC6.5.8.5.1 Determination of Subgrade Strength

- (i) A design CBR is to be determined for each identifiable unit defined on the basis of topography, geological and drainage condition of the site.
- (ii) The four day soaked CBR at a compaction of 100% Standard compaction is to be the standard test.
- (iii) Tests are to be carried out in a NATA registered laboratory.
- (iv) The sampling is to be randomly located within each length of the proposed roadway with constant subgrade material.
- (v) For less than five results the Design CBR shall be the least estimated insitu CBR result.
- (vi) For five or more results, the Design CBR shall be the 10th percentile of all estimated insitu CBR results.
- (vii) The samples shall be taken generally in the position of the outer wheel path on both sides of the proposed road.
- (viii) The frequency of testing required is to be in accordance with the specifications outlined in the table below

Table SC6.5.8.5.1 – Type and Frequency of Subgrade Testing by Road Length

Testing Type	Roads < 120 M	Roads > 120 M
LABORATORY	Sample at 2 sites	Sample at 1 site every 60 to 100 m
Soaked CBR's and Routine Soil Tests	Lab tests on all relevant materials	Lab tests on all relevant materials
FIELD	3 tests on subgrade	1 test on subgrade every 50m
Dynamic Cone and Field Moisture Content	routine soil tests on subgrade from 1 of these	routine soil tests on subgrade from 1 site in 3

SC6.5.8.5.2 Pavement Materials

- (i) Pavement materials are to be in accordance with the requirements of DTMR Specification "MRTS05 Unbound Pavements".
- (ii) Pavement types are to be as defined in **Table SC6.5.8.5.4.1 – "Minimum Pavement Thickness"**
- (iii) Pavement materials are to be Type 2 in accordance with DTMR Specification "MRTS05 Unbound Pavements".

SC6.5.8.5.3 Determination of Design Traffic

Design traffic loadings for the various road classifications are to be as outlined in the table below

Table SC6.5.8.5.3.1 – Design ESA's by Road Type

Description	Road Class	ESA's
Access Place	A (30 Lots Max.)	5 x 104
Access Street	A1(75 Lots Max.)	1.0 x 105

Collector	B(300 Lots Max.)	2.0 x 105
Trunk Collector	C (1000 lots Max.)	1.0 x 106
Sub-Arterial	D	2.0 x 106
Industrial	E	7.0 x 106
Arterial	F	DTMR Design Standards

SC6.5.8.5.4 Minimum Pavement Thickness

- (i) Minimum pavement thickness is to be as set out in the table below.
- (ii) If the Design CBR determined for the subgrade is less than the minimum CBR given in Table 3.5.4.1 (i.e. CBR less than 3) and the subgrade is expected to be of sufficient strength to allow pavement construction to proceed (ie. The subgrade does not exhibit visible signs of deformation or instability under proof rolling), the designed pavement thickness is to be determined as follows:
 - CBR 2 = 100mm + design depth based on a design subgrade CBR of 3;
 - CBR 1 = 200mm + design depth based on a design subgrade CBR of 3.
- (iii) For subgrades that are expected to be at, or near, the design strength at the time of construction (i.e. will not support a loaded water cart without deformation), the material should be treated as a soft subgrade and one of the following measures is to be adopted:
 - some form of working platform is to be provided (minimum depth 300mm, CBR 15 material);
 - use of geofabric sheeting;
 - stabilise the soil by use of a mixture of cement or lime.

Table SC6.5.8.5.4.1 – Minimum Pavement Thickness

Minimum Total Pavement Thickness (mm) (excluding AC Surfacing)							
CBR of Subgrade	A	A1	B	C	D	E	F Refer all Type F Roads to DTMR
1 and 2	Refer above						
3	450	470	495	550	560	670	
4	375	395	420	465	520	620	
5	325	340	360	390	480	580	
6	290	310	325	350	450	550	
7	265	280	295	320	425	520	
8	240	255	265	295	400	500	
9	225	230	245	275	380	480	
10	225	225	225	255	365	465	
12	225	225	225	225	325	430	
14	225	225	225	225	305	400	
16	225	225	225	225	290	375	
18	225	225	225	225	275	355	
20	225	225	225	225	275	335	
Minimum Course Thickness							
Asphalt	25	25	25	50	50	50	
Base Course Type 2.1 (Min CBR80)	125	125	125	125	125	125	
Upper Sub Base Type 2.3 (Min CBR45)	100	100	100	100	150	150	
Lower Sub Base Type 2.5 (Min CBR15)	As required to obtain minimum thickness (100mm minimum layer thickness)						

Source: A, A1, B, C type ARRB Special Report No. 41 - Figure 7 / D, E, F type DTMR Pavement Design Chart 1.

Notes for Table:

1. This table has been derived from ARRB Special Report No. 41, Figure 7 and DTMR Pavement Design Manual 1990, Design Chart 1.
2. To cater for the difference in the mechanisms of pavement failure, Class A, A1, B and C road pavement designs are based on ARRB curves and Class D and E road pavement designs are based on Department of Transport curves.
3. All Class F roads are to be designed to DTMR standards.
4. CBR is the 4 day soaked CBR value.
5. If upper sub-base course minimum thickness cannot be achieved, then base course material is to be used for full pavement depth.
6. Kerb and Channel shall be in accordance with the relevant section of this manual.
7. The above pavement thicknesses are gravel thicknesses only.

8. AC surfacing thickness is to be added to the gravel thickness to determine the total box depth.
9. 2 coat bitumen seal is acceptable for rural pavements.

SC6.5.8.5.5 Rural Pavements

- (i) The wearing course gravel pavement is to be a minimum depth of 100mm, but may increase depending on the soil strength (CBR) of the subgrade material.
- (ii) Where the subgrade material is unsatisfactory with respect to the soil strength (CBR), one of the following measures is to be undertaken:
 - replacement of the deficient pavement to a minimum depth of 300mm with a material of CBR 15 or higher;
 - use of geofabric;
 - stabilise the soil by use of a mixture of cement and/or lime; or
 - increase wearing course depth.
- (iii) The wearing course pavement material is to be well graded, gravel-sand mixtures with a small proportion of clayey fines with the following properties:
 - fines to sand ratio between 0.2 and 0.4;
 - Plasticity Index range between 4 to 15;
 - Linear Shrinkage range between 2 to 8; and
 - a minimum CBR 45 for the material.
- (iv) The Grading Limits for the wearing course pavement material are to be as outlined in the Table Below.

Table SC6.5.8.5.5.1 – Rural Pavement Grading Limits

AS Sieve Size	37.5mm	19.0mm	9.50mm	4.75mm	2.36mm	425µm	75µm
% by Mass Passing Sieve Designated	100	55-90	40-70	28-55	20-45	10-25	4-15

SC6.5.8.5.6 Rural Subgrade Set Out

- (i) The subgrade is to be set out and formed so that the centre line or crown of the road is centrally aligned within the road reserve.
- (ii) The longitudinal gradient of the formation is to be no greater than 10 % although limited sections not exceeding 100m may have a maximum gradient of 20%.
- (iii) Where grades exceed 10%, sections are to be bitumen sealed.

SC6.5.9 STORMWATER DESIGN STANDARDS

SC6.5.9.1 Stormwater Design Standards

SC6.5.9.1.1 General

- (i) All stormwater drainage is to be in accordance with the Queensland Urban Design Manual (QUDM), AS 3500.3, DTMR Road Drainage Manual and as modified by the requirements of this manual.
- (ii) Stormwater Quality Management objectives are to be in accordance the Environment section of this manual.
- (iii) The design of the drainage system and the earthworks for the proposed development is to be such that the upstream and downstream drainage, property and environment are not adversely affected.
- (iv) The design is to prevent ponding for a prolonged period of time.
- (v) Runoff rates and pollutant loads will not be made worse on downstream properties unless provided for in an adopted Catchment Management Plan.
- (vi) The design of the stormwater system will accommodate the future developed peak flows from upstream catchments based on the applicable zone stated the Planning Scheme.
- (vii) The design is to be to a standard that is accessible, durable, cost effective and easily maintainable.
- (viii) The design is to prevent accumulation of silt and blockage by debris.
- (ix) The design is to allow the safe passage of vehicles at reduced operating speeds on streets affected by runoff.

- (x) Where topography allows the design is to direct all drainage to the front all lots discharging to street gutters.
- (xi) If no pre-design meeting is undertaken then the Engineering Summary Report lodged with the application is to outline the methodology, assumptions and site specific coefficients and calculation methods adopted in the design which are not stated in QUDM or this manual and the substantiation of their use (i.e. determination and adopted start HGL level).
- (xii) Electronic Data files are to be provided (where software has been used) with the hard copy of the tabulated design calculations.
- (xiii) If Inlet or Discharge works are to be located within the adjacent properties, written approval authorising these works is to be obtained from the affected property owners.
- (xiv) Cement Mortar benching to half the height of the pipe diameter is to be constructed in all Stormwater Pits, Field Inlets, and Manholes with large chambers examined for special N20 concrete benching.

SC6.5.9.1.2 Stormwater Quantity Design Standards

- (i) The preparation of a site based Stormwater Management Plan (SBSMP) for intensive and major developments demonstrates development and stormwater quantity measures are in accordance with this policy do not result in:
 - increased peak discharges; and/or
 - increased flood levels or volumes outside the boundaries of the site.
- (ii) Assess impact of stormwater discharge from the proposed development on downstream and adjacent properties.
- (iii) Identify legal point of downstream discharge and whether there is a need for any intervening easements or drainage reserves.
- (iv) If retardation or detention basins are proposed, identify location and assess required size/capacity, and whether intended to be “wet” or “dry”.
- (v) Copies of models, mapping (i.e MapInfo), and all relevant files in an acceptable format to Council.

SC6.5.9.1.3 Stormwater Quality Design Standards

SC6.5.9.1.3.1 General

- (i) The water quality objectives are to be nominated and the temporary and permanent methods of satisfying these objectives are to be identified utilising the integration of water quantity, water quality and waterway corridor issues into the design.
- (ii) Engineering drawings of the proposed methods of water quality control.
- (iii) Discussion and model calculations which demonstrate the achievement of the objectives.
- (iv) A maintenance plan stating how the proposed methods are to be maintained including as applicable:
 - Inspection and approximate clean out frequency, access and consumables;
 - Dewatering and waste disposal frequency;
 - Staff training, equipment and Workplace Health and Safety requirements; and
 - Approximate maintenance cost and recommended performance monitoring.
- (v) Where practical, designs are to incorporate the principals of Water Sensitive Urban Design (WSUD) into the development in accordance with Healthy Waterways (2006) - “Water Sensitive Urban Design – Technical Design Guidelines for South East Queensland”. See www.waterbydesign.com.au.
- (vi) Erosion and Sediment Control is to be designed in accordance with standard and current best-practice documents such as the International Erosion Control Association (IECA) - “Best Practice Erosion and Sediment Control”, Queensland Department of Transport and Main Roads – “Road Drainage Design Manual – Chapter 5, Erosion and Sediment Control”, and prepared and certified by a suitably qualified and experienced professional.
- (vii) Refer to the Operational Works Application Supporting Documents section of this policy for the items which are required to be addressed in the Stormwater Quality Management Plan.
- (viii) Water quality catchment modelling is to be undertaken using programs such as XP-Storm, MUSIC or other software considered acceptable to Council in order to demonstrate how water quality objectives have been achieved.
- (ix) A single or combination of water quality treatment devices are to be sized to be capable of treating all run-off from impervious surfaces for an Annual Recurrence Interval (ARI) of 3 months (or first flush where approved) for all Community Title Developments and

developments on land in the Centre zone, Community facilities zone, High impact industry zone and Industry zone.

- (x) The requirement to install water quality treatment devices will be assessed on an individual basis dependant on the nature of the proposal.

SC6.5.9.1.3.2 Water Quality Objectives

The Water Quality Objectives to be achieved are articulated in **Tables 9.5.4.3.A, 9.5.4.3.B and 9.5.4.3.C** of the Services, works and infrastructure code and **Planning Scheme Policy 3 – Catchment Management Analysis Guidelines** where development is proposed in higher risk catchment areas identified on **Overlay Maps OM005a-b**.

SC6.5.9.1.3.3 Proprietary Stormwater Quality Devices

- (i) Any proprietary Gross Pollutant Trap, Forebay, Trash Rack or similar Stormwater Quality Devices proposed for a development is to be fully detailed in the Stormwater Management Plan and the Civil Engineering Plans and is subject to Council approval.
- (ii) The devices respective pollutant removal rates and maintenance requirements are to be provided.

SC6.5.9.1.3.4 Temporary Methods of Erosion Control

- (i) Temporary measures to be employed during the construction phase that will be accepted include contour banks, hay bales, sand bags, gully baskets, sedimentation/detention basins and traps, staging of works, hydromulching, channel lining with rip rap, energy dissipaters, truck wheel washes, geotextile matting and proprietary products.
- (ii) Vegetation above and below the disturbed areas is to be retained to prevent silt laden runoff entering and leaving the site.
- (iii) All excess material is to be removed immediately or safely stockpiled after excavation.
- (iv) An area is to be nominated on the plans which show the location of the storage of the soil stockpiles.
- (v) Cut-off drains and other soil erosion control measures are to be provided where necessary above and below the excavated site and maintained throughout the construction.
- (vi) The construction program and staging of operations which will assist in the control are to be examined and detailed on the design plans.
- (vii) Inlet protection is to be provided to all gullies.
- (viii) Removable “Gully baskets” or other suitable approved protection is to be provided to all pits.
- (ix) Trenches are to be backfilled within 24 hours of inspection and approval.

SC6.5.9.1.3.5 Permanent Methods of Erosion Control

- (i) All unpaved areas where earthworks operations have been undertaken are to be grass seeded to achieve grass coverage as stated in the landscaping section and permanently revegetated.
- (ii) Footpaths, parks, allotments and other disturbed areas are to be topsoiled to a minimum depth of 75mm and grass seeded.
- (iii) Vegetation treatment other than grass, including temporary erosion control matting, hydromulching etc during establishment can be used to stabilise batters and swales.
- (iv) Verges to be grass turfed minimum 1m behind back of kerb/sidewalk and in accordance with section **SC6.5.10.1.13**.

SC6.5.9.1.4 Hydraulic (Flood Hazard Assessment) Report Requirements

- (i) The flood study will be required to clearly identify the flood levels and flow velocities of both the existing and developed scenarios.
- (ii) Presentation is to include the following:
 - Catchment map;
 - Summary of all modelling parameters and assumptions used in the model;
 - Stream flood profile and bed profile for the study area showing cross section locations;
 - Cross sections of the stream and flood plain;
 - Tabulated calculations of the pre and post developed scenarios;
 - Plan showing proposed finished surface contours with the flood line interpolated;
 - 1% Annual Exceedance Probability (AEP) levels are to be shown where the flood line crosses property boundaries; and
 - Copies of the models and all relevant files.
- (iii) Full set of drawings and calculations are to be submitted for the pre-development and post development drainage strategies.

- (iv) Unless provided for in an existing strategy it is necessary to determine the 1% AEP level and Council Defined Flood Level (DFL) in the stream/waterway adjacent to a proposed development, incorporating an impact study detailing pre and post development scenarios.
- (v) The study will then be utilised to determine the infrastructure requirements and the minimum building pad levels of the development.
- (vi) Where fill is to be placed within the flood plain it will be necessary to verify that the placement of fill will not detrimentally affect any existing flooding upstream or downstream of the development by analysing the existing and developed cases.
- (vii) Review any flood studies which have been previously undertaken within the relevant catchment.
- (viii) Identification of potential flooding impact from a range of flows including 10% AEP, 2% AEP, 1% AEP, 0.2% AEP and PMF floods, where applicable.
- (ix) Mapping of both depth and hazard (As per Queensland Reconstruction Authority's *Planning for stronger, more resilient floodplains Part 2 – Measures to support floodplain management in future planning schemes*)

SC6.5.9.1.5 Legal Point of Discharge

- (i) The point is to be identified and nominated by Council and is to comply with the requirements defined in QUDM.
- (ii) Drainage reserves/easements or written approval is to be obtained by affected properties between the development site to the point of discharge.
- (iii) If the development increases, re-directs or alters the natural flow path, a written drainage discharge agreement is to be signed by the affected property owners and submitted to Council.
- (iv) Unless the Legal Point of Discharge is within a trunk drainage system that has been designed to cater for the developed flow, the developer will be required to provide evidence that the development will not adversely affect the drainage system beyond the legal point of discharge.
- (v) The legal point of discharge will be one of the following depending on the site situation.
 - To an existing trunk drainage system.
 - To concrete kerb and channel, gullies or existing stormwater drainage system abutting the allotment.
 - To the road reserve provided the concentration of stormwater does not adversely affect the drainage capacity of the road and/or adjoining properties.
 - To an existing drainage system provided the system has the current and future capacity required.
 - To concrete kerb and channel or to a new stormwater inlet pit provided by the developer at a location removed from the site.

SC6.5.9.1.6 Drainage Reserves and Easements

- (i) Concentrated Stormwater flows from upstream overland flow paths are to be contained within public land and easements to the legal point of discharge.
- (ii) Land below the minor storm inundation boundary including open channels, overland flow paths, flood plains, detention basins, and lakes is to be provided within a dedicated drainage reserve, public reserve, road or pathway.
- (iii) An easement or reserve is to be provided to the 1% AEP inundation boundary.
- (iv) Underground infrastructure and interallotment drainage servicing all lots is to be contained within a dedicated drainage reserve, easement, public reserve, road or pathway.
- (v) Stub easements are the minimum requirement over culvert outlets for land in the Rural zoned.
- (vi) All easements or reserves are to be dedicated to Council.
- (vii) Minimum stormwater easement width is to be in accordance with QUDM section 3.8.5.

SC6.5.9.1.7 Alignment of Stormwater Pipes and Box Culverts

- (i) The stormwater pipes are to be located in dedicated drainage easements or reserves.
- (ii) The stormwater line from structure to structure is to be located beneath the kerb and channel and generally not located beneath the road carriageway.
- (iii) Road Crossings are to be as perpendicular to the road centreline as possible to avoid acute angles of crossing.
- (iv) No more than 20% of the piped network is to be located beneath road pavement.
- (v) Pipe and box culvert covers are to be sufficient to support T44 standard wheel loadings in accordance with the manufacturer's specification for the appropriate class of pipe.
- (vi) Where uPVC pipes are used the minimum cover within the road reserves is to be 500mm, unless concrete bridging is utilised.

- (vii) The use of permanently submerged pipe systems will not be approved without the installation of cut-off valves to allow for maintenance. Valves will be required as a minimum at the outlet of the pipe and at the upstream point of the submergence.
- (viii) Inverts of pipes discharging to permanent water bodies will be above normal standing water level unless specifically motivated and approved by Council.

SC6.5.9.1.8 Pipe or Box Culvert Sizing

- (i) Minimum pipe or box culvert sizing for all drainage structures installed in roads, drainage reserves, or parks and open spaces are to be in accordance with QUDM section 7.8.3(a) (i.e. minimum 375mm dia unless connecting to a single upstream pit).
- (ii) Refer to the Pipe Capacity section in this manual for additional sizing by capacity requirements.

SC6.5.9.1.9 Conflict with Other services

- (i) The minimum vertical and horizontal clearance between a stormwater pipe and any other service conduit or pipe is to be 300mm. This can be reduced to no less than 100mm provided that the special treatment applicable to the service is undertaken. Refer to the relevant section of this manual.
- (ii) If a water or sewer main intersects with a stormwater structure then the penetration will be accepted subject to the following conditions.
 - The penetrated pipe or manhole is large enough to permit access for internal maintenance.
 - The penetrating segment is a single length of ductile iron for the entire span with no joints.
 - Flexible joints are to be provided either side of the penetrated structure.
 - The drainage design makes allowance for the restriction of flow and is unlikely to cause blockages.

SC6.5.9.1.10 Stormwater Pipe, Box Culvert, Joint and Structure Materials

- (i) Pipe, material and jointing standards will be as detailed in section 7.8 of QUDM and conform to the requirements of AS 4058 - Precast concrete pipes.
- (ii) Pipes < 300mm diameter will be uPVC.
- (iii) UPVC will be rubber ring jointed or solvent weld jointed.
- (iv) Pipes > 300mm diameter will be either precast reinforced concrete or fibre reinforced concrete.
- (v) RC pipes are to have flush joints (ie Internal rebates and external bands).
- (vi) Any other materials proposed will have to be identified and substantiated in the Engineering Summary Report lodged with the operational works documents.
- (vii) The class of the pipe is to be specified in accordance with the strength requirements of pipes in roadways, deep trenches or under fills with a minimum class 2.
- (viii) Reinforced concrete pipes are to be subjected to the Load and Absorption Test as specified in AS 3725, with the load being the three edge bearing method.
- (ix) Box culverts are to be precast reinforced concrete.
- (x) All precast box culverts are to consist of a separate invert slab and a single invert u-shaped section forming the deck and the two walls.
- (xi) The top of the culvert shall be joined to the base with cement mortar.
- (xii) Joints between lengths of box culverts, tops and sides are to be covered outside by a mortar band not less than 150 mm in width and a minimum of 20 mm thickness.
- (xiii) Mortar bands are to be reinforced with chicken wire for a minimum width of 130 mm.
- (xiv) uPVC or plastic pipes are not to be used for cross road drainage or within 5m of outlets/discharge points. Plastic pipes will be allowed for interallotment drainage, driveways, house connections (roofwater lines) or where approved by Council.

SC6.5.9.1.10.1 Stormwater Pipe and Box Culvert Bedding

- (i) Where uPVC pipes are used the bedding is to be in accordance with the pipe bedding area of the Sewerage Reticulation section of this manual.
- (ii) Pipes are to be bedded as shown on the standard drawing.
- (iii) Pipes are to have minimum bed depth 100mm.

SC6.5.9.1.10.2 Stormwater Pipe and Box Culvert Backfill

Stormwater pipes and Box Culverts are to be backfilled as shown on standard drawings and in accordance with the Stormwater Construction section of this manual.

SC6.5.9.1.10.3 Stormwater Pits

- (i) For Stormwater pits, grates and frames refer to Somerset Regional Council standard drawings SRC-STM-001 to 009.
- (ii) Precast Gully pits are permitted, subject to Council approval.
- (iii) Gully pits are to be located to QUDM section 7.5.3 requirements to reduce the likelihood of conflict with a future driveway location.
- (iv) Stormwater pits are to be located on straights wherever possible.
- (v) Anti Ponding Gullies in curves are to be side entry type, chamber and grate only and are to be avoided wherever possible.
- (vi) Sag pits are only acceptable where a relief overland flow path is provided.
- (vii) No Step Irons are to be provided.
- (viii) Stormwater pits in excess of 1.5m deep are to be a stormwater pit / access chamber structure.
- (ix) No grates are to be used in roads, footpaths or cycleways, unless the location and design is specifically approved by Council.
- (x) Surcharge Pits are to ensure that there is a minimum 300mm freeboard to the inlet level of the upstream inlet pits.
- (xi) Soakage pits are to be accompanied by a geotechnical report supporting its ability to achieve the desired standard of drainage.
- (xii) The grate and frame for the standard inlet pit is to be Class D to AS 3996 and is to be hot dip galvanised to AS 1650.
- (xiii) The precast Lintel is to be of an approved type as shown on the standard drawings or approved engineering plans.

SC6.5.9.1.10.4 Field Inlet Pits

- (i) Field Inlet pits are to be designed and located in accordance with QUDM section 7.5.4.
- (ii) Raised Grate Inlets are preferred for field inlets.
- (iii) In parks and areas subject to pedestrian traffic, the raised grate inlet pit is to be identified by an arch rail 1.2m high with reflectorised marking.
- (iv) All field inlets are to have a 250mm concrete apron surrounding the pit.
- (v) The grate and frame for the standard inlet pit is to be Class D to AS 3996 and is to be hot dip galvanised to AS 1650.

SC6.5.9.1.10.5 Stormwater Manholes

- (i) Manholes are to be located in accordance with QUDM Section 7.6.
- (ii) No Step irons are to be provided.
- (iii) Non standard structures are to be fully detailed and certified by a Structural RPEQ.
- (iv) Precast manholes will be accepted providing that they are installed in accordance with the manufacturer's specifications.
- (v) Manufactured bends of maximum 45 degrees and bandaged junctions are acceptable on 1500mm dia pipes or 1500mm high Box Culverts, provided a manhole is provided within 30m of the bend or junction.
- (vi) Manholes located in pavements are to be capable of supporting T44 traffic loads.
- (vii) All cast iron surfaces are to be coated with hot bitumen before being placed in the works.
- (viii) Covers and frames are to comply with the details shown on the standard drawings.
- (ix) The initials SW are to be clearly visible on all access chamber covers.
- (x) The covers are to be cast iron where access chambers are situated within the road boundaries or other trafficable areas and concrete infilled elsewhere.
- (xi) Frames are to be cast in the reinforced concrete access chamber topslabs.
- (xii) The topslabs are to be bedded on a maximum of 12 mm cement mortar on top of the concrete collar of the manhole so that the top of the cover is flush with the finished pavement or ground surface.
- (xiii) The concrete used in the construction of the access chamber lid is to be grade N32/10 in accordance with AS 1379 and AS 3600.

SC6.5.9.1.10.6 Stormwater Headwalls

- (i) Where located in state controlled roads, Headwalls are to be provided in accordance with DTMR Standard Drawings.
- (ii) The outlet structure is to be designed to ensure that the flow leaving the structure is sub-critical and be of sufficient length to contain the hydraulic jump.
- (iii) Precast headwalls may be used provided they are constructed to the following criteria:

- Precast headwalls are to be laid on a clean stable foundation and bedded in a minimum 200 mm deep layer of grade N25 concrete which is to be sluiced, pumped or vibrated in place to ensure no voids are present in the completed work.
 - Apron cut-off walls extend below the edge of the apron by a minimum of 600mm and are constructed of minimum grade N25 concrete.
 - The headwalls are backfilled with approved free draining material.
 - Weepholes are provided to drain the bedding material.
- (iv) The inlet and outlet headwalls, embankment walls and aprons are to produce a smooth transition of stormwater flowing in the open drain into the pipe and culvert inlet or out of the pipe or culvert into the open drain in order to reduce energy loss and reduce upstream backwater.
- (v) Energy dissipaters and scour protection are to be detailed as required.
- (vi) Sloping headwalls are to be provided in accordance with standard drawings.

SC6.5.9.1.11 Somerset Region Intensity Frequency Duration Tables

SC6.5.9.1.11.1 Time of Concentration

- (i) Refer to QUDM Table 4.6.4 for determining standard inlet times for small fully urbanised catchments.
- (ii) Refer to section 4.6.6 of QUDM (Figure 4.6 - Friend's Equation Nomograph) and section 4.6.11 for determining inlet times for catchments that are not completely urbanised.
- (iii) Where a software package has been used to create hydrographs, details of how they were determined are to be included in the model details submitted to Council.

Tables SC6.5.9.1.11.1.1 – Values required from ARR Charts

Log-Normal Intensities			
	1 hour	12 hour	72 hour
2 year	45	7	1.8
	(chart 1)	(chart 2)	(chart 3)
50 year	87	14	3.8
	(chart 4)	(chart 5)	(chart 6)

Other Factors	
G	0.28
	(chart 7)
F2	4.38
	(chart 8)
F50	17.35
	(chart 9)

Table SC6.5.9.1.11.1.2 – Rainfall Intensities in mm/hr by Duration and Return Interval

Duration	Average Recurrence Interval (years)						
	1	2	5	10	20	50	100
5 min	108.6	141.1	180.3	204.8	238.2	283.9	320.3
6	101.9	132.4	169.3	192.4	223.9	266.9	301.2
10	83.5	108.6	139.1	158.3	184.4	220.1	248.6
20	61.0	79.3	102.0	116.3	135.7	162.3	183.6
30	49.7	64.6	83.3	95.1	111.0	133.0	150.6
1 hour	34.0	44.2	57.2	65.5	76.6	92.0	104.3
2	20.4	26.5	34.5	39.6	46.4	55.8	63.4
3	15.1	19.6	25.5	29.3	34.3	41.4	47.0
6	8.9	11.6	15.1	17.4	20.5	24.7	28.2
12	5.3	6.9	9.0	10.4	12.3	14.8	16.9
24	3.2	4.2	5.5	6.4	7.6	9.2	10.6
48	1.9	2.5	3.3	3.9	4.6	5.6	6.4

72	1.4	1.8	2.4	2.8	3.3	4.0	4.7

SC6.5.9.1.12 Design Storms

- (i) Refer to QUDM Table 7.02.1 for the determination of major and minor design storm events.
- (ii) No major storm is to be piped through private property.
- (iii) Major roads stated in the QUDM table refer to Trunk Collector roads and above.

Table SC6.5.9.1.12 – Design Storms by Zone and Precinct

ZONES	MINOR (PIPED) DRAINAGE	MAJOR (OVERLAND) DRAINAGE
Community facilities zone Emerging community General residential zone – including Park residential precinct Recreation and open space zone Rural residential Rural zone Township zone	50% AEP	1% AEP
Centre zone High impact industry zone Industry zone	10% AEP	1% AEP

Note: Refer to the Culvert Design section of this manual for cross drainage design storm.

SC6.5.9.1.13 Overland Flow Paths

- (i) Overland flow paths are to be formalised and contained within easements, roads, pathways, or drainage reserves for all new developments. Refer to the section **SC6.5.11.1.5** for requirements.
- (ii) All roadway and pathway overland flow paths are to be in accordance with Sections 7.1.3 and 7.3.6 of QUDM.
- (iii) Overland flow through parks and open space is acceptable providing it does not compromise the intent of the park or open space.
- (iv) Overland flow paths are to be provided for at all sag points in the road.
- (v) Refer to the section **SC6.5.11.6** for determination of whether an Overland Flow path is deemed to be an open channel and subject to the requirements of that section.
- (vi) Negative crossfall of the road verge is permissible to define the path of flow and will be subject to weir flow depth/velocity criteria for safety and freeboard requirements as stated in QUDM.
- (vii) Overland flow paths are to be shaped so as to contain the flow within the designated boundary at a non-scouring velocity less than 1.2m/sec unless appropriate scour protection is provided.

SC6.5.9.1.14 Flow Depths and Width Limitations

- (i) Roadway Flow limits are to be in accordance with QUDM section 7.3.1 where major roads are defined as Trunk Collector and above, and minor roads defined as Collector Roads, Access Streets and Access Places.
- (ii) Refer to the Culvert Design section **SC6.5.32** of this policy for floodway depth and width limitations.

SC6.5.9.1.15 Stormwater Pit and Field Inlet Capacities

- (i) The inflow of grated field inlets is to be in accordance with the weir or orifice flow in accordance with QUDM section 7.5.4. The lesser of the two is to be used.
- (ii) Design blockage factors of QUDM table 7.5.1 apply for all storm events.

SC6.5.9.1.16 Pipe Flow Velocities

Refer to QUDM Table 7.12.1 for acceptable pipe velocities with no more than 20% of the pipe system outside the desirable limits stated.

SC6.5.9.1.17 Outlet Velocities

The outlet velocity of a piped system is to be checked for velocity scour protection requirements and scour protection is to be provided at any outlets where outlet velocities or the nature of the soil in the vicinity of the outlet have the potential to cause scouring problems.

SC6.5.9.1.18 Design Freeboard

- (i) The freeboard requirements are to be in accordance with QUDM section 7.3.12 and Council's Defined Flood Level (DFL).
- (ii) Refer to section **SC6.5.10.1.14** of this policy for immunity requirements for property accesses.
- (iii) Refer to section **SC6.5.11.1.3** of this policy for immunity requirements for culverts, floodways and bridges.

SC6.5.9.1.19 Starting Hydraulic Grade Levels (HGLs)

- (i) The HGL level at the outlet will not be lower than the following:-
 - In a free outlet - the obvert of pipe;
 - In detention basin, creek or open channel - the estimated water level for the design; or
 - Where connecting to an existing pipe system - the calculated HGL from the outlet of the existing system.

SC6.5.9.1.20 Pipe Capacity

Mannings equation for determining pipe capacity is to be in accordance with QUDM Section 7.16.7.

SC6.5.9.1.21 Pit and Entrance Losses

- (i) Losses within inlet pits and manholes are to be determined from Section 7.16.8 and the charts in Appendix 2 of QUDM.
- (ii) The application of pit loss reduction factors for the provision of benching is acceptable.

SC6.5.9.1.22 Bikepath Immunity

All bikepaths are to have a minimum 50% AEP drainage immunity and satisfy the requirements of the **Table SC6.5.10.1.12.1** of this policy.

SC6.5.9.2 Interallotment Drainage Design Standards

SC6.5.9.2.1 General

- (i) The use of interallotment drainage will only be permitted where the minor design storm for a fully developed upstream catchment can be accommodated in a pipe less than 375mm diameter.
- (ii) The design including capacities and levels of the drainage system is to comply with Section 7.13 of QUDM except as amended by this policy.
- (iii) Lots in the General residential zone (excluding the Park residential precinct) and Community Title developments are to be provided with a Level III drainage system.

SC6.5.9.2.2 Alignment of Interallotment Drainage

SC6.5.9.2.2.1 Interallotment Drainage Pipe Alignment

- (i) The main line is to be offset 0.6m from the rear or 1.2m from side boundaries.
- (ii) Detailing of satisfactory backfilling will be required when the alignment is in the zone of influence of another service alignment or structure.
- (iii) Refer to the Stormwater section of this manual for service separation and penetration conditions.
- (iv) Minimum cover within private property is 500mm except as required to discharge into kerb and channel.

SC6.5.9.2.2.2 Interallotment Drainage Manhole and Chamber Alignment

- (i) Manholes in interallotment drains are to be provided at change of grade, pipe size, direction and at the end of the line.
- (ii) Chambers can replace manholes where depth to invert is less than 1.2m and will be precast or cast insitu concrete boxes, or precast FRC or RC pipe system to the dimensions shown in the table below.

Table SC6.5.9.2.2.1 – Interallotment Chamber Sizing Requirements by Depth

Maximum Depth to Invert (mm)	Boxes – Internal Dimensions (mm)	FRC or RCP manholes
< 900 (<750)	600 x 600*	600mm dia
900 < 1200 (750<1500)	600 x 900*	750mm dia (900)

*minimum wall thickness of 100mm

SC6.5.9.2.2.3 Interallotment Drainage House Connection Alignment

- (i) At least one branch connection is to be provided on the main line for each property.
- (ii) To determine the minimum depth of the house connection, grade along the longest path at 1 in 100 with 200mm cover at the downpipe.
- (iii) Junction chambers are to be provided at the connection with the interallotment drain line in Commercial and Industrial lots being served.

SC6.5.9.2.2.4 Interallotment Drainage Outlet Location

- (i) Outlet is to be to a legal point of discharge.
- (ii) Outlet to a road reserve is to be to an existing or new pit or manhole.
- (iii) If agreed, Council will give permission for interallotment drainage to outlet to the kerb and channel where no alternative is available.
- (iv) Where the interallotment drainage outlets onto private property other than the allotment to be serviced, an easement is to be created over the drainage outlet.

SC6.5.9.2.3 Interallotment Drainage Pipe and Culvert Sizing

Pipe sizing is to be in accordance with QUDM section 7.13 and is to be a minimum 150mm diameter.

SC6.5.9.2.4 Interallotment Drainage Materials

SC6.5.9.2.4.1 Interallotment Drainage Pipe Bedding and Backfilling

- (i) Where uPVC pipes are used, the bedding is to be in accordance with the pipe bedding area of the Sewerage Section of this manual.
- (ii) Where RCP or FRC pipes, bedding is to be in accordance with the Stormwater Section of this manual.
- (iii) Detailing of satisfactory backfilling will be required when the alignment is in the zone of influence of another service alignment or structure.

SC6.5.9.2.4.2 Interallotment Drainage Pipe Material

- (i) Pipe material is to be in accordance with QUDM Table 7.13.4.
- (ii) uPVC is to be minimum sewer class SH solvent welded to AS 1260; RCP is to be Class 2 rubber ring jointed to AS 4058; and FRC is to be Class 2 rubber ring jointed to AS 4139.
- (iii) Refer to Kerb Outlet section of this manual for material types across road verges to kerb adapters.
- (iv) Flexible joints in the form of a short pipe 600mm maximum at the junction of all stormwater drainage structures are to be provided.
- (v) For uPVC systems:
 - flexible joints are not necessary, however rubber ring jointed connections are to be provided at all drainage structures to accommodate expansion or contraction; and
 - all pipes are to have sanded ends suitable for bonding to concrete.

SC6.5.9.2.4.3 Interallotment Drainage Manholes, Chambers and Lids

- (i) Refer to Alignment section of this manual for sizing requirements. When over 1.2m in depth, refer to the standard stormwater manhole details.
- (ii) Lids to cast in-situ chambers are to be pre-cast concrete and:
 - be a standard concrete infilled access chamber cover and frame.
 - be embossed "roofwater".
 - have infill concrete at grade N25.
 - match the finished ground slope and sit 50mm proud.
- (iii) Cast insitu boxes are to have close fitting cast iron, galvanised steel or concrete infilled type lids or grates of generally light duty standard to suit the internal dimensions.
- (iv) FRC and RCP manholes are to have the manufacturer's proprietary concrete or concrete infill type lids.
- (v) Infill concrete is to be Class N25.

- (vi) Lids are to match the finished surface level and slope unless depressed grates.
- (vii) Lids are to be impressed with “stormwater” into the infill.

SC6.5.9.2.4.4 Interallotment Drainage House Connections

- (i) House connections or Junction Chambers are to be in accordance with the IPWEAQ Standard Drawing.
- (ii) At least one connection point is to be provided on the main line for each property.
- (iii) The connection is to be in the form of a Slope Junction installed in the line with the property branch line diameter being a minimum of 100mm (I.D.)
- (iv) An inspection opening is to be located at the end of the property branch line similar to a sewer house connection branch.
- (v) The connection point is to terminate 0.5m past any adjacent sewer.
- (vi) Stormwater marking tape is to be tied to the cap of the inspection opening and extend vertically to be tied to a wooden peg at finished surface level.

SC6.5.9.2.4.5 Interallotment Drainage Outlets.

- (i) Interallotment roofwater drainage systems are to discharge into a suitably located stormwater pit or access chamber in the street; or
- (ii) Interallotment drainage will be outlet through a standard precast headwall.
- (iii) Refer to the Erosion and Sediment Control section of this manual for detail of scour requirements.

SC6.5.9.2.4.6 Interallotment Drainage Kerb Outlet

- (i) Where no alternative outlet is available, refer to Standard Drawing for the outlet to the kerb and channel and the kerb adapter and saw cutting detail.
- (ii) Residential developments are to use 90mm dia uPVC under street verge.
- (iii) Where servicing a commercial development, galvanised RHS with minimum 4mm thickness is to be provided to accommodate the capacity required and to withstand traffic loading at reduced cover locations unless a splitter box and multiple 90mm dia pipes are used.
- (iv) For lots discharging to kerb and channel where a concrete footpath/cyclepath is provided in the verge, a roofwater drainage connection point is to be provided at the lowest corner of the lot, i.e. a 100mm dia (or RHS) line discharging to kerb and channel via an approved kerb adaptor.

SC6.5.9.3 Culverts, Floodways and Bridge Design Standards

SC6.5.9.3.1 General

- (i) Culverts, aprons, headwalls and wingwalls are to be provided in accordance with DTMR Standard Drawings and the DTMR Road Drainage Manual where not amended by this manual.
- (ii) Refer to the Table below for design culvert capacities required for various cross road culverts.

Table SC6.5.9.3.1.1 – Road Cross Culvert Capacity (Minor Event) by Zone, Precinct and Road Types

ZONES and PRECINCTS	ROAD TYPE	STORMWATER TRUNK CROSS DRAINAGE (MINOR EVENT)
Rural zone [#]	Access Place	50% AEP
	Access Street	50% AEP
	Collector	10% AEP
General residential zone - Park residential precinct	Access Place	10% AEP
Rural residential zone	Access Street	10% AEP
	Collector	10% AEP
Community facilities zone	Access Place	10% AEP
General residential zone (excluding park residential precinct)	Access Street	10% AEP
	Collector	10% AEP
Recreation and open space zone	Trunk Collector	2% AEP
Township zone		
Centre zone	Access Street	10% AEP
High impact industry zone	Collector	10% AEP

ZONES and PRECINCTS	ROAD TYPE	STORMWATER TRUNK CROSS DRAINAGE (MINOR EVENT)
Industry zone		
Emerging community zone	Access Place	To be determined by Council
	Access Street	
	Collector	
	Trunk Collector	

See Table 6.5.9.3.1.3 for indicative pipe sizes for rural catchment areas.

- (iii) Refer to the table below for design floodway event and criteria to be assessed with all culvert designs.

Table SC6.5.9.3.1.2 – Floodway Event (Major) Design Criteria by Road Type

CRITERIA	TRUNK COLLECTOR OR GREATER	SEALED ROAD	UNSEALED ROAD
Design Floodway Event (Major)	1% AEP	1% AEP	1% AEP
Maximum width of floodway#	20m	50m	100m
Maximum depth of flow	100mm	200mm	300mm
Maximum dV (refer QUDM)	0.2m ² /s	0.4m ² /s	0.6m ² /s

Maximum is not to exceed width of downstream accepting path.

- (iii) Backwater from the Major Floodway event is not to enter upstream properties in events of similar return frequency.
- (iv) Maximum batter slope from road shoulder to top of headwall is to be 1 in 2.
- (v) Refer to the Safety Devices section of this manual for Inlet Protection and Safety Fencing requirements.
- (vi) The design submitted will be required to provide calculations supporting the width, depth and dV of the major storm event over the road.
- (vii) Culverts located in General residential zone – Park residential precinct are to be piped 30m beyond the frontage of the proposed allotment.
- (viii) The cross road drainage is to be constructed with the obvert of the pipe culvert a minimum of 300mm below the finished road level, and the pipe is to have concrete or stone pitch concrete headwalls, wingwalls and aprons on both the inlet and outlet of the culvert.
- (ix) The minimum pipe size to be used for any cross road culvert is 375mm diameter.
- (x) Culverts are to be laid with a minimum fall of 100mm across the width of the road.
- (xi) The inlet and outlets to the culverts are to be clear, flat and unobstructed for a distance of 1.5m.
- (xii) The grade of any earth batters leading into or out of the culvert are to have a maximum slope of 1 in 6.
- (xiii) Two (2) flexible road edge guide posts per DTMR MRTS14 Road Furniture, are to be installed on either side of the culvert structure on both sides of the road in accordance with DTMR Standard Drawing for Roadworks No. 1356.
- (xiv) Rural Cross road drainage is to be constructed in accordance with one of the pipe sizes outlined in the table below.

Table SC6.5.9.3.1.3 – Indicative Pipe Sizes for Rural Catchment Areas

Rural Catchment Area (Ha)	Pipe Size Required (mm)	Discharge (m ³ /S)
1.5	300	0.15
2.0	375	0.20
3.0	450	0.30
5.0	525	0.45
7.0	600	0.60
9.0-11.0	2 x 525	0.80
12.0	2 x 600	1.00
15.0 to 100	RPEQ Engineer Design Required	RPEQ Engineer Design Required

SC6.5.9.3.2 Hydraulics

- (i) For entrance losses and manning's coefficients refer to QUDM tables 7.16.5 and 7.16.3, respectively.
- (ii) Tailwater levels used in culvert design are to be determined from the open channel depth calculated for the receiving flow.
- (iii) Input tables and calculated results from culvert design software are to reflect these parameters to account for whether the road crossing is Inlet or Outlet controlled.

SC6.5.9.3.3 Headwater Depth Criteria

- (i) Culverts located in areas other than Rural Zone or the Park Residential Precinct of Town Zone are to have a headwater depth at a minimum 150mm depth below the invert of the road kerb and channel or the road shoulder point if no kerb and channel is present for the minor storm event.
- (ii) Culverts located in Rural Zone or the Park Residential Precinct of Town Zone are to have a headwater depth at a minimum 100mm below the road shoulder point for the minor storm event.
- (iii) The headwater inundation is not to increase existing upstream property flood levels.
- (iv) The effect of flooding to house sites caused by the floodway event is to be considered with all culvert designs.

SC6.5.9.3.4 Culvert Road Furniture

- (i) Culverts located in Rural Zone or the Park Residential Precinct of Town Zone are required to be delineated with road edge guide posts.
- (ii) If the culvert measures 5.0m long in the direction of the roadway then four road edge guide posts are to be provided on either side of the cross road structure on both sides of the road.
- (iii) In addition to the above, floodways greater than 20.0m long in the direction of the roadway are to have flood gauge posts installed.
- (iv) The delineator posts are to be installed with the inside face of the post in line with the shoulder of the road.
- (v) Delineator posts are to be installed so that the red delineator is on the left side and the white delineator is on the right side of the road in both directions.

SC6.5.9.3.5 Bridges

Bridges are to be certified by an RPEQ structural engineer and to applicable authorities' standards and guidelines.

SC6.5.9.4 Detention Basins Design Standards

SC6.5.9.4.1 General

- (i) Detention Basins are to be designed in accordance with QUDM section 5, where not amended by this manual.
- (ii) Refer to the Safety Devices section of this manual for Inlet Protection and Safety Fencing requirements.
- (iii) For Dams see *Minor filling and excavation* in Schedule 1 – Administrative terms and definitions

SC6.5.9.4.2 Dry Detention Basins

- (i) Dry detention basins are defined as an area for the temporary storage of stormwater, which for the majority of the time holds no water.
- (ii) Any inlet pit at the low point of a detention basin is to be fitted with an approved anti-blockage grate.

SC6.5.9.4.3 Wet Detention Basins

- (i) Wet Detention Basins (or Permanent Water Bodies) are defined as an area, whether natural or man made, that has a standing water level.

SC6.5.9.5 Rainwater Tank Design Standards

SC6.5.9.5.1 General

- (i) Where conditioned as a requirement of a development or where it is elected to install Rainwater Tanks for connection to a development, refer to the criteria in this section.
- (ii) Where the incorporation of rainwater tanks into a development is used to demonstrate the attenuation requirements of the site the methodology and software input criteria are to be reviewed at the Pre-Design Meeting prior to detailed design. Rainwater tanks are to be installed as part of the development.
- (iii) All software data files (PURRS, DRAINS, etc) are to be included in the submitted operational works lodgement complete with the associated drawings and engineering summary report.

SC6.5.9.6 Open Channels Design Standards

SC6.5.9.6.1 General

- (i) Where an overland flow path:-
 - Conveys a flow from an Upstream catchment; or
 - Has a 1% AEP flow greater than 1.2m deep; or
 - Has batter slopes steeper than 1 on 6; or
 - Is a roadside table drain;it is considered to be an Open Channel and is subject to the design requirements of QUDM Section 9 and the following.
- (ii) The design capacity for all open channels is to be 1% AEP unless approved otherwise with the exclusion of table drains in the Rural zone, Rural residential zone or the General residential zone - Park residential precinct (refer to section below).
- (iii) All open channels are to be contained within drainage reserves or easements (refer to **section SC6.5.9.1.6** of this policy).
- (iv) All open channels are to satisfy the freeboard requirements of QUDM table 9.3.1 with the exception of table drains (refer to section below).
- (v) Open channels located in areas other than Rural zone, Rural residential zone or the General residential zone - Park residential precinct will require safety fencing (refer to **section 6.5.9.7** of this policy).

SC6.5.9.6.2 Table Drains

- (i) Table Drains located in Rural zone, Rural residential zone or the General residential zone - Park residential precinct shall be formed, loamed and grassed where determined by council and anti-scouring measures provided where it is determined that the road grades or soil type so require
- (ii) Table drains are to be provided to all roads located in Rural zone, Rural residential zone or the General residential zone - Park residential precinct.
- (iii) The Drainage Capacity is to be 5% AEP at 100mm below the shoulder point.
- (iv) Maximum batter slopes are 1 on 4 on the road side and 1 in 2 on the property side.
- (v) The maximum depth is 800mm below the shoulder point of the road.
- (vi) Minimum longitudinal grades are 0.5% unless concrete invert or earth reinforcing is provided. Where it is provided, it is a minimum 0.25% longitudinal grade.
- (vii) Maximum longitudinal grade is 16% and grades over 10% will require demonstration that scouring will not occur, provide a concrete channel and need to be designed by RPEQ engineer.
- (viii) The channels are to be fully grassed such that not less than 0.8m² per m² is covered with a healthy growth of grass.
- (ix) Refer to QUDM table 9.5.2 for maximum flow velocities using 50% vegetal cover for erosion resistant soils, as applicable.

SC6.5.9.6.3 Natural Creeks and Waterways

- (i) All natural creeks and waterways are to be contained within drainage reserves or easements as detailed in **section SC6.5.9.1.6** of this policy.
- (ii) Any environmental flows are to be maintained.
- (iii) Refer to QUDM table 9.3.1 for freeboard requirements.

SC6.5.9.6.4 Hard Faced Channels

- (i) All hard faced channels are to be contained within drainage reserves (refer to **section SC6.5.9.1.6** of this policy for details).
- (ii) Refer to the Safety Devices section of this manual for details of the safety fence requirements.

SC6.5.9.6.5 Grassed Channels located in areas other than Rural zone, Rural residential zone or the General residential zone - Park residential precinct

- (i) These channels are to be contained within drainage reserves, unless stated otherwise in **section SC6.5.9.1.6** of this policy.
- (ii) Refer to QUDM table 9.5.2 for maximum flow velocities using 70% vegetal cover for erosion resistant soils as applicable.

SC6.5.9.6.6 Grassed Channels located in Rural zone, Rural residential zone or the General residential zone - Park residential precinct

- (i) These channels are to be contained within the road reserve or easements across private property, as stated in the **section SC6.5.9.1.6** of this policy.
- (ii) Where a channel outlets into private property, a minimum stub easement of 6.0m x 6.0m is to be provided or as required to contain earthworks associated with the outlet.
- (iii) Refer to QUDM table 9.5.2 for maximum flow velocities using 50% vegetal cover for erosion resistant soils, as applicable.

SC6.5.9.6.7 Replicated Natural Channels

Refer to Brisbane City Councils Natural Channel Design Guidelines 2003 and QUDM Section 9.6 for design of channels to replicate natural waterways.

SC6.5.9.7 Safety Devices Design Standards

SC6.5.9.7.1 General

- (i) Safety structures are to be installed on all new drainage structures located in or adjacent to land in all areas other than Rural zone, Rural residential zone or the General residential zone - Park residential precinct.
- (ii) Appropriate warning signage is to be installed in locations where there is a perceived hazard such as a detention basin.
- (iii) Where an identifiable hazard exists with no defined solution in this manual, then a risk analysis is to be undertaken and an appropriate treatment included in the design.

SC6.5.9.7.2 Fencing

- (i) Safety fencing is to be provided around detention basins, along open channels and across culvert headwalls where:-
 - The batter slope is greater than 1 on 4 and the 5% AEP water level is greater than 1.2m deep; or
 - The batter slope is greater than 1 on 2 and the batter is higher than 1.0m; or
 - To Hard Faced Channels between the top of the drain and the drainage reserve boundary; or
 - The structure is in the vicinity of public congregation areas, including schools and shopping facilities; or
 - The structure is on a route frequented by school children, mobility impaired persons, or a high number of general public; or
 - Egress from a drainage structure would be difficult and no other installation has been provided to reduce the risk; or
 - There will be a risk to the public.
- (ii) Safety fences are to be a minimum of 1.0m high, consisting of galvanised posts with a top and bottom rail and PVC covered chainmesh wire and designed to not facilitate the climbing of the fence.

SC6.5.9.7.3 Inlet Protection

- (i) Inlet Protection is to be provided at the inlet to all box culverts and pipes greater than 300mm diameter where:-
 - The structure is greater than 25.0m in length; or

- The flow within the structure attains critical depth in any storm event; or
 - The inlet is contained in a drop structure.
- (ii) Inlet protection structures are to comply with the requirements detailed in QUDM section 12.5 with minimum 30 degrees and maximum 60 degrees to the horizontal.

SC6.5.9.7.4 Dry Detention Basin Safety Devices

Detention basin warning signs are to be installed on all sides of basins that can be accessed by the public, approximately 1.0m from the high water mark, to the satisfaction of Council.

SC6.5.9.7.5 Wet Detention Basin Safety Devices

- (i) Preliminary designs and risk analysis of the safety structures to be installed as part of a wet detention basin will need to be prepared by the consulting engineer for Council approval of the proposal as early in the design process as possible and specifically identified in the final design.
- (ii) The matters to be considered in the proposal will include:-
- The location of the basin in relation to housing and public congregation areas;
 - The probability that unsupervised children will be present in the area;
 - The depth of the still water in the basin in relation to the Building Act which requires safety fencing for depths greater than 450mm;
 - The batter slopes above and below the water level and the ease with which a person will enter or leave the water;
 - The potential provision of a berm below the still water level on which water plants will grow and provide a natural barrier to the deeper water;
 - The potential to plant wetland plants to the perimeter of the basin to provide a natural barrier to the waters edge;
 - The rate at which water level is likely to rise in the basin; and
 - The effectiveness of the warning signage in the area of the basin.

SC6.5.10 SEWER DESIGN STANDARDS

SC6.5.10.1 General

- (i) Except as specifically varied hereafter, the design and construction of reticulation sewers is to comply with the Queensland Urban Utilities (QUU) design and construction standards and this policy.
- (ii) Evidence of the QUU's agreement to provide services is to be given to Council prior to sealing of plans of survey.

SC6.5.10.2 Road and Rail Crossings

- (i) A sewer may cross a road to reduce the number of manholes to be used, provided house connections are not located within the road reserve.
- (ii) Crossings of existing roads will generally be bored. Council will approve open trenching to roads below Collector subject to the condition of the existing pavement and surfacing, space available for boring pits and substrate conditions.
- (iii) Written approval from either the Queensland Department of Transport and Main Roads or Queensland Rail is required if a sewer is to be constructed on land under the control of these bodies. In such cases the crossings will generally be designed and constructed in accordance with relevant bodies' requirements.

SC6.5.10.2.1 Sewer Backfill in Existing Roads

Where crossings are not able to be bored and where approved by Council, excavation is to be carried out across existing roads and expediency in the backfilling of the trenches is required, the following methods in accordance with the standard drawing are to be employed—

- (i) If HDPE pipe is used with no joints/welds underneath roadways nor within 300mm beyond back of the K+C or edge of pavement where no kerb is provided, than no enveloper pipe would be required.
- (ii) Trenching, where permitted, should be at or incorporate existing joints in pavement. Trenching is to be as per standard drawing IPWEA SEQ R-170

SC6.5.10.2.2 Filling over Existing Sewers

Where fill is placed over an existing sewer:-

- (i) Applicant will need to comply with QUU requirements.

SC6.5.11 WATER DESIGN STANDARDS

SC6.5.11.1 General

- (i) Except as specifically varied hereafter, all water reticulation mains are to be designed in accordance with the Queensland Urban Utilities (QUU) Design and Construction Standards and this policy.
- (ii) Evidence of the QUU's agreement to provide services is to be given to Council prior to sealing of plans of survey.

SC6.5.11.2 Road Crossings

- i. All water main crossings of new and existing roads will be constructed in an enveloper pipe of ductile iron or similar. The enveloper (i.e. iron, steel, concrete) pipe will extend a minimum of 300mm beyond the back of the kerb and channel or the edge of pavement where no kerb is provided.
- ii. If HDPE pipe is used with no joints/welds underneath roadways nor within 300mm beyond back of the K+C or edge of pavement where no kerb is provided, then no enveloper pipe would be required.
- iii. Trenching, where permitted, should be at or incorporate existing joints in pavement. Trenching is to be as per the Standard Drawings IPWEA SEQ R-170.

SC6.5.11.3 Major Road Crossings

All road crossings underneath a road under the control of the Queensland Department of Transport to be in accordance with Queensland Transport's "Installation of Underground Conduits within the Boundaries of Declared Roads".

SC6.5.11.4 Crossings of Existing Roads

- (i) Unless otherwise approved in writing, all crossings of existing roads and streets will be bored or jacked with no disturbance to the pavement, shoulders or kerb.
- (ii) Council will permit open trenching to streets below Collector determined by the location, traffic conditions, and age of the existing pavement.
- (iii) The details of the crossing, pipe materials and grouting will be submitted to Council for approval.

SC6.5.11.4.1 Water Backfill in Existing Roads

Where crossings are not able to be bored and where approved by Council, excavation is to be carried out across existing roads and expediency in the backfilling of the trenches is required, the following methods in accordance with the standard drawing are to be employed—

- (i) approved sand bedding to within 600mm of the finished surface is to be placed and compacted by flooding, vibrating or other approved means; and
- (ii) the top 600mm is to be restored with lean mix low slump concrete (1:20) and 25-40mm of asphalt surfacing.

SC6.5.11.4.2 Water Main Backfilling to Footpaths and Other Non Trafficable Areas

- (i) Backfilling is to be carried out using selected material from excavation.
- (ii) The material is to be placed in layers not exceeding 300mm in depth and is to be compacted to a minimum consolidation of 95% Standard Compaction.

SC6.5.11.5 Railway Crossings

If the water main is to be constructed underneath a railway line the crossing will be in accordance with the requirements of Queensland Rail.

SC6.5.11.6 Markers

- (i) Kerb and channel will be stamped or engraved above each end of under road conduits. Refer to Somerset Regional Council Standard Drawings SRC-ROAD-024.
- (ii) Hydrant and Valve markers will be as per Queensland Urban Utilities' requirements.

SC6.5.12 LANDSCAPING DESIGN STANDARDS

SC6.5.12.1 General

Landscape design is to demonstrate that efficient use of available water supply has been maximised, possible impacts from weed infestation has been minimised, and that it is in keeping with the character of the existing vegetation in the Region.

SC6.5.12.1.1 General Species Selection Criteria

Plant species should reflect the principles outlined in section **SC6.5.8** and should be consistent with the following criteria:

- (i) Species which have proven to be locally reliable, given conditions within their range of requirements.
- (ii) Suitable growth habit for amenity planting - trees need to be trained before planting.
- (iii) Hardy, including tolerance to average winds.
- (iv) Reasonable life expectancy.
- (v) Reasonable growth rate.
- (vi) Species which do not require regular maintenance and which have the ability to recover from pruning and/or damage.
- (vii) No species with a potential to become environmental weeds.
- (viii) No species known to have large surface roots.
- (ix) No species known to have brittle branches.
- (x) No species with prickles, thorns or irritant hairs.
- (xi) No species with messy flowers or fruits or hard, heavy pods.
- (xii) No species known to produce any poisonous properties.
- (xiii) No species known to produce problem suckers.

SC6.5.12.1.2 General Construction Sites

- (i) All unpaved areas where earthworks have been undertaken are to be grass seeded to achieve a good grass cover.
- (ii) Following the placing and spreading of topsoil to a minimum depth of 75mm won from the site or imported, the footpaths, parks, allotments, and other disturbed areas are to be seeded.

SC6.5.12.2 General Landscaping Softworks

SC6.5.12.2.1 Seeding

Seeding is to consist of dehusked couch seed mixed with other seeds and fertilisers in accordance with the following criteria:

- (i) the seed is to be thoroughly mixed with fertiliser and loam in the following proportions:
 - 200g, dehusked couch seed;
 - 10kg, super phosphate fertilizer or equivalent; and
 - 12kg, loam;
- (ii) the resultant mixture is to be spread evenly over the surface at the rate of 21kg of mixture to 100 square metres; and
- (iii) the mix is to also include a nursery grass (e.g. millet).

SC6.5.12.3 Open Spaces – Parks Landscaping Design Standards

SC6.5.12.3.1 General

- (i) Parks are to be designed and constructed in accordance with the Somerset Regional Council Standard Drawings and this policy.
- (ii) Park land is to be free from the following hazards and constraints, including:
 - Land listed on the Contaminated Land Register of Environmental Management Register;
 - Land under High Voltage Power lines or within 50m of the Power Easement; and
 - Land constrained by Easements.
- (iii) Land for parks is to be a minimum 15m wide unless part of a linkage or minor entry point which is to be an absolute minimum of 5m.
- (iv) Land for sporting use must be 150m or greater for any dimension.
- (v) Buffers to incompatible land uses are to include vegetation corridors, planted mounds and/or fencing as designed by a qualified Landscape Architect.
- (vi) Constructed Stormwater Drains are not suitable for parkland.

Table SC6.5.12.3.1.1 – Table General Criteria by Park Type

Park type	Min Size	Max Service Access Radius ⁽¹⁾	Minimum Road Frontage	Useable area for main purpose ⁽²⁾	Slope and Topography (maximum)	Flooding and other hazards	Paths and access	Other requirements
Local Park	0.5 Ha	500m General residential zone 1500m General residential zone - Park residential precinct 2-5 min car access	50%	0.3 Ha	1: 20 for main use area 1: 6 for remainder	Main use area free of regular flooding (ie above 10% AEP) with at least 10% of total area above 2% AEP. Free of hazards	Safe walking access and pathway links to park. Car access to boundary and parking available	Good visibility from surrounding residences. No Narrow linear shapes
Village Park	1 Ha	2 km	50%	1 Ha	1: 20 for main use area. 1:50 for kick about area. Variable topography for remainder	Main use area free of regular flooding (ie above 10% AEP) with at least 10% of total area above 2% AEP. Free of hazards	Safe walking access and pathways into the park and facilities. Car access and parking.	Provide local and district park opportunities. May be provided as portion of a Multi-use park combined with sports.
Township Park (Destination)	2 Ha	10-20 min drive	50%	2 Ha	1: 20 for main use area. 1:50 for kick about area. Variable topography for remainder	Main use area free of regular flooding (ie above 10% AEP) with at least 10% of total area above 2% AEP. Free of hazards	On site car parking. Walking and cycle track links.	May also provide local park opportunities and Youth Activity Nodes.
Village Sports Park	2 Ha	10-20 min drive	25%	1.5 Ha	1: 50 for all playing surfaces	Free of hazards. Facilities above 1% AEP. Fields above 2% AEP.	Car, foot and bike access. Off-street parking Linked to township trail/bikeway network.	May be provided as portion of a Multi-use park combining informal and formal recreation.
Town Sports Park or Precinct.	5 Ha	10-20 min drive	50%	3 Ha	1: 50 for all playing surfaces	Free of hazards. Fields/ courts above 2% AEP. Built Facilities above 1% AEP	Car, foot and bike access. Internal road and parking.	Master planned to provide additional local/town informal recreational nodes.

Park type	Min Size	Max Service Access Radius ⁽¹⁾	Minimum Road Frontage	Useable area for main purpose ⁽²⁾	Slope and Topography (maximum)	Flooding and other hazards	Paths and access	Other requirements
Regional Destination Park or Sports Precinct/ Event venue	2 Ha for park area 10 Ha for sports	1 hours drive	25%	Varies	Use areas (eg picnic facilities) 1:20 – playing surfaces 1:50.	Use areas above 10% AEP. Free of other physical hazards. Fields/ courts above 2% AEP. Built Facilities above 1% AEP	Road access. Off-street parking.	Master planned with provision dependant on opportunity to provide significant feature.
Roadside Rest Areas	0.2 Ha	n/a	25% with road visibility	0.2 Ha	1:20	Free of hazards.	Road access – off street parking	Provided by DTMR or Somerset Regional Council.

Notes for table:

1. Service access radius refers to the maximum distance any given household would have to travel to reach a specific opportunity type.
2. Useable area refers to the space within the park available for sport or recreation activity and facilities. This therefore excludes creeks, stands of vegetation, water bodies, wetlands, steeply sloping land and other “constrained” land.

SC6.5.12.3.2 Embellishments

The standard embellishments for different park types are detailed with design criteria in the following table.

Table SC6.5.12.3.2.1 – Embellishment Requirements by Park Type

PARK TYPE/ FEATURES	LOCAL PARK /TOWNSHIP PARK	DESTINATION PARK	TOWNSHIP SPORTS PARK	TOWN SPORTS PARK/ PRECINCT	REGION WIDE DESTINATION PARK OR SPORTS PRECINCT	REST AREAS AND OTHER OPEN SPACE
Boundary fencing	Bollards to prevent car access.	Bollards to prevent car access.	Bollards to prevent car access onto fields.	Fencing/ bollards to control access into site as well as limiting internal traffic access to field and facilities.	Range of fencing/ boundary definition styles as appropriate to location.	As needed.
Water taps Irrigation	1-2 drinking taps/ fountains where potable water is available.	2+ drinking fountains where potable water is available. Taps for picnic areas and active recreation nodes.	Taps located on built facilities and 1 per field where potable water is available.	Taps located on built facilities where potable water is available.	Drinking fountains and taps provided at picnic nodes and built amenities/ facilities.	Not provided.
Toilets⁽¹⁾	Not provided for local Parks. Provided for Township Parks.	Usually provided.	Provided if not being provided as part of club facilities .	Provided as part of facilities.	Provided.	Not usually provided unless combined with Township Park.
Bike/ pedestrian paths and facilities	On footpath and providing access to boundary (local parks only).	Paths and links to park and within park Bike racks provided.	Bikeway links to park Bike racks provided	Bikeway links to park Internal links to facilities. Bike racks provided	Internal paths to facilities and use areas.	
Lighting	Safety lighting provided by street lights .	For carpark, toilets, youth space and picnic area. For natural area parks lights in carpark and toilets.	For carpark, toilets, security lighting for buildings. Field lighting responsibility of clubs.	For carpark, toilets, security lighting for buildings. Field lighting responsibility of clubs.	For carpark, toilets, picnic shelters. Where possible. May include field lighting for sports precinct.	Not normally provided.

PARK TYPE/ FEATURES	LOCAL PARK /TOWNSHIP PARK	DESTINATION PARK	TOWNSHIP SPORTS PARK	TOWN SPORTS PARK/ PRECINCT	REGION WIDE DESTINATION PARK OR SPORTS PRECINCT	REST AREAS AND OTHER OPEN SPACE
Playgrounds⁽²⁾	1 play event provided.	Large multiple play events provided.	Not provided except in associated Recreation nodes (eg. local Park).	Not provided except as part of recreation nodes.	Sometimes provided as part of picnic and use area. Depends on the other opportunities at park (eg safe water play area).	Not provided.
Youth facilities- Informal Active facilities	Facility for older youth eg: ½ court or open area for kickabout. Usually provided in Township Park or nearby.	Youth “active” facilities provided eg ½ court, bike tracks, youth space etc.	Not provided except as public access to sporting fields.	Not provided except as public access to sporting fields or as dedicated facility (eg. skate park).	No specific facility provided as park “features” accommodate (eg. swimming).	Not provided.
Sporting Fields	Sometimes provided if space permits as an informal field.	Sometimes provided if space permits as an informal field.	Fields provided and developed to playing standard.	Fields developed to playing standard.	Informal fields/ playing areas sometimes provided in Regional Parks. Fields and Amenities sometimes provided for Sports Precincts.	n/a
Picnic tables, seats, BBQs	1- 2 tables. 2+ seats. BBQ normally provided for Township Parks.	2+ tables. 4+ seats. BBQs usually provided. Sheltered tables.	Not provided except as recreation nodes. 2-4 perimeter seats.	2 perimeter seats per field. Picnic facilities provided as part of recreation node.	Multiple picnic nodes provided as required.	1-2 tables.
Shade	Shade from trees or structures provided for play events and picnic nodes.	Built shade for play and picnic facilities if natural shade unavailable.	Perimeter shade from appropriate tree species.	Perimeter shade for fields from trees.	Shade for picnic facilities and all use nodes. Combination of shade planting and structures as required.	Natural shade and picnic shelters.

PARK TYPE/ FEATURES	LOCAL PARK /TOWNSHIP PARK	DESTINATION PARK	TOWNSHIP SPORTS PARK	TOWN SPORTS PARK/ PRECINCT	REGION WIDE DESTINATION PARK OR SPORTS PRECINCT	REST AREAS AND OTHER OPEN SPACE
Landscape works	Ornamental plantings. Shade species. Buffer plantings with other use nodes	Enhancement plantings and shade plantings along with screening and buffers.	Planted buffer areas adjacent to residential. Screening/buffer plantings for recreation nodes.	Planted buffer areas adjacent to residential. Screening/buffer plantings for recreation	Significant works including plantings, features, and rehabilitation work where natural vegetation critical to site. Works at entry points and plantings as appropriate to enhance or rehabilitate site.	Defined access points, regeneration and enhancement plantings.
Car parks and internal roads	On street. Mainly a walk to park	Off- street parking provided unless sufficient on-street available	Off street parking provided	Off street parking provided as central hubs to facilities/ field areas-linked by internal road network	Off street or dedicated on street parking possibly provided in several locations. Internal roads if needed.	Off street or on street parking.
Special elements	Footpath kerbing and entry to park should allow for people with mobility challenges.	Location and directional signage. May also provide larger open areas for neighbour-hood events.	Location and directional signage. May also provide large informal open spaces for community and civic events	Location and directional signage.	Location and directional signage. Interpretation signs where required. May also provide large informal open spaces for community and civic events	Location and directional signage.

Notes for Table:

1. Minimum standard would be to provide a serviced site for later club development of toilet/ change facilities.
2. Playgrounds provided according to Council standard which includes soft fall and shade.

SC6.5.12.4 Road Corridor Landscaping Design Standards

SC6.5.12.4.1 Verges

The verge is to be fully grassed such that not less than 0.8m² per m² is covered with a healthy growth of grass.

SC6.5.12.5 Site Based Landscaping Design

SC6.5.12.5.1 Rural Development Landscaping Requirements

On-Site Landscaping is established and maintained so as to:

- (i) Retain existing native vegetation;
- (ii) Effectively screen all non-residential buildings, structures and outdoor use areas from view from surrounding roads and dwellings;
- (iii) Landscape vegetation will reflect the principles outlined in section **SC6.5.8**

SC6.5.13 ELECTRICAL AND TELECOMMUNICATION DESIGN STANDARDS

SC6.5.13.1 Electrical Reticulation Design Standards

SC6.5.13.1.1 General

- (i) Electrical Reticulation is to be designed in accordance with the Electrical Authorities requirements and is to be carried out by competent electrical designers
- (ii) No Development is to occur within a registered electricity easement
- (iii) No Development is to occur within 4.6m of an electricity line

SC6.5.13.1.2 Underground Reticulation

- (i) Underground electrical reticulation is to be provided in all new reconfiguration/development within the Centre zone, General residential zone, Community facilities zone, Emerging community zone, High impact industry zone, Industry zone and Township zone.
- (ii) Conduit Location and Alignment
 - Shared trenching with telephone reticulation at road crossings and in footpaths is permissible.
 - No sharing of trenches is to occur with water.
 - Trenching, conduit location and backfilling is to be carried out to the requirements of the relevant authority.
 - The service alignments are to be as depicted on Somerset Regional Council Standard Drawings SRC-ROAD-022 and 023.
 - Crossings of existing roads are generally to be bored.
 - Council's engineer will approve open trenching to roads below Collector dependent on the condition of the existing pavement and surfacing or where subsoil conditions or site specific constraints prohibit the use of boring equipment.
 - Road crossings are to be at right angles where possible.
 - Exceptions will be allowed up to a 45 degree skew provided crossing is directly between pillars on both sides of the road.
 - Electrical crossings are generally to be to the opposite boundary to water service crossings.
 - Exceptions will be considered where electrical crossing is at 45 degrees and water crossing perpendicular.
 - Electrical crossings are not permitted within an intersection unless on standard 0.3m to 0.9m alignment of projected intersecting property line.
- (iii) Pillar Locations
 - Pillars are to be located at side boundary wherever possible.
 - Pillars are to be located on alternate boundaries to hydrants.
 - No pillars are to be located on truncated boundaries at intersections.
 - Placement on the tangent point will be accepted, if necessary.

- (iv) Where Pad Mount Transformer Locations are to be located within the frontage of proposed or existing parkland, the location is to be approval by the Engineer.
- (v) Where minor subdivisional development occurs within an area which has existing overhead reticulation Council will approve overhead connection subject to the relevant authority's approval.

SC6.5.13.1.3 Overhead Reticulation

- (i) Overhead power supply is acceptable in Recreation and open space zone, Rural residential zone and Rural zones.
- (ii) Where abutting development which has existing overhead reticulation, Council may approve extension of those services to the new areas subject to the relevant authority's approval.
- (iii) Power Pole Location and Alignments
 - The alignment of overhead power is to be in accordance with Somerset Regional Council Standard Drawings SRC-ROAD-022 and 023.
 - Poles are generally to be located opposite common property boundaries.
 - Pole alignments will be offset 0.3m in the following circumstances at property boundaries of hatchet blocks with narrow frontages, or in cul-de-sacs with narrow frontages.
 - Poles are not to be placed to coincide with water services.
 - Poles will be placed 1.0m offset from physically located conduits, if no alternative layout is feasible.

SC6.5.13.2 Street Lighting Design Standards

SC6.5.13.2.1 General

- (i) All works are to be designed to the requirements of the following relevant authorities' standards and approvals:-
 - Australian Standard Code of Practice AS 1158.1,.2 and .4 Latest Revision;
 - Queensland Department of Transport and Main Roads (DTMR) requirements and approvals for roads under their jurisdiction; and
 - Relevant Council Infrastructure Policy.
- (ii) All street lighting is to be certified by a RPEQ.
- (iii) Wherever possible, street lighting is to be installed on the same side as concrete footpaths.
- (iv) Street lighting to use LED lighting, whenever possible.

Table 6.5.13.2.1.1 – Street Lighting Requirements by Zone and Precinct Type

ZONES or PRECINCTS	ROAD TYPE	STREET LIGHTING
Rural Zone	Access Place	None
	Access Street	None
	Collector	None
General residential zone - Park residential precinct Rural residential zone	Access place	*
	Access street	*
	Collector	*
Community facilities zone General residential zone (excluding park residential precinct) Recreation and open space zone Township zone	Access place	P5
	Access street	P5
	Collector	P4
	Trunk collector	P4
Centre zone High impact industry zone Industry zone	Access street	P4
	Collector	P4
Emerging community zone	Access place	To be determined by Council.
	Access street	
	Collector	
	Trunk collector	
* Road Intersections, end of cul-de-sacs, and bends in roads (Flag Lighting).		

SC6.5.13.2.2 Lighting Category

- (i) Full compliance with categories A1, A2 and A3 on major roads are to be observed as closely as conflicts between pole locations and other infrastructure will permit.
- (ii) Urban street lighting to B1 and B2 standards and Park Residential lighting are to use the standards as a general guide, however the minimum requirements are to be observed.
- (iii) Rural zones do not require street lighting.
- (iv) Not required if amalgamated properly.

SC6.5.13.2.3 Hazard Identification Lighting

All intersections, head of cul-de-sacs, traffic calming devices, changes in direction exceeding 20 degrees, long curves where street turns through 20 degrees and locations of potential hazards are to be lit.

SC6.5.13.2.4 Pathway Lighting

Lighting of walkways between streets is to be achieved by arranging for a street light to coincide with the walkway entrance, so that the light is visible from every point within the walkway.

SC6.5.13.2.5 Bikeway Lighting

Lighting of bikeways will be assessed on the merits of each case.

SC6.5.13.2.6 Open Space Lighting

Lighting of open space areas will be assessed on the merits of each case.

SC6.5.13.2.7 Pedestrian Crossing and Refuge Lighting

Where pedestrian crossings or pedestrian refuges are provided, they are to be lit to AS 1158.4 "Supplementary Lighting at Pedestrian Crossings".

SC6.5.13.2.8 Intersection and Roundabout Lighting

Where channelisation or roundabouts occur at intersections, a higher standard of lighting is to be provided at the intersection.

SC6.5.13.2.9 Alignment of Street Lighting

- (i) Where underground power is provided the light pole location is to generally be 600mm behind the back of kerb.
- (ii) For the High impact industry zone and Industry zone, where overhead power is permitted, lighting is to generally be attached to the power pole located in the service corridor as defined on Council's Standard Drawing.
- (iii) Street light poles are not to be located adjacent to water crossings.
- (iv) Offset of 1.0m from physically located conduits is acceptable provided access to properties is not affected.
- (v) Street light poles will be placed on 0.3m alignment from the property boundary when at property boundary of hatchet blocks with narrow road frontage or in cul-de-sacs where frontages are narrow.

SC6.5.13.2.10 Spacing of Street Lighting

The gap between lights along any given length of street is not to exceed 90.0m in the General Residential zone, High impact industry zone, Industry zone, Recreation and open space zone and Township zone, 120m in the General residential - Park residential zone and Rural residential zone and A2 Standard in the Centre zone and Community facilities zone.

The gap between lights along any given length of street in the Emerging Community zone will be determined by Council.

SC6.5.13.2.11 Lighting Materials

- (i) Generally, timber poles are to be installed, however steel or concrete poles will also be used subject to the Electricity Authority and Council approval and the developer meeting all additional costs.
- (ii) All lighting poles and fittings are to comply with the following Australian Standards—
 - AS 1158 - The lighting of urban roads and other public thoroughfares;
 - AS 1798 - Lighting poles and bracket arms - preferred dimensions;

- AS 3771 - Road lighting luminaries with integral control gear; and
 - AS 4065 - Concrete poles for overhead lines and street lighting.
- (iii) In the event that a light pole is damaged and needs replacing, Council will generally replace them or non standard type light poles with standard light poles with the same style and type, if available.

SC6.5.13.2.12 Shading

- (i) A written application is to be made to Council's Engineering Department requesting consideration of the installation of street light shades.
- (ii) Applications for aero-screen lighting will be in accordance with the "QTSC Group Standard Conditions for the provision of Public Lighting Services".
- (iii) Costs for the installation of shading are to be met by the applicant and be as set by the Code from time to time.

SC6.5.13.3 Telecommunications Reticulation

SC6.5.13.3.1 General

- (i) A telephone reticulation approved plan is to be obtained and submitted to Council prior to any subgrade inspection and evidence of the Telecommunication Authority's agreement to provide services is to be given to Council prior to sealing of plans of survey.
- (ii) Subject to the Power and the Telecommunication Authority's approval, joint use trenching will be adopted for telephone services.
- (iii) Required for Centre zone, Community facilities zone, Emerging community zone, General residential zone, High impact industry zone, Industry zone, Rural residential zone and Township zone.

SC6.5.14 PROCEDURES, DOCUMENTATION AND CERTIFICATION

SC6.5.14.1 Development Application Supporting Documents

If an Engineering Report is required to accompany a Reconfiguration of Lot or Material Change of Use Application this section details the minimum information required to be provided.

SC6.5.14.1.1 Physical Characteristics of the Subject Land

- (i) Topography: Slope, Elevation.
- (ii) Geotechnical characteristics.
- (iii) Hydrology: Catchment Area(s), Drainage flow paths.
- (iv) Nature and extent of vegetation.

SC6.5.14.1.2 Access

- (i) The nature of existing roads (those both immediately adjoining and those providing access to the nearest "collector" or higher standard road).
- (ii) Information should detail nature of construction, width of pavements, whether kerb and channelling is present or not, intersection details, etc.
- (iii) Having regard to the potential traffic volumes generated by the proposal, and the nature of the existing road system, whether there is a need for a Traffic Engineering Report as determined by Council, Queensland Transport or Department of Main Roads as applicable.

SC6.5.14.1.3 Traffic Engineering Report

- (ii) The nature of the existing road system servicing the property.
- (iii) An outline of any existing Traffic Studies affecting the applicable area, undertaken by Council or other bodies.
- (iv) Assessment of the adequacy of the existing receiving road system to cater for the additional traffic flows generated by the proposed development, and proposed solutions, where required.
- (v) Assessment of whether or not the traffic volumes generated would result in the need for a noise attenuation barrier.

SC6.5.14.1.4 Stormwater

- (i) Refer to section 6.5.6 Stormwater Design Standards

SC6.5.14.1.5 Services

Detail the nature and extent of existing services (e.g. Power, Telecommunications, Lighting, Gas, Water Supply, Sewerage, etc) and the need arising from the project for extended, augmented, or additional services, as appropriate.

SC6.5.14.1.6 Infrastructure Capacities

Where Council is unable to provide information relating to the location and capacity of existing infrastructure, the Developer will be required to provide this information and, where necessary, upgrade the existing infrastructure within the following limitations:

- (i) Stormwater: downstream to the legal point of discharge and only that part of the catchment upstream of the development.
- (ii) Roads: to the intersection with the closest collector road, and intersection upgrading as identified in global strategy analysis to be prepared at the Developer's expense.

SC6.5.14.1.7 Environmental Management Plan

Refer to section **SC6.5.6**.

SC6.5.14.1.8 Acoustic

To assist in the assessment of impacts on acoustic amenity within the region, Council may require a noise assessment report to be prepared. This report will assist in facilitating appropriate development in the region in terms of meeting realistic expectations of acoustic amenity.

SC6.5.14.1.9 Hazard Prone Area

To assist in the assessment of impacts with development in hazard prone areas within the shire the Council may require the following information to be provided:

- (i) the degree of severity of the hazard;
- (ii) flood, bushfire or landslide hazard assessments specific to the development site;
- (iii) how the development is intending to mitigate the affects of the natural hazards; and
- (iv) the impacts of natural hazards on other land due to the development.

SC6.5.14.2 Operational Works Plan Detail Requirements

SC6.5.14.2.1 General Detail Requirements

All engineering plans drawn on standard size sheets, as follows:

- (i) Size Overall Dimensions: (one set is required until plans are approved, refer to approved plans section for post approval requirements)
 - A3
- (ii) All linear dimensions on plans to be in metres;
- (iii) Standard pegging intervals as follows:
 - roadworks, centrelines (or other construction lines) are to be pegged and levelled at 20m intervals, with further division to 10m to 5m intervals, where necessary, owing to horizontal or vertical curvature;
 - for stormwater and roofwater drainage, at all manhole positions and major changes in topography;
 - levels to be reduced to Australian Height Datum.

SC6.5.14.2.2 Roadworks, Stormwater and Roof Drainage Detail Requirements

Plans are to include the following information, as applicable:

- (i) title block;
- (ii) locality plan, including the location of the subdivision in relation to adjacent main roads, major streets, etc;
- (iii) layout and stage plan;
- (iv) a plan of each new road, including:
 - road reserve boundaries;
 - allotment boundaries, both existing and proposed;
 - centreline, or other construction line;
 - chainages, on centre-line or construction line or set out coordinates;
 - bearings of the centreline or construction line (if used);
 - offsets, if the construction line is not the centre line;

- tangent point chainages or coordinates of each curve;
 - radius of each curve, tangent length, deflection angle and length of curve;
 - centreline and bearing of each intersecting road;
 - chainage or coordinates of the intersection point of road centrelines;
 - kerb lines, kerb radii and chainage or coordinates of all tangent points of the kerb line;
 - edge of pavement, where no kerb is to be constructed;
 - dimensioned road reserve, footpath and pavement widths;
 - location and details of signs and roadmarkings to be provided;
 - drainline locations, diameters and class of pipe;
 - manhole location, chainage and offset or coordinates and inlet and outlet invert levels;
 - gully locations, chainage and offset or coordinates and invert and kerb levels;
 - location and levels of existing utilities or other existing works within the site;
 - limits and levels of lot filling or excavations;
 - location and levels of bench marks and reference pegs;
 - north point; and
 - footpaths and combined cycleways/footpaths;
- (v) a detailed plan of each intersection, including all the relevant information required for plans of each new road, as listed in above, together with additional details such as kerb levels on kerb returns (i.e. at tangent points plus 3 additional points on curve at equal intervals with max. interval 5m), pavement contours (0.2m vertical intervals) and channelisation works;
- (vi) longitudinal section of each road, including:
- chainages;
 - existing surface or peg levels;
 - design road centreline and top of kerb levels;
 - cut or fill depths;
 - design grades and radii of vertical curves;
 - chainage and levels of grade intersection points;
 - chainage and levels of tangent points of vertical curves;
 - length and radii of vertical curves; and
 - details of super elevation where applicable;
- (vii) standard cross-sections for each road including:
- road reserve width;
 - pavement widths;
 - footpath widths;
 - crossfalls of pavement and footpaths;
 - pavement depth;
 - type of kerb and channel; and
 - type of pavement surfacing;
- (viii) cross sections of each road are to be drawn such that the maximum interval between cross sections does not exceed 20m, including top of ridge and bottom of gully and:
- road reserve boundaries with labels - i.e. northern property boundary;
 - pavement centre-line (or other construction line);
 - natural surface;
 - design cross-section;
 - crossfall of pavement and footpath, pavement and footpath widths, and pavement depths wherever these differ from the standard cross-section;
 - where design is for a road in an existing road reserve, the design cross-section must show the existing profile and ultimate profile for the full reserve width;
- (ix) longitudinal section of each drainline is to be drawn along the centreline of the drainline and show:
- chainages;
 - existing surface levels;
 - proposed surface level;
 - design invert levels, obvert level and hydraulic gradeline;
 - manhole chainages and inlet and outlet invert levels;
 - distances between manholes;
 - grade of each pipe;
 - diameter of each pipe length; and
 - class of each pipe length.

SC6.5.14.2.3 Drainage Detail Requirements

Plans are to include the following information—

- (i) drainage calculations and catchment plans for drainage design prepared in accordance with QUDM are to be submitted with the engineering plans, including the minor and major drainage systems, all drainage structures and drainage channels
- (ii) for developments which are likely to have a significant adverse impact on water quality, detailed working plans and specifications of the water quality control structures or works

SC6.5.14.2.4 Erosion and Sediment Control Plan Detail Requirements

- (i) an Erosion and Sediment control program including plans and specifications is to be prepared for both temporary and permanent control of sediments, erosion and gross pollutants;
- (ii) the erosion and sediment control plan is to be prepared in accordance section **SC6.5.11.1.3**
- (iii) The erosion and sediment control plan is to show the following information—
 - the site's existing topography (i.e. site boundaries, controls, drainage paths, discharge point);
 - how and where it will be altered (i.e. any stockpile areas, proposed construction works);
 - the sediment and erosion control measures that are proposed to be used (marked distinctively on the plan);
 - the catchment boundaries and the direction of flow for the different drainage areas before and after development;
 - the stormwater management system proposed.

SC6.5.14.2.5 Cut or Fill Areas

- (i) proposed fill areas and cut areas are to be shown on the engineering plans;
- (ii) where cut or fill areas are adjacent to boundaries with existing residential or commercial uses, development cross-sections showing the batter or retaining wall in relation to the adjoining land use are to be shown on the engineering plans;
- (iii) the effects on the drainage of adjoining properties of any cut or fill operation is to be considered and details shown on the engineering plans.

SC6.5.14.2.6 Contaminated Soils

- (i) any areas of soil known to be contaminated and required to be removed is to be shown on the Engineering plans;
- (ii) specific details are to be provided of the means of removal or treatment of the contaminated soil.

SC6.5.14.2.7 General List of Civil Plans Required to be Submitted, as applicable

- (vi) Locality Plan
- (vii) Project Notes
- (viii) Erosion and Sediment Control Plan
- (ix) Earthworks Plan
- (x) Roadworks Plan
- (xi) Intersection Details Plan
- (xii) Roadworks Longitudinal Sections
- (xiii) Roadworks Cross Sections
- (xiv) Stormwater and Interallotment Drainage Plan
- (xv) Stormwater Drainage Longitudinal Sections
- (xvi) Interallotment Drainage Longitudinal Sections or Tables
- (xvii) Stormwater Calculations Table
- (xviii) Stormwater Manhole and Culvert Details

SC6.5.14.2.8 Details Required to be Submitted, as applicable

- (i) stormwater outlet structures, other than standard headwalls;
- (ii) gross pollutant traps;
- (iii) surcharge structures;
- (iv) overland drainage paths;
- (v) any structure not satisfactorily detailed in a Council Standard Drawing;
- (vi) structural details of any retaining walls;

- (vii) noise attenuation works; and
- (viii) detention basin drawing are to contain:
 - plan and sectional view;
 - details of basin wall construction;
 - details of low and high level outlets;
 - extent of any permanent storage;
 - maximum level of storage;
 - extent and nature of any landscaping; and
 - safety fencing and barrier details as required.

SC6.5.14.2.9 Carpark Plan

- (i) Car park layout with parking spaces, aisle widths and manoeuvring areas dimensioned.
- (ii) Access locations and dimensions.
- (iii) Wheel stops and traffic control devices.
- (iv) Line marking details.
- (v) Dimensioned pedestrian walkways.
- (vi) Surfacing details.
- (vii) Stormwater drainage details including identification of the overland flow path for the major storm event and collection at access points.
- (viii) Subsoil drainage.
- (ix) Irrigation systems.
- (x) Landscaping details.

SC6.5.14.2.10 Landscape Working Plan

- (i) Landscape working drawings are to be adequately detailed to enable accurate construction of the proposed works conforming to the criteria of section 6.5.3.6. They are generally to conform to the format and detail shown on the civil drawings and must show:-
 - All existing or proposed landscape and associated treatments are - including edges, paving, fences, walls, signage, retaining structures, lighting, pillar boxes, street lights/poles, bollards, drainage systems, overland flow paths, culverts, pits, playground equipment, park amenity equipment, landscaping furniture, gazebos, swimming pools, mail boxes, clothes hoists, waste disposal bins, taps, etc;
 - Planting Plans with plant canopies clearly grouped, coded and referenced to the plant schedule;
 - Irrigation plans showing the mains connection meters/valves, back flow prevention, power connection point, irrigation controller, valves, filters, pumps, chemical injectors, sprinklers, emission devices, sensing devices, layout of all pipe work and wiring including conduits/crossings;
 - Areas where access is limited or restricted due to environmental considerations or vegetation preservation requirements including notations to define and protect these areas;
 - Earthworks cut/fill profile with levels noted;
 - Any specific vegetation or areas of vegetation that are proposed to be removed including relevant notations describing the removal process, where filling exceeds 300mm council assumes vegetation will require removal;
 - Schematic location of all existing and proposed services in the vicinity of the landscape works (e.g. water, sewer, stormwater, telecom, power);
 - Drawing notations which illustrate all landscape treatments where required by Council for construction details, installation procedures, product type and quality descriptions;
 - Subsoil drainage details;
 - Shade tree calculation workings;
 - Landscape area details; and
 - Root Guard details, where applicable.
- (ii) Any amendments to the design plans specified by Council are to be clearly identified on the drawing and/or in the revision block of the drawing prior to resubmission for approval.
- (iii) The operational works may be approved and conditioned subject to satisfactory landscaping approval should the approval be ready prior to the scrutiny of the submitted Landscape Design.

- (iv) Landscaping in accordance with the approved plan is to be completed to Council's satisfaction prior to the issue of a Certificate or the use of the land for the proposed purpose. Landscaping will be accepted as bonded where necessary due to construction constraints.
- (v) Schematic Layout Details (Reconfigurations)
Schematic Layout Details (Buildings)
Complex Planting Details
Specification and Construction Details

SC6.5.14.3 Specification Requirements

SC6.5.14.3.1 Civil Project Specification

The Project Specification is not submitted or reviewed by Council, it is the responsibility of the consulting engineer to ensure that works are undertaken in accordance with the specification contained within the contract documents and to provide a copy upon request if required. The specification is required to reflect best practices and incorporate modifications as required by this policy, the conditions of approval, Council Local laws, policies and codes and the relevant Australian Standard Codes of Practices and applicable authorities (E.g. Australian Standards, Water and Sewer Service Standards, DTMR Standards, etc).

SC6.5.14.4 Operational Works Application Supporting Documents

SC6.5.14.4.1 General

Council will only accept an engineering design submitted by the following:

- (i) a person registered by the Board of Professional Engineers of Queensland as a Registered Professional Engineer of Queensland (R.P.E.Q.); and
- (ii) the engineer or engineering company submitting the design is to carry minimum insurance cover for Professional Indemnity of \$500,000 and Public Liability of \$5,000,000.

SC6.5.14.4.2 Assessment by Council

- (i) Council officers are not responsible for checking drawings in detail and it is the consultant's responsibility through its quality assurance procedures to ensure that drawings are in accordance with Council's standards, acceptable engineering practice and produces a safe and acceptable design.
- (ii) Council's checking will be on an audit basis only.
- (iii) If, however, the audit checking reveals any matters found to have been incorrectly ticked off as being attended to, or, casually attended to, the submission will be returned to the consultant for their resubmission once rectified.
- (iv) A rechecking fee will be levied in these cases.
- (v) Council will hold the applicant and/or their consultant responsible beyond application and construction approval stages if Council discovers that default or negligence has occurred at some stage.

SC6.5.14.4.3 Processing of the Minor Works through Building Application

- (i) Minor civil site works designs submitted in conjunction with building applications will generally be approved in conjunction with the building application. All commercial and Industrial projects will require a separate operational works application in addition to any building application as triggered by the Planning Scheme.
- (ii) The approval will be subject to amendments or conditions similar to more complex designs.
- (iii) Very minor amendments will however be marked in red on the drawings approved by Council.

SC6.5.14.4.4 Engineering Design Summary

A brief summary of design methodologies for the different design elements is to be included as applicable to aid the interpretation of the plans for assessment purposes.

SC6.5.14.4.5 Stormwater Report Requirements

- (i) Refer to the section **6.5.9.1.3** for content criteria.

SC6.5.14.4.6 Structural Certification of Major Structures

Any major structure or earth retaining structures including, boulder walls, gravity retaining walls, cantilever retaining walls, crib walls, sleeper walls are to be shown on the engineering plans, detailed in cross-section and is to be covered by a Consultant's Structural Certification.

SC6.5.14.4.7 Pavement Design Report

- (i) The report need not be submitted with the operational works application but Council will not inspect pavement subgrade or permit the placement of pavement materials until a pavement design has been submitted and approved.
- (ii) Refer to the checklist in the appendix for details.

SC6.5.14.4.8 Q-Leave Form

A Q-Leave payment advice in accordance with the requirements of the Building and Constructing Portable Long Service Leave Scheme is to be submitted prior to the commencement of any application for operations works, as applicable.

SC6.5.14.4.9 Approved Plans

- (i) The consultant is to submit one (1) complete sets of A3 size approved drawings for Council's use. One A3 copy are stamped and returned to the applicant.
- (ii) Where no amendment of the original submission was required the original submission is acceptable.

SC6.5.15 CONSTRUCTION AND SUPERVISION STANDARDS

SC6.5.15.1 Construction Environmental Consideration Standards

SC6.5.15.1.1 General Construction Environmental Standards

- (i) The developer is to ensure that prompt action is taken to eliminate problems for residents and business owners in the immediate vicinity of the development when the problem results from the construction of development works (including dust, smoke, machinery noise before 6.30 am, redirection of stormwater, from silt washing into existing properties and other problems).
- (ii) This action is to be taken at the developer's cost when the developer is directed in writing to rectify such problems by Council's officer, and may involve the contractor or developer undertaking temporary engineering works to the satisfaction of Council's engineer.
- (iii) Any oral direction is to be confirmed by Council's officer in writing as soon as practicable.
- (iv) Failure to comply with Council's directive will result in Council undertaking remedial action with all costs incurred in taking such action recovered from the developer.
- (v) All penalties or charges imposed by Council will be required to be paid in full prior to Council sealing the survey plan or accepting the development "On-maintenance", whichever is the earlier.

SC6.5.15.1.1.1 Dust

- (i) The Contractor is to minimise any dust problems which may occur during the construction of the roadworks and which may affect the safety and general comfort of the travelling public and surrounding residences.
- (ii) As a minimum, the Contractor is to carry out regular applications of water or other palliative measures along the sections of the roadworks and side-tracks traversed by the travelling public.
- (iii) Council reserves the right to order whatever action is deemed necessary and appropriate at the time, including ordering temporary cessation of work in extreme cases.
- (iv) As this is an issue of public amenity and safety, the developer and contractor are to be responsible for any claims or costs arising from dust nuisance generated by the development.

SC6.5.15.1.1.2 Noise

The Consultant is to ensure that construction activity is limited between 6.30am to 6.30pm in accordance with the Construction Hours section of this manual.

SC6.5.15.1.1.3 Control of Incineration

Incineration is not permitted within the urban areas of the region. Cleared Vegetation is not permitted to be burnt on site.

SC6.5.15.1.1.4 Blasting

- (i) All blasting is controlled by the Department of Natural Resources Mines. Any application for blasting is to be lodged with the department, and all relevant approvals and permits received.
- (ii) Detailed inspections of all surrounding structures both before and after blasting occurs is required to be performed by the supervising engineer to assess damage caused by the blasting, if any.
- (iii) The contractor is to notify Council 2 hours prior to the commencement of blasting operations.

SC6.5.15.1.2 Erosion & Sediment Control Construction Standards

SC6.5.15.1.2.1 General

- (i) The Developer is to ensure that water quality control measures indicated on the approved sediment and erosion control plans and any other measures ordered by Council's design and development manager (DDM) are implemented and maintained in accordance with the approval requirements.
- (ii) All permanent and temporary water quality control measures relevant to the individual portions of the works are to be installed in accordance with the approved plan prior to the clearing or works being undertaken.
- (iii) The developer is to be responsible for any claims or costs arising from siltation or water quality degradation, and remedial works resulting from the development.
- (iv) The construction program and staging of operations are to be in accordance with the approved plan.

SC6.5.15.1.2.2 Maintenance

- (i) All structures are to be inspected after any storm event to repair any breaches and to remove any accumulated silt or debris where 50% capacity is exceeded.
- (ii) The removal of the sediment is to be done in such a manner so as not to damage the structure.
- (iii) Inlet protection provided to all stormwater pits is to be maintained until disturbed catchments have been stabilised.
- (iv) Removable "Gully baskets" where provided are to be serviced a minimum of every 3 months and after significant rainfall events.

SC6.5.16 GENERAL CONSTRUCTION STANDARDS

SC6.5.16.1 General

- (i) The Consultant who designs and supervises Municipal works is independent and is not an employee or associate of the developer or the contractor carrying out the works.
- (ii) The works are to be undertaken by a nominated Principal Contractor experienced in the construction of Public (Municipal) Works.
- (iii) Certification of such works is to include the submission of copies of all relevant test results and certificates as required by this Manual and the Somerset Regional Council Development Procedures
- (iv) Certification of such works is to also include the submission of "As Constructed" information surveyed by a Licensed Surveyor in accordance with the Local Government's "Infrastructure 'As Constructed' Standards".
- (v) It is the responsibility of the consultant to arrange for all testing, inspections and certifications.
- (vi) It is the responsibility of the contractor to maintain quality of workmanship between inspections.

SC6.5.16.2 Inspections

- (i) During construction, joint inspections are to be made as outlined below, as applicable.
- (ii) The Local Government requires notice of all such joint inspections.

- (iii) Test results, application rates and other relevant information is to be made available as required at or prior to the relevant inspection.
- (iv) Audit inspections of the works may be undertaken at all reasonable times during the construction period.

SC6.5.16.2.1 Joint Inspections

The inspection requirements for reconfigurations and developments involving public (municipal) works are as follows:

- (i) pre-start meeting pavement subgrade;
- (ii) sub-base pavement inspection;
- (iii) pre-seal (base course) inspection;
- (iv) final inspection "On Maintenance";
- (v) final inspection "Off Maintenance"; and
- (vi) others (when specific engineering problems arise).

SC6.5.16.3 Pre-Start Meeting

SC6.5.16.3.1 General

Prior to construction work commencing, the pre-start meeting is to be attended by the Consulting Engineer, the Civil Contractor(s) and the Local Government representative(s).

SC6.5.16.3.2 Prerequisites

Following operational works approval, but before construction work may commence, the Local Government requires the following:

- (i) Notification by the Consulting Engineer of the:
 - contractor(s) on-site and after hours telephone number;
 - supervising engineer(s) office and after hours telephone number;
 - date of commencement of works;
 - program of works showing major components.
- (ii) An invitation to attend the meeting on a specified date with 3 working days notice.
- (iii) A copy of the Public liability certificate of currency (project specific).
- (iv) Traffic Management Plan, as applicable.
- (v) The consent of property owners affected by the approved works, as required by any development approval conditions.

SC6.5.17 PAVEMENT SUBGRADE INSPECTION

SC6.5.17.1 General

- (i) This inspection will generally include:
 - checking service conduit locations against markers, if kerb and channel is in place;
 - check backfill of service trenches;
 - check location of mitre and subsoil drains;
 - proof rolling the bottom of the box after compaction by load testing of pavement subgrade with a single axle loaded water truck or similar (minimum load on rear wheels shall be 8 tonne). Deflections detected in the subgrade indicating weakness may require rectification and re-inspection;
 - checking of subgrade level and crossfall. (Reduced levels are to be taken at a minimum of four locations across the pavement at pegged intervals prior to the inspection);
 - checking all related civil works;
 - confirm the proposed limits of different pavement depths by visual inspections of subgrade material or identify the need for further testing;
 - an approved pavement design and compaction test results for the subgrade and backfill to trenches is to be available at the time of the inspection;
 - check that the location of the tests is to be representative of the subgrade; and
 - check to ensure that all unsuitable material (including organic matter) has been removed.
- (ii) If Council considers that a unique case exists which requires further examination, they may require further testing to be performed.
- (iii) 24 hours notice is required from the inspection date.

SC6.5.17.2 Soil Testing of the Subgrade Material

- (i) To determine the nature of the subgrade material upon which the pavement will be placed soil tests are to be taken at the approximate level of the subgrade.
- (ii) An assessment of the site needs to be made to determine the approximate horizontal limits of the different soil types and any significant moisture variations within the subgrade.
- (iii) Excavation of test holes is to extend 500mm below the subgrade level to identify any stratified variation of the subgrade material.
- (iv) Where any significant variation in the test results occurs, further testing of the material will be necessary to determine the soaked CBR strength or identify different subgrade soil types.
- (v) For stratified subgrade materials the lowest soaked CBR identified within the 500mm of the subgrade level is to be used as the basis for pavement design.
- (vi) After in situ calibration of a Dynamic Cone Penetrometer against an identified subgrade material type, in situ Dynamic Cone Penetrometer testing may be used to determine the exact limits of the different strength subgrade materials identified by the CBR testing.
- (vii) Where subgrade replacement with selected material or roadway embankment filling is to be undertaken, the depth of the imported material is to be greater than 500mm before pavement design can be based on the soaked CBR of the imported material.
- (viii) The design is to otherwise be based on the weakest material in the 500mm zone below the subgrade level.

SC6.5.17.2.1 Materials Testing

All materials testing is to be carried out by a National Association of Testing Authorities (NATA), Australia accredited soils testing laboratory using the procedure described in the following manuals or codes of practice.

- (i) SAA - Standards Association of Australia.
- (ii) DTMR - Queensland Department of Transport and Main Roads.
- (iii) ASTM American Society of Testing and Materials.
- (iv) BS - British Standards.
- (v) Where a test is described in more than one of these references, the procedure which is described in the first of these references is to be used.

SC6.5.18 SUB-BASE PAVEMENT INSPECTION

Sub-base Pavement Inspection may be required by Council depending upon the results of the Subgrade Inspection. Elements of the subgrade test procedure may be employed.

SC6.5.19 PRE-SEAL INSPECTION

SC6.5.19.1 General

- (i) This inspection will generally include:
 - Checking base course gravel after compaction;
 - Compaction test results and gravel quality test results of the base, sub-base and select fill courses are to be available for the inspection if required. Final approval is dependant upon satisfactory pavement test results being submitted to Council;
 - If the engineer deems that the location of the tests are not representative of the pavement layer they may require further testing with payment being made as detailed above;
 - Pre-prime inspection of the pavement surface to ensure the profile complies with the approved engineering drawings and has even and acceptable crossfalls with sufficient depth available for the required thickness of finished surface. (Finished surface levels are to be taken at a minimum of four locations across the pavement prior to the inspection);
 - Pre-prime inspection to check that the surface is suitable for priming; and
 - Proof rolling the top of the base course with a single rear axle loaded water truck or similar (minimum load on rear wheels shall be 8 tonne). Deflections detected will require rectification and subsequent reinspection.
- (ii) Before priming, the conduit markers are checked against the service conduits.

- (iii) Before priming, the proposed application rates of prime and binder and spread rates of pre-coated aggregate are to have been approved prior to the inspection. Where there is no kerb and channel the edge of the pavement will be marked prior to priming.
- (iv) Before priming, the proposed application rates of prime and results of mix acceptance tests are to have been approved prior to the inspections.
- (v) Stormwater drainage works affecting the roadworks completed.
- (vi) All pipe and service crossings of the roads completed, and determined to be correctly located by the Consultant.
- (vii) Kerb and channel line and levels checked and determined to be within tolerances by Consultant.
- (viii) Check intersection contouring.
- (ix) 24 hours notice is required from the inspection date.

SC6.5.20 “ON MAINTENANCE”

SC6.5.20.1 General

- (i) The need for a detailed inspection is to be at the discretion of the Local Government.
- (ii) In the majority of cases it is intended that an "audit" inspection only be necessary.
- (iii) The on-site inspection is to be attended by the Consulting Engineer, the Civil Contractor(s) and the Local Government representative(s).

SC6.5.20.2 “On Maintenance” Inspection Prerequisites

- (i) The pre-inspection checklist form is to be completed, advising that all works as per the checklist have been addressed and inspected to the satisfaction of the Consulting Engineer.
- (ii) The checklist is to be forwarded to Council prior to the requested “On Maintenance” inspection date.
- (iii) The Local Government inspection will not be carried out if this checklist has not been received from the Consultant.
- (iv) In addition to the pre-inspection checklist, the consultant is to submit a formal Consulting Engineer's Certificate for the works

SC6.5.20.3 Non-Conforming “On Maintenance” Inspection

- (i) If the development fails to satisfy the requirements of the inspection as outlined in the pre-on maintenance inspection checklist (other than for minor defects) the Consulting Engineer is to be so advised.
- (ii) When the defects have been remedied, the Consulting Engineer is to arrange another inspection.
- (iii) Any construction works that either the Consulting Engineer or Council's Engineer deems unacceptable will be itemised in a defects list.
- (iv) Minor defects, being those defects when the total value of rectification works for all defects is less than \$1,000.00, may be attended to within 30 days of the inspection and will not delay Council's acceptance of the works “On-Maintenance”.
- (v) Major defects, defects affecting public safety, or minor defects where the total value of rectification works exceeds \$1,000.00, will be required to be rectified prior to Council's acceptance of the works “On-Maintenance”.
- (vi) A reinspection of the rectification works and payment of a reinspection fee may be required.

SC6.5.20.4 Formal “On Maintenance” Documentation Requirements

The Consulting Engineer is to forward to the Local Government the following information prior to formal acceptance of the works “On Maintenance”—

- (i) Letter confirming satisfactory completion of the “On Maintenance” inspection and requesting that the maintenance period commence from the date of inspection.
- (ii) Certification by the Consulting Engineer that the works have been completed in accordance with the approved Design and Specifications.
- (iii) Refer to the Formal “On Maintenance” Requirements Checklist form
- (iv) Upon confirmation of the documentation requirements the Council will arrange for the release or reduction of any incompleting works bond(s) held and issue a formal advice on the date on

which the work was accepted "On Maintenance", in conjunction with the certificate of practical completion.

SC6.5.20.5 Letter of Reinstatement

- (i) If works are required to be carried out through private property, prior written approval from the landowner is to be obtained, including the standard of reinstatement required.
- (ii) Upon completion of the works this letter is to be again signed by the landowner confirming that all reinstatement works are to their satisfaction.
- (iii) This letter is required to be submitted as part of the "as-constructed" documentation.

SC6.5.20.6 Checklist of the Sealing of the Survey Plan

If no bond has been submitted for the early release of survey plans, the Plan Sealing Checklist form of this Manual is to be submitted, complete with all required attachments.

SC6.5.21 "OFF MAINTENANCE" INSPECTION STANDARDS

SC6.5.21.1 General

- (i) Refer to the checklist of the items that are generally required to be inspected at an "Off Maintenance" Inspection.
- (ii) All areas inspected at the "On Maintenance" stage are to be re-inspected with special emphasis placed on any unsatisfactory points noted during the "On Maintenance" inspection or any points that have been brought to the Local Government's attention during the maintenance period.
- (iii) Any matters outstanding at the time of this inspection will constitute incomplete work and such works will not be accepted by the Local Government.
- (iv) The Consultant is responsible for ensuring that the works are presented in accordance with the approved drawings and accepted engineering best practice prior to requesting an 'Off-Maintenance' inspection.
- (v) At the time of the "Off-Maintenance" inspection, all aspects of the works are to indicate that they are performing in accordance with the "design intent".
- (vi) Where there is indication that the works are not performing or may be subject to a reduced design life, rectification work will be required to be carried out before the development is accepted "Off-Maintenance".
- (vii) 3 working days notice is required from the inspection date.

SC6.5.21.2 Non-Conforming "Off Maintenance" Inspection

- (i) Any construction works that either the Consulting Engineer or Council's Engineer deems unacceptable will be itemised in a defects list.
- (ii) When the unsatisfactory or outstanding works have been remedied, the Consulting Engineer is to arrange another inspection.
- (iii) A reinspection of the rectification works and payment of a reinspection fee may be required.

SC6.5.21.3 Formal "Off Maintenance" Documentation Requirements

The Consulting Engineer is to forward to the Local Government the following information prior to formal acceptance of the works "Off Maintenance":

- (i) Following a satisfactory "Off-Maintenance" inspection, the Consultant is to submit a written request to Council's Engineer for acceptance of the works "Off-Maintenance", and release of the maintenance security bond.
- (ii) The provision of items agreed at the time of formal acceptance of the works "On-Maintenance" is required.
- (iii) Council will, upon confirmation that no outstanding accounts arising from the development are due to Council, provide confirmation of Council's acceptance of the works "Off-Maintenance", and arrange for the release of the maintenance security bond.

SC6.5.21.4 Random Audit Inspections

In addition to the joint inspections, the following random audit inspections are to be undertaken to ensure adequate quality control is being employed:

- (i) pavement construction;
- (ii) allotment fill compaction;
- (iii) stormwater and roofwater installation;
- (iv) conduit installation; and
- (v) asphalt/bitumen surfacing applications.

SC6.5.21.5 Alteration to Approved Design

All changes to the approved design affected during construction are to be approved prior to construction.

SC6.5.21.6 Water for Construction Purposes

- (i) A permit to draw water is to be obtained prior to water being drawn from a water supply system.
- (ii) The use of potable water (water treated to drinking water standards to NHMRC Guidelines 1996) for activities associated with road and pavement construction, compaction of fill and dust suppression will only be permitted with the approval of council.
- (iii) Alternatively, the use of recycled water (Class A, B, or C to Qld Guidelines for Safe Use of Recycled Water) is encouraged.

SC6.5.21.7 Consideration of Local Residents

- (i) The contractor is to ensure that at no time the works cause nuisance or inconvenience to adjacent residents.
- (ii) Roadworks are to be carried out in a manner so that existing entrances to private properties affected by the roadworks operations are either:
 - maintained in a useable condition during the period of construction of the roadworks; or
 - alternative entrance arrangements are made with the property owners concerned.

SC6.5.21.8 Inconsistencies

Where any inconsistencies exist between the third party design codes and this policy and Somerset Regional Council's Standard Drawings, the Council documents are to take precedence subject to clarification.

SC6.5.21.9 Alteration to Public Utilities

- (i) The alterations or repairs to any public utility mains, services or installations necessitated by or caused by a development are to be the responsibility of the developer.
- (ii) No work will commence on the utility mains until approval has been received from the appropriate authority.

SC6.5.21.10 Urgent Repairs and Protective Works

- (i) If by reason of any circumstances arising in connection with the work, any urgent remedial, protective, repair or other work is necessary to prevent damage to the work or to provide protection for pedestrians and traffic and the Contractor is unable or unwilling to do such work, the Local Government may do such remedial work.
- (ii) The Local Government is to determine the reasonable costs incurred in carrying out the works and the amount so determined is to be paid by the Contractor to the Local Government, no later than prior to acceptance of the works "on maintenance".

SC6.5.21.11 Construction Hours

Construction Hours are to be in accordance with DEHP Standards as follows;

- (i) Construction hours are to be 6:30am – 6:30pm Monday to Saturday.
- (ii) Construction is not to be undertaken on Sundays or public holidays.

SC6.5.21.12 Traffic Safety

- (i) A road signage plan is to be submitted to and approved by Council prior to commencement of any works within or adjacent to a public road.
- (ii) All signs are to be erected in accordance with the Manual of Uniform Traffic Control Devices.

SC6.5.21.13 Side Tracks, Detours and Traffic Disruptions

Council is to approve the temporary closure of any road prior to the establishment of detours, etc.

SC6.5.21.14 Temporary Erosion and Sediment Control Plan

A sediment and erosion control plan is to be submitted to and approved by Council prior to the commencement of work on the site.

SC6.5.22 MATERIALS TESTING

SC6.5.22.1 General

- (i) The materials testing are to be carried out by qualified operators within NATA registered laboratories.
- (ii) The supplier's Quality Assurance documentation is to be retained by the consulting engineer as part of the project documentation.
- (iii) The consulting engineer is required to certify that the constructed works comply with Council's minimum requirements.
- (iv) It is therefore the consulting engineer's responsibility to assure themselves that all materials used in the construction of the works comply with those minimum requirements.
- (v) To obtain this assurance, it may be necessary for the consultant to inspect materials before installation to ensure the appropriate Quality Assurance stamps are in place and where appropriate, ensure that the quality control measures, claimed to be carried out by a material supplier, are being carried out.
- (vi) In certain cases, where there is reason to doubt the quality of the materials being used for the works, the consultant may also need to arrange independent testing of the materials to verify their quality.
- (vii) Compaction testing of crushed rock and earth materials is to be carried out at the minimum intervals detailed in the below table which are in accordance with Australian Standards.

Table SC6.5.22.1.1 – Material Quality Compliance Test Summary

Testing for quality compliance is to be carried out in accordance with the applicable standard test procedures of the Department of Transport and Main Roads, Materials Testing Manual including in particular the following—

DTMR Test Method No.	Description
Q101	Preparation of Distributed Sample
Q102	Moisture Content
Q103A	Particle Size Distribution (wet sieving)
Q104A	Liquid Limit (Cone penetrometer)
Q105	Plastic Limit and Plasticity Index
Q110A	Dry Density/Moisture Relationship (standard compaction)
Q110B	Dry Density/Moisture Relationship (modified compaction)
Q113A	California Bearing Ratio (standard compaction)
Q215	Determination of Crushed Faces
Q106	Linear Shrinkage
Q119	Resistance to Weathering
Q204B	Aggregate Crushing Value (wet)

Note : Los Angeles Abrasion Test and the Sodium Soundness Test is to be in accordance with the following ASTM Specification—

Los Angeles Abrasion Test ASTM C	<u>Course - Fine</u> 535 and C131
Sodium Sulphate Soundness Test ASTM	C88 – 69

- (viii) Where no test method is specified, any method recognised by Australian Standards may be utilised.
- (ix) It is, however, necessary that calibration requirements for quick test methods (e.g. nuclear densometer) are strictly observed for each different material being tested.
- (x) Council do not require a copy of all the documentation from this testing, however random audits will be carried out to ensure compliance by requesting the consultant provide all the inspection reports and quality control documents as per the checklists within 10 working days of the request.

SC6.5.23 CONCRETE TESTING STANDARDS

- (i) Where applicable, concrete structures are to be in accordance with the relevant DTMR manuals as stated in the consultants project specification.
- (ii) Prior to the "On Maintenance" inspection being carried out, all available concrete test results are to be submitted to the Local Government.
- (iii) The minimum requirement is for all seven (7) day test results to be available.
- (iv) All outstanding test results (28 day tests) are to be submitted during the Maintenance Period.

Table SC6.5.23.1 – Compliance Requirements for Concrete Testing

ITEM	TARGET STRENGTH (28 DAYS)	FREQUENCY	SUBMIT TO LOCAL GOVERNMENT	WHEN REQUIRED
Kerb and Channel	25MPa	1 per 300 m	Yes	On or Off Mtce ⁽³⁾
Vehicular Crossings	25 MPa	1 per crossing	No	
Bikeways	25 MPa	1 per 300 m	Yes	On or Off Mtce ⁽²⁾
Footpaths	25 MPa	1 per 300 m	Yes	On or Off Mtce ⁽²⁾
Concrete channels	25 MPa	1 per 150 m	Yes	On Mtce ⁽³⁾
Structures ⁽⁵⁾	per design	as directed	Yes	On Mtce ⁽⁴⁾
Manholes/Gully-Pits ⁽⁶⁾	per design	as directed	Yes	On Mtce ⁽⁴⁾

Notes:

1. Test according to AS 1012 (pts 1-14) "Method of Testing Portland Cement Concrete".
2. Tests may be submitted after On Maintenance only if bonded.
3. Minimum Requirement is for the 7-day tests to be provided at On Maintenance.
4. 28-day test required.
5. Bridges, retaining walls, cast insitu box culverts, etc.
6. Major structures other than standard manholes and gully-pits.

SC6.5.24 MAINTENANCE PERIOD

SC6.5.24.1 General

- (i) During the maintenance period, responsibility and liability for the maintenance and rectification of defects of materials and works, lies with the developer or consultant, not the Local Government.
- (ii) All development works and works that will be transferred to Council control are subject to a 12 month maintenance period during which time the developer is to maintain the works, and any defects relating to materials, workmanship and design errors or omissions are to be corrected at the developer's expense.
- (iii) The maintenance period for bridges shall be 12 months minimum extending to 18 months for bridges which incorporate timber elements.
- (iv) At any time during the maintenance period Council may undertake random inspections to determine the satisfactory maintenance of the works.
- (v) Where maintenance requirements or defects are noted, written advice will be sent to the developer's Consulting Engineer requiring appropriate works to be carried out within 30 days.
- (vi) Where public safety or health is at risk as a result of poor maintenance or defective works, verbal advice will be given to the Consulting Engineer requiring appropriate action within 24 hours.
- (vii) Where neither of Council's notifications are complied with, Council may undertake the necessary works without further reference to the developer.
- (viii) All costs incurred by Council in carrying out the works will be recovered from the maintenance bond.
- (ix) The maintenance period for Landscaping Works is 18 months.
- (x) The maintenance period for Detention Basin Works is 18 months.

SC6.5.24.2 General Maintenance Standards

The following is a list of the maintenance works generally considered applicable to development work.

- (i) Water and fertilise all disturbed areas to obtain the minimum 40% grass coverage required to prevent erosion within 6 months of the works being accepted "On-maintenance".
- (ii) Further maintain revegetation areas to achieve the minimum acceptance coverage of 80% before the works are due for acceptance "Off-Maintenance".
- (iii) Water, fertilise and weed all landscaped areas provided as part of the development works.
- (iv) Slash all private property remaining in control of the developer and drainage reserves.
- (v) Mow road verges, pathways and park areas to maintain a grass length of less than 150mm.
- (vi) Sweep roads to maintain a surface free of loose stones and excessive dirt deposits.
- (vii) Remove silt and debris washed into kerb and channel, stormwater pipes and structures by stormwater runoff.
- (viii) Temporary and permanent stormwater quality control structures are to be cleared of silt and debris when filled to 50% capacity.
- (ix) Repair scours; replace topsoil and grassing to areas eroded by stormwater.
- (x) Severe scouring may indicate the need for the installation of permanent erosion control structures.
- (xi) Repair all trench subsidence to water, sewer, stormwater, and power and telephone trenches.
- (xii) Maintain all fire hydrants and valves free of silt and in an operable condition.
- (xiii) Repaint road linemarking as necessary.
- (xiv) Specific works may however have special maintenance requirements that may also need to be carried out during the maintenance period.
- (xv) The general performance bond required to be submitted for all development works may be used by Council to undertake remediation where the developer fails to undertake immediate action to correct faulty road signage.

SC6.5.24.3 Construction and Design Defects and Omissions

- (i) The repair of construction defects or the rectification of design errors and omissions will be required to be undertaken as they are identified.
- (ii) Where after Council's approval of the design and the acceptance of the project "On-Maintenance", it is identified that an aspect of the works does not comply as a result of either an error or omission in the design, that portion of the works will be required to be rectified.
- (iii) The civil works are also required to perform in accordance with the design intent.
- (iv) Where there is an indication that a portion of the civil infrastructure provided as part of the works is not performing in accordance with the design intent, Council may request the design engineer to investigate the matter and submit a formal report identifying the causes for the failure to perform, and recommendations for any rectification works that may be needed.
- (v) These reports are to be submitted within 30 days of Council's request.

SC6.5.25 BONDS

SC6.5.25.1 General

- (i) Bonding is the submission of a financial security to Council by the developer to cover obligations stated in the conditions of the development permit.
- (ii) All security bonds submitted to Council are to be in the form of cash or an irrevocable, unconditional, open-dated guarantee issued by a bank, insurance office or other financial institution acceptable to the Council in the developer's name. Bonds of \$5,000 or less are to be cash or bank cheque only.
- (iii) The submission of a cash bond is to be accompanied by details of the bond and the development project on Council's standard lodgement form. Council will issue a receipt acknowledging acceptance of the cash. The receipt needs to be retained as proof of lodgement. Council will only return unused portions of cash bonds to the person or company nominated on the receipt as lodging the bond unless specifically directed in writing by the lodger of the bond to make alternate payment.
- (iv) Council will not accept any other form of security, such as mortgages, holding Titles to land, shares or insurance bonds, etc.
- (v) Ultimate care is to be taken to ensure that bonds are appropriately addressed when transferring property between owners before development is completed.
- (vi) For bank guarantees, it is important to ensure that the bond document clearly identifies the contributions and works being bonded.

- (vii) Where it is intended to convert the bond to a future maintenance bond, this is also to be identified.
- (viii) Estate marketing names and staging numbers are not to be used as primary identification as these may be subject to change and amendment as development progresses. Include the full and correct real property description to identify the property in which the works are being bonded (e.g. Lots 11 to 22 on Survey Plan No 123456, cancelling part of Lot 999 on SP 100482).
- (ix) Council will formally notify the institution issuing the bond of any reduction in the security required due to payment of contributions or satisfactory completion of works for which the bond was lodged. The developer will be carbon copied to ensure notification.
- (x) If, at any time, the bond is to be redirected to secure contributions or works not specifically stated on the bond document, Council will require a letter from the institution approving the redirection of the security.
- (xi) Where a bond is required to be released prior to the completion of payments or the construction of works, (due to property transfer, etc) Council will not release the bond until an appropriate alternate security is lodged.
- (xii) Under no circumstances will Council release a bond on the basis that a legitimate outstanding development issue is not the responsibility of a developer or contractor submitting either a performance or maintenance bond.
- (xiii) At council's discretion, works such as Electricity Supply may be considered for bonding.

SC6.5.25.2 Release or Reduction of Bond Amount

- (i) Unless otherwise notified by the applicant, the maintenance bond will be refunded after acceptance of the works formally "Off-Maintenance".
- (ii) The Principal Consultant shall lodge a formal request for the return or reduction of any bonds outlining the reasons and including the following details:
 - Description of development;
 - Council file reference for development;
 - Bond amount originally lodged with Council;
 - Name of Trading Bank (Bank Guarantee Bond only);
 - Council receipt number (Cash/Cheque Bonds only); and
 - Date bond lodged with Council.

SC6.5.25.3 Incompleted Works Bonds

SC6.5.25.4 General

- (i) Council may, at its discretion, accept a bond to secure incomplete works associated with a reconfiguration of a lot and seal the plans of survey prior to the completion of the works.
- (ii) The works within the common property and the connection of services such as sewerage, water and electricity to each of the individual lots associated with Community Title Scheme are required to be completed or bonded to the same requirements as standard reconfigurations.

SC6.5.25.5 Maintenance Bond

- (i) At the completion of construction and acceptance of the development "On-Maintenance", incompleted works bonds held by Council may either be released or reduced to the value of the maintenance bond.
- (ii) The maintenance bond, valued at 5% of the total value of works, is to be submitted to Council.
- (iii) The bond from the developer is to be accompanied by details of the bond and the development project on Council's standard lodgement form.

SC6.5.25.6 Incomplete Works Bond Prerequisites

The Local Government may approve Plans of Subdivision, prior to acceptance of works "On Maintenance", subject to the following prerequisites.

- (i) The bulk earthworks are completed and the general layout of the reconfiguration is evident.
- (ii) Incomplete works are not to exceed 50% of the value of total works.
- (iii) Where a bond is accepted, the amount to be bonded is the value of outstanding works plus 25%.

- (iv) The Consulting Engineer is to provide a certified Schedule of Quantities and rates for the outstanding works as the basis for the Local Government determining the appropriate amount of the bond.
- (v) A written undertaking is to be given by the Developer to insert the following clause in all contracts of sale entered into prior to the completion of works and their acceptance "On Maintenance"— "The purchaser hereby acknowledges that he/she is aware that the works relative to the construction of the land herein purchased are not completed at the date of signing of this contract and have been bonded so as to enable the early approval of the plan by the Local Government. The purchaser(s) hereby undertake not to require the Local Government or any private certifier to give to the purchasers a development permit for building work in respect of this land until such time as the works are completed and the Local Government has "Accepted On Maintenance" such works."
- (vi) The Developer is to give an undertaking, in writing to the Local Government, that unless all outstanding development (operational) works are completed and "Accepted On Maintenance" within three (3) months of the date of the approval of the Plans of Subdivision (or such longer time as the Local Government may approve), the Local Government may call up the bond and undertake all works to complete the approved development, including all testing and compilation of "As Constructed" information.
- (vii) Bonding is to be in the form of a Bank Guarantee, except for very minor works where the Local Government may agree to accept a cash bond.
- (viii) In no case will Council seal a plan of survey for a reconfiguration of a lot until:
 - operational works for the reconfiguration have been approved by Council; and
 - Council is satisfied that the reconfiguration is capable of being serviced as required by the conditions of approval.
- (ix) All earthworks within private property created by the reconfiguration are to be complete.
- (x) All outstanding works, both internal and external to a reconfiguration, are capable of being completed within three months from the date Council seals the survey plan for the reconfiguration.
- (xi) Council may require the Developer's Consulting Engineer to submit a works program detailing all major portions of the work and their programmed completion dates.
- (xii) All outstanding works that are required to comply with the conditions of reconfiguration or material change of use are to be secured with Council by a bond.

SC6.5.25.7 Realisation of Bonds

- (iv) Works that remain incomplete 3 months after Council has sealed the plan of survey may be undertaken by Council or by a contractor under the direction of Council.
- (v) All costs incurred by Council in undertaking the works, including Council's supervision costs will be recovered from the security bond.
- (vi) Where costs incurred by Council exceed the value of the security, Council will take all necessary legal action to recover the additional costs from the developer.

SC6.5.26 CONTRIBUTIONS

All contributions will be required to be paid in full prior to Council's sealing of the survey plan, issue of building approval for the site, or before any Material Change of Use commences, whichever is the earlier.

SC6.5.27 EARTHWORKS CONSTRUCTION AND TESTING STANDARDS

Earthworks are to be carried out in accordance AS 3798 "Guidelines on Earthworks for Commercial and Residential Developments", best practices, and any Geotechnical Consultants recommendations.

SC6.5.27.1 Clearing Construction Standards

SC6.5.27.1.1 Pre-Clearing

- (i) Prior to any clearing, all existing and future parkland is to be delineated to ensure its protection from unauthorised clearing.

- (ii) No trees, other than those specifically approved for removal as part of the operational works engineering design, are to be damaged or removed – including in areas to be dedicated as open space.

SC6.5.27.1.2 Clearing

- (i) Clearing is to be kept to a minimum in declared tree preservation areas as outlined in the approved Environmental Management Plan.
- (ii) Roadway clearing is to be limited to the road reserve.
- (iii) Allotment clearing is to be limited to the minimum areas required to safely construct services such as sewers and interallotment drainage, and the limits of approved earthworks to allotments plus 1.0m lateral clearance.

SC6.5.27.1.3 Post Clearing

- (i) All felled trees and vegetation on the site are to be removed from fill areas prior to the commencement of earthworks.
- (ii) Disposal of cleared vegetation is to be:
 - Mulched and used on site; or
 - Removed to an approved off-site location.
 - Not to be burnt on site

SC6.5.27.2 Bulk Earthworks Construction and Testing Standards

SC6.5.27.2.1 General

Earthworks are to be carried out in accordance with AS 3798 Section 6. For normal types of compaction equipment, the fill is to be compacted in layers not exceeding 300mm.

SC6.5.27.2.2 Allotment Filling

All filling placed on any proposed allotment is to be in accordance with Australian Standards Earthworks Code AS 3798- Guidelines and Earthworks for Commercial and Residential Developments.

SC6.5.27.2.3 Post Filling

All disturbed or filled areas are to be topsoiled, stabilised with approved grassing to achieve the minimum coverage for erosion control as early as practical. Once the minimum erosion control coverage is achieved, the grassing is to be maintained to achieve the minimum acceptance coverage before acceptance “Off-maintenance”.

SC6.5.27.2.4 Compaction

- (i) Compaction and test frequency for earthworks is to be in accordance with the table below, **section SC6.5.18.2** and Appendix B of AS 3798 Guidelines and Earthworks for Commercial and Residential Developments.
- (ii) For small scale filling the general minimum standard of supervision is to be to Level 2 and a testing frequency as defined in that table.
- (iii) Council may direct a higher level of supervision be undertaken in specific areas.
- (iv) Where the depth of fill exceeds 600mm for an area of greater than 5000m² then these operations will be considered as a large scale operation and will therefore require Level 1 supervision, unless agreed otherwise.
- (v) Fill is to be compacted in accordance with the Geotechnical Consultants requirements, but generally in layers not exceeding 300mm.

SC6.5.27.2.5 Testing

The frequency of testing fill for adequate compaction is to be in accordance with the requirements outlined in Table below.

Table SC6.5.27.2.5.1 – Frequency of Field Density Test by Operation Type

Scope of Earthworks	Minimum Frequency of Tests (See Note 2)
Large scale operations	Greatest of—

(e.g. subdivisions, large industrial lots, road embankments)	(a) 1 test per 500m ³ distributed reasonably evenly throughout full depth and area; or (b) 1 test per layer per material type per 2500m ² ; or (c) 1 test per 200mm thickness per material type per 2500m ² ; (d) 1 test per lot
Small scale operations (e.g. residential lots)	Greatest of— (a) 1 test per 200m ³ distributed evenly through full depth and area; or (b) 1 test per layer(3) per 1000m ² ; or (c) 1 test per 200mm thickness (3) per 1000m ² ; or (d) 1 test per lot.
Concentrated operations (e.g. filling of gullies, farm dams, etc)	Greatest of— (a) 1 test per 100m ³ distributed reasonably evenly throughout full depth and area; or (b) 1 test per layer (3) per 500m ² ; or (c) 1 test per 200mm thickness (3) per 500m ²
Confined operations filling behind structures (4)	1 test per 2 layers per 50m ² (i.e. test every second layer once per 50m ²)
Trenches under pavements and structures	1 test per 2 layers per 40 linear m (i.e. test every second layer once per 40m)

Notes:

1. These guidelines refer to the determination of relative compaction using a direct method. However, where an indirect method is used, e.g. Perth sand penetrometer (AS 1289.F3.3), some interpretation of the guidelines may be required.
2. Tests in visually doubtful areas, and retests of failed areas should be carried out and are additional to the testing recommended in this table.
3. Where the geotechnical testing authority has been engaged at level 2 or level 3 as set out in Appendix B of AS 3798, it may be acceptable to test more than one layer per site visit by excavating to the test level.
4. Implies hand operated or small equipment.
5. All test locations are to be shown on a sketch plan.

SC6.5.28 ROADWORKS CONSTRUCTION AND TESTING STANDARDS

SC6.5.28.1 Roadworks Construction And Testing Standards

SC6.5.28.1.1 General

- (i) Road construction methods and practices are to be in accordance with the following:
 - Somerset Regional Council standard drawings SRC-ROAD-001 to 026;
 - DTMR "Standard Specification Roads";
 - DTMR "Urban Road Design Manuals"; and
 - For rural roads use Austroads "Rural Road Design" Manual;
 - Relevant Austroads Manuals when practices are outside the construction methods stated above.
- (ii) All work is to be supervised by an RPEQ and certification that the works are completed in accordance with the approved plans and the consultant's specification.
- (iii) Works involving State Controlled Roads must be referred to the Department of Transport and Main Roads (DTMR) for inspection and approval.
- (iv) All concrete is to be manufactured, specified and supplied in accordance with the Australian Standard "The Specification and Manufacture of Concrete".

SC6.5.28.2 Pavement Construction And Testing Standards

SC6.5.28.2.1 General

- (i) Pavements are to be constructed in accordance with Queensland Department of Transport and Main Roads "Pavement Design Manual".

SC6.5.28.2.2 Compaction Testing

- (i) Determination of the compaction performance of the subgrade and pavement gravel materials (i.e. laboratory reference density, field density, optimum moisture content, field moisture content) is to be carried out in accordance with AS 1289 Methods of Testing Soils for Engineering Purposes, in particular the E series tests.
- (ii) The laboratory reference density is to be as follows:
 - Subgrade 100% Standard Maximum Dry Density (MDD); and
 - Pavement 95% Modified Maximum Dry Density (MMDD).
- (iii) The minimum frequency of testing is to be as follows:
 - 1 per 200m³;
 - 1 per layer per 1000m²;
 - 1 per 200mm thickness per 1000m²;
- (iv) A minimum of 3 tests per project are to be undertaken.
- (v) All tests are to be distributed reasonably evenly through the full depth and area of pavement.
- (vi) The testing frequencies are to be based on a "not one to fail" basis.
- (vii) Subgrade and base courses are to be compacted to the following densities:
 - Natural Subgrade 100% MDD; and
 - Base Courses 95% MMDD.

SC6.5.28.2.3 Pavement Depth Verification

- (i) Pavement depths are to be verified by the provision of "as constructed" levels of the subgrade and top of asphalt surfacing at a frequency of 3 levels (RHS, centre and LHS) every 50m.
- (ii) The surveyed information is to be provided in a tabulated format and is to be certified by both the surveyor and consulting engineer.
- (iii) A copy of the certified results are to be submitted with the Engineer's certification of the works.

SC6.5.28.2.4 Urban Subgrade Preparation

- (i) Subgrade is to be trimmed to an even free draining surface free from loose material.
- (ii) Unsuitable material is to be removed.
- (iii) Subgrade affected by rainfall after final trimming is to be affectively dried out with an appropriate treatment.
- (iv) Prepared subgrade and preceding base courses are to be moistened immediately prior to spreading the next course.
- (v) A mandatory Council inspection of the subgrade is to be satisfactorily completed prior to progressing to the next stage of construction. An optional inspection will then be undertaken on the sub-base material prior to the placement of kerb and channel should Council require it they will notify the contractor at the time of pavement design approval or the subgrade inspection.

SC6.5.28.2.5 Urban Pavement Material Placement and Compaction

- (i) Unbound pavement course material is to be placed only on an underlying layer maintained at the specified moisture content.
- (ii) Pavement materials are to be maintained at the required moisture content during and prior to spreading.
- (iii) Leading edges of the pavement material are to be kept moist.
- (iv) A mandatory Council inspection of the pre-seal is to be satisfactorily completed prior to progressing to the next stage of construction.
- (v) Refer to the General Compaction Testing section for requirements.

SC6.5.28.2.6 Urban Asphaltic Concrete Surfacing

- (i) Asphaltic concrete is to be constructed in accordance with the requirements outlined in the DTMR "Standard Specification Roads".
- (ii) The surface of all asphaltic concrete is to be finished true to grade and profile with a neat finish around manholes, joints and other road fittings.
- (iii) The finished level is not to deviate by more than -5mm or +10mm of the design level.

SC6.5.28.2.7 Urban Pavement Depth Verification

- (i) Pavement depths are to be verified by "as constructed" levels of the subgrade and top of asphalt at 50.0m intervals.

- (ii) The surveyed information certified by the surveyor and consulting engineer is to be submitted with the Engineer's certification.

SC6.5.28.2.8 Rural Subgrade Preparation

- (i) The subgrade is to be trimmed to the same crossfall tolerances as specified for the wearing course pavement.
- (ii) Subgrade is to be trimmed to an even free draining surface free from loose material.
- (iii) Unsuitable material is to be removed.
- (iv) A mandatory Council inspection of the subgrade is to be satisfactorily completed prior to progressing to the next stage of construction.

SC6.5.28.2.9 Rural Pavement Material Placement and Compaction

- (i) Pavement materials are to be placed to ensure even spreading.
- (ii) Pavement materials are to be compacted at optimum moisture content from the outside edge to the crown of the road.
- (iii) A mandatory Council inspection of the pre-seal is to be satisfactorily completed prior to progressing to the next stage of construction.
- (iv) Refer to the General Compaction Testing section for requirements.

SC6.5.28.2.10 Rural Spray Surfacing

- (i) Bitumen surfacing is to be constructed in accordance with the requirements outlined in the Queensland Department of Transport and Main Roads "Standard Specification Roads".
- (ii) Bitumen surfacing is to be hot sprayed bitumen, including Prime and two coat seal.

SC6.5.28.3 Road Sub-Soil Drainage Construction Standards

SC6.5.28.3.1 General

Subsoil drainage is to be constructed in accordance with the Standard Drawing.

SC6.5.28.3.2 Order of Construction

Sub-soil drains are to be constructed after placement of the lower sub base material or after preparation of the pavement box on minimum depth pavements.

SC6.5.28.3.3 Excavation of drains

Trenches for pipe drains are to be excavated to a minimum 900mm below the finished surface level.

SC6.5.28.3.4 Pipe Laying

All sub-soil drainage is to be laid on a prepared minimum 50mm depth of graded filter material or sand bed to ensure a uniform grade.

SC6.5.28.3.5 Joining

Sub-soil drains are to be joined to the manufacturer's specifications. Clean out points are to be joined to the sub-soil drains using oblique tee connections.

SC6.5.28.3.6 Flushing

After the drains are constructed they are to be flushed out until the outlet water is clean and flows consistently.

SC6.5.28.4 Kerb And Channel Construction And Testing Standards

SC6.5.28.4.1 General

- (i) Any kerb and channel not true to line or with noticeable other faults will be broken out and removed from the site.
- (ii) No channel will be accepted which water is found to pond.
- (iii) All kerb on Access Street / Place is to be of type M3.

SC6.5.28.4.2 Kerb and Channel Foundation

- (i) Where no requirements are stated in the approved plans the depth of approved foundation material will be 100mm minimum with a minimum soaked CBR of 45% compacted to obtain 95% maximum dry density.
- (ii) No concrete is to be placed until the foundations have been approved.

SC6.5.28.4.3 Kerb and Channel Forming

- (i) Hand Formed and Finished
 - Back forms are to be used on the footpath side of the full depth of the kerb.
 - The whole channel is to be cast simultaneously (not separating invert).
 - Concrete is to be well rodded or vibrated during placing to ensure a dense surface finish and maximum density.
 - Immediately following the casting of the kerb the top, arris and invert is to be formed and finished.
 - The front board of the kerb is to be stripped within 24 hours of casting and the kerb face immediately bagged.
 - Channel is to be placed in 3.0m sections with provision at the joints to prevent binding.
 - Joints are to be finished square and at right angles to the section.
- (ii) Machine formed and Finished
 - Minimum slump is 12mm.
 - Concrete to be thoroughly compacted.
 - Exposed faces and kerb edges to be finished.
 - Grooves are to be cut at right angles to a depth of 100mm at 3.0m intervals.
 - Adjacent concrete is to be finished to a smooth and level surface.
 - Concrete is to be supplied ready-mixed and placed within 30 minutes.

SC6.5.28.4.4 Curing of Concrete

- (i) All concrete work is to be cured by the use of a curing compound consisting of waxy constituents cut back with a volatile solvent resulting after application in a film of microcrystalline petroleum wax.
- (ii) Curing compound is to be pigmented white.
- (iii) Curing compound is to be applied evenly at the rate recommended by the manufacturer over all exposed surfaces immediately on completion by either spraying or brushing and protected from damage for 72 hours minimum.

SC6.5.28.5 Traffic Provisions And Control Devices Construction Standards

SC6.5.28.5.1 General

- (i) Traffic provisions are to be installed in accordance with the DTMR "Manual of Uniform Traffic Control Devices".
- (ii) Where working in existing trafficked roadways a permit to open a road or temporarily close a road to traffic is to be obtained from the Council prior to the commencement of work.
- (iii) All permanent signs in concrete paved areas are to be sleeved and bolted.
- (iv) Vandal proof bolts and fittings are to be used on all permanent signing.

SC6.5.28.5.2 Traffic Control Devices

- (i) Traffic control devices are to be installed in accordance with the DTMR "Manual of Uniform Traffic Control Devices".
- (ii) All traffic control devices are to be maintained in a clean and effective condition.
- (iii) All devices which are damaged or worn are not to be used.

SC6.5.28.5.3 Detouring of Traffic

- (i) The contractor is to liaise with Council if traffic is to be detoured away from the works.
- (ii) Issuing of public notices and prior repair or upgrading of roads prior to the detouring or restoration.

SC6.5.28.5.4 Entrances to Private Properties

All works are to be carried out in a manner so that existing entrances to private properties are maintained in a useable condition or alternative arrangements are made with the property owner concerned.

SC6.5.28.5.5 Dust Control

The contractor is to minimise any dust which will affect the travelling public with regular applications of water or other measures.

SC6.5.28.5.6 Urgent Repairs and Protective Works

If the Council is required to undertake any urgent remedial, protective, repair or other work necessary to prevent damage to the work or to provide protection for pedestrians and traffic, these works will be at the cost of the contractor.

SC6.5.28.6 Street Lighting

Street lighting is to be installed in accordance with the Australian Standard 1158.3.1.

SC6.5.29 STORMWATER DRAINAGE CONSTRUCTION AND TESTING STANDARDS

SC6.5.29.1 Stormwater Reticulation Construction Standards

SC6.5.29.1.1 Pipe Laying

- (i) Pipes are to be laid true to line, grade and level, be free draining and firmly bedded and to the following tolerances:
 - Invert Levels +/- 50mm; and
 - Structure locations within 1.0m of approved design.
- (ii) Pipes are to be laid from the discharge end upstream.
- (iii) Circular pipes with elliptical reinforcement are to be laid according to their marking.
- (iv) Pipes are to be bedded down as shown on the Somerset Regional Council Standard Drawing SRC-STM-010 on course clean sharp river sand or other approved bedding.
- (v) Pipe laying is to be in accordance with the current Australian Standard Specification.

SC6.5.29.1.2 Jointing Pipes

- (i) Spigot and socket pipes are to be joined by rubber ring joints in accordance with AS 1646.
- (ii) When flush jointed pipes are used, the first pipe is to be bedded to establish line and grade with the groove upstream.
- (iii) Install the external band after the joint is made to the manufacturer's specification.

SC6.5.29.1.3 Laying and Jointing of Box Culverts

- (i) Box Culverts are to conform to AS 1597.
- (ii) Joints between lengths of culverts on the tops and sides are to have approved jointing tape applied.

SC6.5.29.1.4 Backfilling and Compaction

- (i) All backfilling is to be spread in 150mm layers.
- (ii) Beneath Road Pavements as follows:
 - Approved backfill material to a point 300mm above the crown of the pipe or culvert.
 - Above this is to be approved subgrade replacement material (min CBR15) in max loose layers of 250mm and compacted to not less than the compaction requirements of the road subgrade and pavement.
- (iii) Beneath Existing Pavements:
 - The edges of the trench are to be cut with a clean straight line prior to excavation.
 - Approved backfill material to a point 350mm below finished surface level.
 - Above is to be 300mm lean mix concrete or alternatively widening the excavation of the top 300mm to step joint and allow suitable compaction equipment.
 - 50mm Asphaltic concrete to finished surface.
- (iv) Beneath Footpaths and Allotments:
 - Backfill using selected material from excavations in maximum loose layers of 250mm and compacted to a minimum consolidation of 95% standard compaction.

SC6.5.29.1.5 Access Chambers and Inlet Pits

- (i) Formwork is to be constructed and braced to ensure that there is no visible deflection of the formwork and that the concrete can finish accurately to the required dimensions.
- (ii) Allow in the walls for weep holes to drain the pipe bedding and surrounds.
- (iii) Allow where required in the walls for the entry of subsoil drainage lines.
- (iv) Concrete is to be placed continuously with construction joints at the base and the top of the walls only.
- (v) To ensure a good bond, the concrete is to be well roughened at any construction joints.
- (vi) No Step Irons are to be installed
- (vii) All concrete is to be in accordance with AS 1379 and AS 3600 or as shown on the Standard Drawing or approved engineering plans.
- (viii) All rough surfaces and construction joints are to be cement rendered.
- (ix) Cement mortar benching is to be to the half height of the connecting pipes.
- (x) N20 concrete benching will be required in large access chambers and angle junctions.

SC6.5.29.1.6 Access Chambers Covers and Frames

- (i) Cast iron covers and frames are to be free of cracks, flaws and porous spots.
- (ii) All Cast Iron surfaces are to be hot bitumen coated.
- (iii) Covers and Frames are to be in accordance with the IPWEAQ Standard Drawings DS-015 to DS-021.
- (iv) Covers are to be cast Iron within road reserves or trafficable areas and concrete infilled elsewhere.
- (v) Frames are to be cast into the top slabs.
- (vi) Top slabs are to be imbedded on a maximum 12mm mortar on the manhole collar to finish flush with the surface.
- (vii) The concrete to be used in the access chamber lid is to be grade N32/10 to AS 1379 and AS 3600.

SC6.5.29.1.7 Inlet Pit Grates and Lintel

- (i) Grate and Frame is to be Class D to AS 3996 and hot dip galvanised to AS 1650.
- (ii) Precast Lintel is to be in accordance with the IPWEAQ standard drawing DS-061 or approved plan.

SC6.5.29.1.8 Inlet and Outlet Structures

- (i) Precast headwalls may be used provided they are constructed as follows:
 - Laid on a clean stable foundation and bedded on 200mm thick grade N25 concrete;
 - Apron cut-off walls extend below the edge of the apron by a minimum 600mm and be N25 concrete minimum;
 - The headwalls are backfilled with approved free draining material; and
 - Weepholes are to be provided to drain the bedding material.

SC6.5.30 Interallotment Drainage Construction Standards

SC6.5.30.1.1 General

- (i) Refer also to **sections SC6.5.11.2 to SC6.5.11.2.4** of this policy.
- (ii) FRC and RCP manholes are to be constructed by embedding the lower precast shaft section into a wet cast-in-situ concrete base, cut-outs of pipe penetrations are to be made using concrete saws/drills in such a manner as to minimise damage to the adjacent pipe materials.

SC6.5.31 SEWER CONSTRUCTION STANDARDS

SC6.5.31.1 General

- (i) The construction of reticulation sewers is to comply with the Queensland Urban Utilities (QUU) Design and Construction Standards, this manual and checklists.

SC6.5.32 WATER CONSTRUCTION STANDARDS

SC6.5.32.1 General

- (i) The construction of reticulation sewers is to comply with the Queensland Urban Utilities (QUU) Design and Construction Standards, this manual and checklists.

SC6.5.33 LANDSCAPING AND EMBELLISHMENT CONSTRUCTION AND TESTING STANDARDS

The construction of landscaping hardworks and softworks are to be in accordance with the Somerset Regional Council standard drawings SRC-LS-001 to 010 and approved landscaping design and specification.

SC6.5.34 AS CONSTRUCTED STANDARDS

SC6.5.34.1 General

- (i) Information submitted in the As Constructed process is made up of Hard copy drawings and electronically in Autocad and PDF format using the Asset Design As Constructed (ADAC) specifications.
- (ii) The information will be used by Council to assure that the completed works satisfy the following:
 - to establish an accurate record of the line, level, material type and dimensions;
 - to ensure that the finished product is in accordance with the approved design; and
 - to establish an inventory of assets handed over to Council for asset management.
- (iii) Unless approved otherwise by Council, as constructed data is to be submitted and accepted by Council prior to plan sealing or prior to the return of a performance bond.

SC6.5.34.2 Certification Requirements

- (i) The As Constructed Certificate is to be supplied and signed by the Surveyor and Engineer who have worked on the project to verify the accuracy of the data submitted.
- (ii) The Road Pavement Levels Certificate is to be supplied and signed by the Surveyor and Engineer who have worked on the project to verify the accuracy of the data submitted. Pavement depths are to be verified by the provision of As Constructed levels of the subgrade and top of asphalt at a frequency of 3 levels (RHS, centre and LHS) every 50 metres. A copy of the road pavement levels certificate is to accompany the 'on maintenance' information.

SC6.5.34.3 Survey Control Requirements

- (i) All Survey information is to conform to Australian Map Grid (GDA).
- (ii) Level Datum for all information is to be Australian Height Datum (AHD).
- (iii) Grid Datum for all information is to be Australian Geodetic Datum (GDA94).
- (iv) Where information is to be submitted on GDA, the survey is to contain at least three or more GDA coordinated marks of 4th order accuracy or better.

SC6.5.34.4 Incomplete Submissions

- (i) If an incomplete submission is provided it will not be accepted and the Local Government will formally notify the applicant.
- (ii) If minor errors occur with data content etc, the Local Government will contact the applicant to resolve problems.

SC6.5.34.5 Approval Notification

- (i) The Local Government will notify the applicant on approval.
- (ii) This approval should, in most cases, be within ten (10) working days of receipt of information by the Local Government (subject to the correctness of information supplied).

SC6.5.34.6 Information Detail Requirements

SC6.5.34.6.1 Stormwater Network Drainage Detail

- (i) the location of all stormwater mains, centre of manholes/pit chamber, roofwater mains, roofwater house connection branches at end and OB position and associated structures;
- (ii) the location and description of existing manholes/pits where connections have been made.

SC6.5.34.6.2 Topographical Detail

- (i) All embankments, retaining walls etc are to be surveyed with a density of levels taken to indicate true fall and topography of ground
- (ii) Levels of all surface features used to derive terrain model including pavement surface levels
- (iii) For large lot residential subdivisions, contours and level information only are required within the road reserve.

SC6.5.34.6.3 Cadastral Detail

All cadastral and easement boundaries representing the area of interest.

SC6.5.34.6.4 Road Detail

- (i) the location and geometry of all road kerbs, medians, traffic calming measures etc;
- (ii) the location and geometry of all footpaths and bikeways;
- (iii) delineation and extent of kerb types;
- (iv) pavement levels of surface and subgrade.

SC6.5.34.6.5 Open Drains Flooding and Detention Basin Detail

- (i) the location and level of centre line/invert of channel at maximum 25 metre intervals and as required to accurately represent curve geometry, change of grade or tangent points;
- (ii) sufficient topological information of any open drain to develop cross sectional profiles at the corresponding centre line survey points;
full extent of concrete inverts and other associated works;
- (iii) for detention basins, sufficient topological information to determine extent, approximate highest and lowest points and volume.
- (iv) Where earthworks have been carried out to change the existing profile of the land, sufficient surface levels are to be provided to accurately depict the changed surface.

SC6.5.34.6.6 Park Furniture and other infrastructure

All assets created for Council not specifically noted in this section are required to be detailed.

SC6.5.34.6.7 Landscaping Detail

- (i) As constructed drawings are required at the practical completion stage prior to the project being accepted on maintenance for operational works or accepted for occupancy for building works.
- (ii) As constructed drawings are to clearly identify any amendments or changes to the approved landscape working drawings.
- (iii) Hardscape treatments and underground services in particular, including paving, fencing, walls, irrigation, lighting and other structures are to be accurately located for Council records.

SC6.5.34.6.8 Irrigation Detail

- (i) Location of all irrigation components and the sizes of all connecting pipework.
- (ii) A schedule of all equipment installed including brand names and model numbers.
- (iii) Operation manuals for system controllers.
- (iv) Warranty documentation applicable to the system components.
- (v) Proposed maintenance watering program for the irrigation system.

SC6.5.34.6.9 Auditing

- (i) Council may engage external consultants during the maintenance period to undertake an audit of the “as constructed” information submitted to Council where in the opinion of Council, significant errors have been identified in the original information submitted.
- (ii) Council’s costs in relation to the audit and the correction of data will be the paid by the developer. If necessary, Council will recover the costs of the audit from the maintenance bond.

APPENDICES

APPENDIX A STANDARD DRAWINGS DRAWING LIST

Council's standard drawings are shown in the table below

Standard Drawings Table

Description	
Drawing Number	
Roads - Somerset Regional Council	
SRC-ROAD-001	STANDARD DRAWINGS - ROADWORKS
SRC-ROAD-002	TYPICAL CROSS SECTIONS RESIDENTIAL STREETS
SRC-ROAD-003	TYPICAL CROSS SECTIONS INDUSTRIAL STREETS
SRC-ROAD-004	TYPICAL CROSS SECTIONS ARTERIAL ROADS WITH KERB AND CHANNEL
SRC-ROAD-005	TYPICAL CROSS SECTIONS ARTERIAL ROADS WITHOUT KERB AND CHANNEL
SRC-ROAD-006	VERGE AND ACCESS FOR ACCESS, COLLECTOR AND INDUSTRIAL STREETS
SRC-ROAD-007	VERGES- TRUNK COLLECTOR AND ARTERIAL ROADS WITH KERB AND CHANNEL
SRC-ROAD-008	VERGES- ARTERIAL ROADS WITHOUT KERB AND CHANNEL
SRC-ROAD-009	TYPICAL CROSS SECTIONS RURAL ROADS
SRC-ROAD-010	VERGE AND ACCESS RURAL ROADS
SRC-ROAD-011	KERB AND CHANNEL, MEDIAN AND EDGE RESTRAINT DETAILS
SRC-ROAD-012	RESIDENTIAL DRIVEWAY INVERT AND SLAB OR TRACKS
SRC-ROAD-013	COMMERCIAL DRIVEWAY INVERT AND SLAB TYPE A
SRC-ROAD-014	COMMERCIAL DRIVEWAY INVERT AND SLAB TYPE B
SRC-ROAD-015	DRIVEWAY INVERT CROSSING FOR AREAS WITHOUT KERB AND CHANNEL
SRC-ROAD-016	RURAL ROAD DRIVEWAY WITH PIPE CROSSING
SRC-ROAD-017	KERB AND CHANNEL ROOFWATER KERB ADAPTER DETAIL
SRC-ROAD-018	KERB AND CHANNEL KERB RAMP DETAILS
SRC-ROAD-019	CONCRETE PATHWAY AND BIKEWAY DETAILS
SRC-ROAD-020	SUBSOIL DRAINAGE DETAILS
SRC-ROAD-021	SUBSOIL DRAINAGE FLUSHING POINTS
SRC-ROAD-022	PUBLIC UTILITIES SERVICE CORRIDORS AND ALIGNMENT PLAN
SRC-ROAD-023	PUBLIC UTILITIES SERVICE CORRIDOR AND ALIGNMENT SECTIONS
SRC-ROAD-024	SERVICE CROSSING BRASS INDICATOR DISC
SRC-ROAD-025	OVERLAND FLOW PATH CORRIDOR AND BOLLARD DETAIL
SRC-ROAD-026	CONCRETE FOOTPATH FULL WIDTH
SRC-ROAD-027	GATE APPROACH SIGN LAYOUTS
SRC-ROAD-028	GRID APPROACH SIGN LAYOUTS
SRC-ROAD-029	SPECIFICATION FOR ROAD/STREET NAME SIGN
Stormwater - Somerset Regional Council	
SRC-STM-001	STANDARD DRAWINGS STORMWATER DRAINAGE
SRC-STM-002	1050mm DIA TO 2100mm DIA ACCESS CHAMBER DETAILS
SRC-STM-003	1050mm DIA TO 2100mm DIA ACCESS CHAMBER ROOF SLABS
SRC-STM-004	KERB INLET GULLY PIT LIP IN LINE
SRC-STM-005	KERB INLET GULLY PIT KERB IN LINE

SRC-STM-006	KERB INLET GULLY PIT PRECAST LINTEL DETAILS
SRC-STM-007	KERB INLET GULLY PIT GRATE AND FRAME
SRC-STM-008	FIELD INLET AND SURCHARGE PIT TYPE 1
SRC-STM-009	FIELD INLET AND SURCHARGE PIT TYPE 2
SRC-STM-010	DRAINAGE PIPES AND CULVERTS EXCAVATION, BEDDING AND BACKFILL
SRC-STM-011	DETAIL OF ALLOTMENT GRADINGS AND DRAINAGE
SRC-STM-012	SEDIMENT CONTROL DEVICES SEDIMENT FENCE AND TRUCK WASHDOWN
SRC-STM-013	SEDIMENT CONTROL DEVICES FLOW CHECK DAMS AND STONE TRAP
Landscaping - Somerset Regional Council	
SRC-LS-001	STANDARD DRAWINGS LANDSCAPING
SRC-LS-002	PLANTING - TUBESTOCK IN PLANTING AREA
SRC-LS-003	PLANTING - SHRUB OR GROUND COVER IN PLANTING AREA
SRC-LS-004	PLANTING - TUBESTOCK IN GRASS AREA
SRC-LS-005	PLANTING - TREES IN GRASS AREA
SRC-LS-006	PLANTING - MATURE TREE STOCK IN PLANTING AREA
SRC-LS-007	PLANTING - STREET TREES
SRC-LS-008	TURF AREAS
SRC-LS-009	PLANTING AREA
SRC-LS-010	TIMBER BOLLARD

APPENDIX B CHECKLISTS AND FORMS

Form - Consulting Engineer's Certificate

Council Reference File No:

Date:.....

CONSULTING ENGINEER'S CERTIFICATE

The construction of the Roadworks, Stormwater Drainage and Associated Works
at

.....

for

.....

I, ... of

.....

Consulting Engineers, being duly authorised in this behalf, do certify that the earthworks, roadworks, stormwater drainage and associated works for the above Development, have been completed in accordance with the approved drawings, designs, schedules and specifications, the conditions of approval for the Development incorporating any approved amendments, and within specified tolerances or, where not specified, within generally accepted tolerance, also in accordance with relevant certificates, sound engineering principles and practices and that the works are fit for the purpose for which they are intended.

And I make this certificate conscientiously believing that I/We have appropriate procedures for inspection and testing in place to assure the quality of the works and conscientiously believing these procedures have been followed during the construction of the works.

Designation

RPEQ No

Checklist – Operational Works Lodgement Requirements

Application No: /

Development Name:

Application Forms

- ☐ Completed Application Forms

Design Information

- ☐ One (1) complete set design drawings (1 x A3) including landscaping, electrical* and telephone authority* drawings
- ☐ Engineering Summary Report – Design
- ☐ Proposed Inspection & Testing Plan
- ☐ Sufficient supporting calculations to enable the design to be checked
- ☐ Any information requested in the subdivision approval
- ☐ Relevant standard drawings where standard drawings do not conform to Council's standard drawing
- ☐ One (1) copy of contract specification where unusual or irregular materials or construction practices are proposed
- ☐ Approvals and Clearances: #
 - Department of Natural Resources and Mines (DNRM)
 - Department of Transport and Main Roads (DTMR)
 - Letters of Approval from adjoining property owners for works on their property
 - Quail (crossing of land)
- ☐ Any consultant's certificate required (Specific certification is required for each structure requiring a structural analysis)
- ☐ Pavement Design Report*
- ☐ Application to Traffic Advisory Committee for approval of regulatory signs

Fees

- ☐ Plan Examination
- ☐ Site Inspection
- ☐ Reinspection of Design Plans

Notes

- * These may be submitted later under separate cover, however a subgrade inspection will not be carried out until these items are submitted.
- # These items may be submitted later under separate cover, however Council's approval of the design will not be granted until all third party clearances and approvals are finalised

Conscientiously believing the above statements to be true and correct:

Consultant: _____ Signature: _____

Checking Officer: _____ Position: _____

Name in full: _____ Date: _____

Checklist - Requirements for the Lodgement of Pavement Design Report

Application No: /

Development Name:

- ☐ All test results must be included.
- ☐ A plan showing location of all soil tests.
- ☐ Table showing soil test results, depth (from natural surface to subgrade level) and location
 - a) Soaked CBR's
 - b) DCP tests *
 - c) Test pit visual soil type identification.
- ☐ A table which establishes the design CBR's and pavement depth limits for each road or street based on the results above.

For example:

Road	Chainage	Design ESA	Design CBR	Pavement Depth
John St	0-700	1 x 10 ⁵	8	275
Jeremy Rd	0-100	8 x 10 ⁵	6	425
Harold Ct	100-700	8 x 10 ⁵	10	275

- ☐ A plan showing limits of pavement depths derived above if necessary.
- ☐ A table showing the profile of each pavement depth.

For Example:

Course	Depth (mm)	Depth (mm)
Asphalt Surfacing	25	25
Base Course	125	125
Sub Base Course	125	125
Selected Subgrade	-	200
TOTAL	275	475

- ☐ Any supporting information from geotechnical testing authority and the manufacturer should any non-standard treatment or pavement stabilisation be required.
- ☐ For unsealed roads, if natural material is to be used.

APPLICANT'S SIGNATURE: _____

NAME: _____

NAME OF CONSULTANCY: _____

DATE: ____/____/____

Checklist - “Pre-On Maintenance” Inspection Checklist of Works

PRE-ON MAINTENANCE INSPECTION CHECKLIST

DEVELOPMENT

COUNCIL REFERENCE FILE NO.

Item	Work Passed (yes/no/n.a)	Comment
Roofwater Drainage System		
The works have been finally inspected and—		
(a) Roofwater drainage system is constructed to plan.		
(b) Roofwater pits have been constructed to a satisfactory standard, i.e.— – benching; – correct cover, embossed RWD; – location relative to lot boundaries; – 50-75mm proud of finished surface level.		
(c) Pipework has been visually inspected and is satisfactory, i.e.— – alignment and grade; – free of debris and siltation; – sanded end connector, for uPVC pipework; – no visual sign of trench subsidence.		
(d) Outlets (especially to kerb and channel) are satisfactory.		
(e) Lots not provided with roofwater drainage system can be drained to kerb and channel.		
Stormwater Drainage System		
The works have been finally inspected and—		
(a) Pipe layout is as per plan or approved amendments with respect to pipe size, levels and location.		
(b) Pipework has been visually inspected and is satisfactory, i.e.— – alignment and grade; – free of debris and siltation; – pipe joints satisfactory; – lifting plug holes sealed; – no visible sign of trench subsidence.		
(c) Gully pits and manholes have been constructed to the correct standards, i.e.— – correct type of grate or cover; – Lintels; – side entry slots; – benching; – pipe connections are not constructed to the corner of two walls such that the pipe capacity is reduced; – grates are satisfactorily seated in frames; – weepholes provided to bedding material.		

Item	Work Passed (yes/no/n.a)	Comment
(d) All density tests of backfill are available and satisfactory.		
(e) PSD's have been submitted or are available for bedding material.		
(f) Outlet/inlet structures are satisfactorily constructed and are free from scour or siltation.		
(g) All manhole and gully pit pipe connections are mortared		
flush with the walls and no pipe reinforcement is exposed.		
(h) Open cut channels have been finally inspected and are satisfactory, i.e.— – cut to design profiles; – lining of channel is to the required thickness and reinforcement, with appropriate weepholes.		
(i) Overland flow works have been finally inspected and appropriate flowpaths are provided and clear of obstruction.		
(j) Outlets and outfalls have been constructed to control discharge flow in accordance with the plans.		
(k) Subsoil drainage discharges to gullies or other approved point of discharge.		
Earthworks The works have been finally inspected and—		
(a) Tow of batters not on road reserve except as approved.		
(b) Retaining walls clear of road reserve except as approved.		
(c) Batter slopes stabilised against erosion.		
(d) Interim drainage constructed in accordance with drawings.		
(e) All areas distributed by the works have been grass seeded and fertilised.		
Road Pavements The works have been finally inspected and—		
(a) Plan layout and geometry of road system is in accordance with the drawings.		
(b) Finished levels at crown and channel are at design levels.		
(c) Crossfalls are to the approved plan.		
(d) AC is satisfactory with regard to finish and thickness.		
(e) Joints in the seal (especially where various development stages apply) are flush.		
(f) The sealed surface is free of blemishes, including those caused by the base of backhoe legs. (When		

Item	Work Passed (yes/no/n.a)	Comment
caused by service authorities, the damage is to be repaired during the maintenance period.)		
Segment Pavers The works have been finally inspected and—		
(a) All pavers have been correctly laid to pattern, within allowable tolerance, compacted and the joints filled.		
(b) Bedding sand for pavers drains to sub-soil drainage.		
(c) Pavers adjacent to CKC, edge restraints etc have been correctly cut and laid.		
Concrete Kerb and Channel Medians The works have been finally inspected and—		
(a) The correct type has been used at all locations (including medians) in accordance with standards.		
(b) Ponding of stormwater does not occur.		
(c) Transitions and connections to existing construction are smooth and to a satisfactory standard of workmanship.		
(d) Service markers have been placed to kerb face.		
(e) Lip and back of kerb are flush with the roadway and footpath respectively.		
(f) All channelisation works and medians have been satisfactorily completed.		
(g) Infill treatment of medians has been inspected and found satisfactory. Any landscaping has been completed to standard.		
(h) Backing strips have been provided to median kerbs where required.		
(i) Side drains have been provided under medians.		
Footpaths The works have been finally inspected and—		
(a) Profiles are as per plan.		
(b) Footpath has been topsoiled to Local Government's requirements.		
(c) Footpaths have been grass seeded and fertilised or turfed to Local Government's requirements.		
(d) All service fixtures (such as valves etc) are flush with the surrounding footpath.		
(e) Concrete footpaths have been constructed to Local Government's requirements.		
(f) Kerb ramps constructed as required.		
Pathways, Driveways and Bikeways The works have been finally inspected and—		
(a) Location and width are as per the plan.		

Item	Work Passed (yes/no/n.a)	Comment
(b) Kerb ramps and crossings are constructed.		
(c) Safety rails and signs have been installed.		
Other		
(a) Street name signs, traffic signs and pavement marking have been installed.		
(b) Works have not resulted in problems on neighbouring properties. Clearance letters as may be applicable have been submitted or are available.		
(c) All boundaries of Reconfiguration/Development have been inspected to ensure works as constructed will not affect adjoining properties.		
(d) All necessary testing to ensure the quality of the work has been carried out and results are available and have been provided to the Local Government.		
(e) Engineer's Certificate of completion is available and has been provided to the Local Government.		
(f) Private works accounts for live sewer and water connections etc have been paid.		
(g) "As Constructed" details are available and have been provided to the Local Government including pavement depth details.		
(h) All lot boundaries, easements etc, have been pegged.		
(i) Any outstanding fees and charges have been paid, i.e. Design Review, Works Inspection, Road Opening Permit, Permit to Draw Water.		
NOTE: Construction is within stated tolerances or otherwise within normally accepted engineering standard tolerances.		

APPLICANT'S SIGNATURE: _____

NAME: _____

NAME OF CONSULTANCY: _____

DATE: ____/____/____

Checklist - Formal “On Maintenance” Requirements

FORMAL ON MAINTENANCE REQUIREMENTS CHECKLIST

Application No: /

Development Name:

General

- ☐ Engineer’s Certificate of Construction
- ☐ “Pre-On Maintenance” Inspection Checklist
- ☐ Geotechnical and Structural Certification as applicable i.e. retaining walls, cut/fill batters etc.
- ☐ “As Constructed” Plan
- ☐ Digital “As Constructed” Information
- ☐ “As Constructed” Certification
- ☐ Completed asset register form.
- ☐ A copy of the prepared plan of survey.
- ☐ Copy of the certified contract value.

Earthworks

- ☐ Lot fill compaction test results
- ☐ As required by Development Approval conditions
- ☐ Certification from geotechnical testing company of any Level 1 supervision works.

Roadworks

- ☐ CBR test results
- ☐ Subgrade compaction test results
- ☐ Pavement gravel materials compaction test results
- ☐ Pavement gravel quality compliance test results
- ☐ Pavement gravel Quality Assurance test results
- ☐ Asphalt quality test results
- ☐ Asphalt compaction test results
- ☐ Pavement depth verification test results – signed by consultant and surveyor

Stormwater

- ☐ Trench backfill compaction test results
- ☐ PDS’s for bedding material if required by the Local Government

Concrete

- ☐ As required by A.S. Specification and Manufacture of Concrete

Miscellaneous

- ☐ Clearance letters
- ☐ Outstanding design documentation
- ☐ Matters listed during construction
- ☐ Maintenance Security Deposit (5% of total cost of the works with minimum \$1000)
- ☐ Payment of Outstanding Private Works accounts
- ☐ Payment of Outstanding Fees
- ☐ Water Supply, Sewerage, Electrical, Telephone, and other utilities installed as per relevant authority requirements

Others As Applicable

- ☐ Technical manuals, maintenance schedules and product guarantee documentation for all machinery installed as part of the works, including park play equipment, stormwater basins, etc
- ☐ Copy of the Maintenance management plans for public open space areas.
- ☐ Approval from any other authorities that works within their jurisdiction have been completed satisfactorily.
- ☐ Copy of State Government approvals or licenses, e.g. permit for works in creeks, pump station overflows or approval of works in erosion prone areas.
- ☐ Letter of reinstatement

Checklist - Off Maintenance Requirements

Application No: /

Development Name:

Roadworks

- ☐ pavements and surfacing for deformation/shrinkage;
- ☐ minimum acceptance coverage of specified grass to all disturbed areas;
- ☐ street signs and linemarking
- ☐ kerb and channel to be cleaned and excess screenings to be removed from bitumen seal.

Stormwater Drainage

- ☐ roads, pipes, structures, flowpaths clear of silt and debris;
- ☐ no ponding on roads, in pipes, structures, kerbs on flow paths;
- ☐ turfing to prescribed areas;
- ☐ pipes for damage/movement;
- ☐ exposure of steel;
- ☐ overland flow path;
- ☐ stormwater scouring repaired;
- ☐ interallotment drainage system for damage/movement.

General

- ☐ stormwater quality measures maintained and temporary measures removed;
- ☐ integrity of environmentally significant areas;
- ☐ all grassed areas in road and drainage reserves, parks and open space slashed;
- ☐ Water Supply, Sewerage, Electrical, Telephone, and other utilities installed as per relevant authority requirements

APPLICANTS SIGNATURE: _____

NAME: _____

NAME OF CONSULTANCY: _____

DATE: ____/____/____

Compliance Requirements for Public Works Table

TESTS AND CERTIFICATES	PROVIDE PRIOR TO	COMMENTS
Earthworks - Density Tests - Retaining walls and Batters, Structural and Geotechnical Certification	On Maintenance On Maintenance	Consultant responsible for submission of all relevant test results.
Roadworks - Subgrade CBR/OMC - Pavement Design - Subgrade, Field Density - Pavement— - Field Density - CBR's/PSD - Material Quality - As Constructed Levels - AC Surfacing— - Marshall Tests - Delivery Dockets - Compaction Tests	Pavement Construction Pavement Construction Subgrade Inspection Preseal Inspection On Maintenance On Maintenance On Maintenance Off Maintenance	Consultant responsible for submission of all relevant test results
Stormwater Drainage - Trench and backfill compaction - under road - other	Subgrade Inspection On Maintenance	Consultant responsible for submission of all relevant test results.
Sewerage Reticulation - Trench and backfill compaction - under road - other	Subgrade Inspection On Maintenance	Consultant responsible for submission of all relevant test results.
Water Reticulation - trench and backfill compaction - under road - other (if applicable)	Subgrade Inspection On Maintenance	Consultant responsible for submission of all relevant test results.
Concrete Tests - CKC - Footpaths - Bikeways - Crossings - Other	See Table – Compliance Requirements for concrete testing	
Other - Pre-Inspection Certificate / Checklist - Engineers Certificate - As Constructed - Bonding Arrangement - Private Works Accounts - Clearance letters if applicable - Outstanding fees and charges - Request for works to go On Maintenance - As Constructed pavement depth details	On Maintenance On Maintenance On Maintenance On Maintenance On Maintenance On Maintenance	Required before inspection will proceed Consultant to advise Consultant to formally request list of outstanding items, works to be rectified to be included
Maintenance Period - Rectify all defects - AC Core Tests	Off Maintenance	

TESTS AND CERTIFICATES	PROVIDE PRIOR TO	COMMENTS
- Concrete Tests - Provide any additional "As Constructed" details as may be required by the Local Government - Submit any other outstanding test results or certificates	Off Maintenance Off Maintenance	
Off Maintenance - Request to take works off maintenance - All works rectified - Maintenance security bond	Off Maintenance Off Maintenance Post Off Maintenance	Consultant to formally request Consultant to formally request release of maintenance security bond

SC6.6 Planning Scheme Policy 5 Bushfire hazard and risk assessment and bushfire management plan guidelines

SC6.6.1 Introduction

The purpose of this planning scheme policy (PSP), is to provide guidance to and advice on satisfying/achieving the outcomes of the Bushfire hazard overlay code. The PSP details information and requirements for the preparation of a site specific bushfire hazard and risk assessment and/or bushfire management plan to support a proposed development and demonstrate compliance with the assessment benchmarks provided in the Bushfire hazard overlay code.

The Bushfire hazard overlay mapping identifies Bushfire Hazard Areas and triggers assessment for proposed new development in accordance with the category of development and level of assessment identified in the part 5 of the planning scheme. Somerset Regional Council adopts the State planning policy bushfire hazard area mapping for the purposes of preparing its overlay mapping (**Bushfire hazard overlay map OM-004a-b**), with recognition of the Queensland Fire and Emergency Services (QFES) (July 2017) updates for the SEQ region.

SC6.6.2 Application

The PSP guidelines apply where the applicant is preparing a site specific bushfire hazard and risk assessment and/or bushfire management plan for proposed development that requires assessment against the Bushfire hazard overlay code.

This policy does not aim to replace assessments triggered by or undertaken in response to other government legislation or policy.

Compliance with the relevant performance outcomes and acceptable outcomes for assessable development of the Bushfire hazard overlay code may be demonstrated in part or assisted by the submission of, a site specific bushfire hazard and risk assessment and/or bushfire management plan prepared by a competent, suitably qualified professional in accordance with this policy.

SC6.6.3 Guidelines for preparation of a bushfire hazard and risk assessment report

Matters to be addressed

In accordance with the State Planning Policy Technical Manual (2016), the bushfire hazard and risk assessment report is to be 'fit for purpose' with data and inputs to accompany the submission of the assessment report to support and justify its conclusions.

Note- Somerset Regional Council has taken this as an interim position pending the State government's imminent release of the model Bushfire hazard code and accompanying guidance material and for the sake of consistency with the practice(s) of other Local Governments in the SEQ region.

In summary, when taking into consideration the post development layout, the bushfire hazard and risk assessment should:

- (a) identify the location and severity of bushfire hazard by site based assessment. This assessment should be based on detailed data collected at the local level and take into account factors such as vegetation type, slope, aspect, and fire history. This assessment should also address on and off-site hazard implications of the development, including those posed by any nearby bushland (landscape level planning). In addition, the plan should consider any large tracts of forest (greater than approximately 500ha) up to 10kms away from the site, as these large forests will likely influence fire behaviour in the landscape proximate to the site;

- (b) calculate the intensity of bushfire (for example, calculate potential maximum fuel loads, fire behaviour, radiant heat, flame zone, ember attack, etc.) that may be experienced on the development site (or a selection of indicative sites within the development so as to provide a representative sample). This is to be calculated both prior to and after bushfire hazard reduction treatments (for example bushfire radiation zones) have been constructed (that is, what is the pre-development and residual post-development hazard);
- (c) recommend remedial measures such as specific features of the development design (e.g. land use type, vehicular access, lot layout, bushfire radiation zones and house site location), proposed firefighting infrastructure (e.g. water supply and fire trails), landscaping, and advice to new residents. With respect to extensions to existing buildings, the assessment must detail the mandatory requirements so as to comply with the assessment benchmarks of the **Bushfire hazard overlay code**. It is recommended that if the existing building does not meet current standards then the assessment will outline non-mandatory measures to reduce exposure to bushfire hazard for the existing structure;
- (d) ensure that any proposed fire trails are designed in accordance with planning scheme requirements, with fire trail construction standards being acceptable to the QFES;
- (e) provide the basis for certification of the development's bushfire mitigation treatments (bushfire radiation zones, fire trails, water tanks etc.) to ensure that these treatments have been constructed and are functioning in accordance with the approved bushfire management plan;
- (f) if the development proposes to dedicate public open space the bushfire hazard and risk assessment must include a specific section that details ongoing management strategies for the proposed dedication that can be incorporated into an open space management plan for the development. Broad fire management guidelines based on fire regimes using State Government regional ecosystem information on vegetation types should be detailed. Detailed information and mapping of all required fire fighting infrastructure within the dedication should also be provided;
- (g) consider how future forest succession and proposed ecological restoration within the development site may influence the residual post development bushfire hazard and ensure that this hazard is minimised. In addition, whilst concurrently ensuring that these ecological processes are maintained on the site so as to conserve the site's significant ecological values and minimise the impacts of the development on the same; and
- (h) clearly state any impact of the chosen bushfire hazard mitigation measures on the environmental and biodiversity values of the site and the measures taken to avoid/minimise this impact and ensure that proposed mitigation treatments are compatible with the Somerset Region Planning Scheme: **s 7.2.3 Biodiversity overlay code**.

Note- This detail is adapted from the Gold Coast City Council, City Plan PSP SC6.3 - Bushfire management plans. (Somerset Regional Council has taken this as an interim position pending the State government's imminent release of the model Bushfire hazard code and accompanying guidance material and for sake of consistency with the practice(s) of other Local Governments in the SEQ region).

SC6.6.4 Guidelines for preparation of a bushfire management plan

A bushfire management plan is to:-

- (a) state the purpose, aim and objectives of the bushfire management plan (e.g. to define the level of hazard on the land and identify actions and responsibilities for the management of the hazard);
- (b) summarise the results of the bushfire hazard assessment undertaken for the land, including identification of the various parts of the land that have been determined to be high, medium and low bushfire hazard areas;
- (c) be informed by consultation with the local Fire Brigade and where the land adjoins Council, State or Commonwealth land, the relevant land manager;
- (d) include consideration of potential off-site sources of fire hazard including particular land uses or physical features of the surrounding area (including details of properties within 100 metres of the land);
- (e) address the impacts of the proposed development on the level of fire hazard experienced by other land in the surrounding area, including any land containing water, electricity, gas or telecommunications infrastructure;

- (f) address any implications for ecologically important areas, areas of cultural heritage significance or areas of landscape significance, including steps taken to minimise the potential impacts of specified fire hazard mitigation measures;
- (g) address the potential impacts of bushfire hazard mitigation measures on slope stability, and on water quality in local receiving waters;
- (h) specify fire hazard mitigation measures, such as:-
 - a. elements of the development design, including the layout of roads and driveways, and the location, size and orientation of lots and buildings;
 - b. specifications and materials for building design and construction in accordance with the Building Code of Australia (including addressing construction standards of buildings to meet the appropriate level in AS 3959, (where applicable));
 - c. fire fighting infrastructure, including water supply and storage, equipment and fittings, fire breaks and maintenance/access trails;
 - d. potential areas of clearing of native vegetation based on an ecological assessment report or environmental management plan recently prepared for the site;
 - e. details of landscape design requirements, including installation and maintenance requirements;
 - f. information for occupants, including required training for persons employed on the site during both construction and operational phases;
 - g. details of long term management requirements, including the frequency, extent and intensity of burning in areas proposed to be subject to regular controlled ignitions;
 - h. details of areas to be subject to mosaic or patch burning techniques and manual fuel reduction zones; and
 - i. any other measures based on or identified in a recently approved ecological assessment report or environmental management plan for the site;
- (i) identify the parties to be responsible for specific actions taken under the terms of the bushfire management plan; and
- (j) provide justification for any variation from the bushfire hazard mitigation measures outlined in the **Bushfire hazard overlay code**.

Note- Somerset Regional Council has taken this as an interim position pending the State government's imminent release of the model Bushfire hazard code and accompanying guidance material and for the sake of consistency with the practice(s) of other Local Governments in the SEQ region..

SC6.6.5 Competency to prepare a bushfire hazard and risk assessment report and/or a bushfire management plan

A bushfire hazard and risk assessment report and/or a bushfire management plan is to be prepared by a competent professional person/accredited Bushfire Planning Practitioner, who is suitably qualified and experienced with technical expertise in the field of bushfire hazard and risk identification and mitigation.

The competency can be demonstrated through;

- (a) knowledge and experience in applying relevant legislation , policies, standards and guidelines relevant to bushfire hazard and fire ecology in Queensland and for the local SEQ regional conditions; or
- (b) knowledge and experience in the preparation of bushfire management plans in accordance with a soundly based methodology including that attached to this PSP as Appendix A ;or
- (c) being an accredited practitioner (BPAD Level 2/3) under the Bushfire Planning and Design Accreditation Scheme from the Fire Protection Association of Australia.

Note- Somerset Regional Council has taken this as an interim position pending the State government's imminent release of the model Bushfire hazard code and accompanying guidance material and for the sake of consistency with the practice(s) of other Local Governments in the SEQ region.

Appendix 6.6A Methodology for undertaking bushfire hazard assessment

Step 1: Assessment of vegetation communities

- 1.1 The different types of vegetation communities determine the rate at which dry fuel accumulates. Some vegetation communities protect fuel from drying out in all but extreme bushfire seasons and can then be susceptible to very destructive bushfires. Alternatively, vegetation communities may expose fuels to drying and therefore be frequently available for burning. Frequent bushfires can result in the development of bushfire-tolerant grassy woodlands or grasslands and less destructive bushfire behavior. The characteristics of different vegetation communities are reflected in **Table SC6.6A.1 (Hazard scores and associated fire behaviors for various vegetation communities)**. This table also presents the hazard scores for a range of vegetation communities. Vegetation community data is available in digital map form from the Queensland Herbarium, Environmental Protection Agency, at a scale of 1:100,000.

Table SC6.6A.1 Hazard scores and associated fire behaviours for various vegetation communities

Vegetation communities ¹	Fire behaviour	Hazard score
Wet sclerophyll forest, tall eucalypts (>30 m), with grass and mixed shrub understorey.	Infrequent fires under severe conditions, flame lengths may exceed 40 m, floating embers attack structures for 1 hour, radiant heat and direct flame are destructive for 30 minutes.	10
Paperbark heath and swamps, eucalypt forest with dry-shrub ladder fuels.	Fire intensity depends on fuel accumulation, but can be severe, with flame lengths to 20 m, spot fires frequent across firebreaks, radiant heat and direct flame for 15 minutes.	8
Grassy eucalypt and acacia forest, exotic pine plantations, cypress pine forests, wallum heath.	Fire intensity may be severe with flame lengths to 20 m, but less attack from embers.	6
Native grasslands (ungrazed), open woodlands, canefields.	Fast moving fires, available to fire annually to 4 years. Usually no ember attack, radiant heat for >10 m, duration <2 minutes.	5
Intact acacia forests, with light grass to leaf litter, disturbed rainforest.	Fires infrequent, usually burn only under severe conditions, relatively slow fires, usually little ember attack.	4
Orchards, farmlands, kikuyu pastures.	Fires very infrequent, slow moving, may be difficult to extinguish, frequent fire breaks.	2
Grazed grasslands, slashed grass.	Grazing reduces intensity and rate of spread of fire, duration <2 minutes.	2
Desert lands (sparse fuels), mowed grass.	Gaps in fuel, usually slow fire spread.	1
Intact rainforest, mangrove forest, intact riverine rainforest.	Virtually fireproof.	0

Note 1—vegetation assessment should be based upon examination of the vegetation on the subject site and surrounding the subject site. Narrow strips of vegetation may be flammable; however, bushfires will not generally reach their full intensity where bushfire fronts are less than 100 metres wide. For this reason the following examples may be viewed as having the next lower hazard score (i.e. paperbark heath would have a score of 6 not 8, cypress pine forest 5 not 6):

- (i) areas with a linear shape (e.g. roadside vegetation beside a cleared paddock); and
- (ii) units of vegetation less than 50 hectares in area and more than one kilometre from the nearest extensive vegetation.

- 1.2 Where the vegetation community is assessed as having a vegetation community hazard score of zero, no other factors need to be taken into account and the relevant sub-units should be given a Low severity of overall bushfire hazard. No further action is required.

Step 2: Assessment of slope

- 2.1 Studies have shown that fires burn more quickly and with greater intensity up slopes, generally doubling every 10 degrees of slope. Also, the steeper the slope the more difficult it is to construct ring roads, firebreaks and provide access for emergency crews. Trees situated downhill from structures will have their crowns close to the structures. This presents bushfire hazards particularly for exposed structures such as timber decks. Table SC6.6A.2 (Hazard scores for slope) presents the hazard scores for different categories of slope.

Table SC6.6A.2 Hazard scores for slope

Slope	Hazard score
Gorges and mountains (>30%)	5
Steep Hills (>20% to 30%)	4
Rolling Hills (>10% to 20%)	3
Undulating (>5% to 10%)	2
Plain (0% to 5%)	1

Note—For site-specific assessment of bushfire hazard, if the site is downhill from the hazard, the slope effect may be taken as zero as the fire intensity will be less. However, burning heavy fuels may roll downhill and trees may fall down, so recommended setbacks from the hazard still need to be observed.

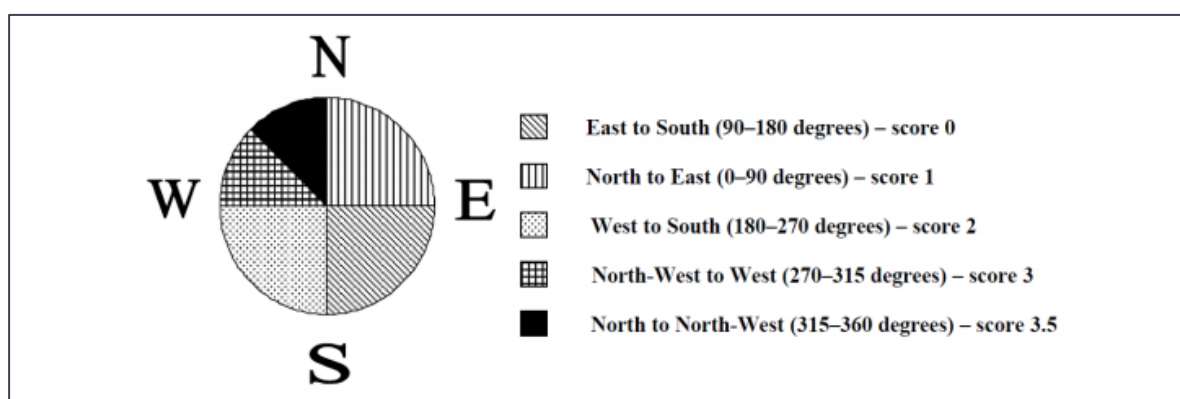
Step 3: Assessment of aspect

- 3.1 Aspect affects bushfire hazard due to the effects that exposure to direct sunlight has on different vegetation communities, including the drying rates of fuels. Aspect also correlates closely with exposure to low humidity winds that increase bushfire intensity. In extremely broken country where there is a variety of aspects, the predominant aspect should be used.
- 3.2 As aspect has only a minor influence on flatter land, aspect is not considered to be significant on land with a slope less than 5%. Table SC6.6A.3 (Hazard score for aspect) lists the hazard score for different aspects and Figure SC6.6A.1 (Compass degree ranges for each aspect category) illustrates the compass degree ranges for each aspect category.

Table SC6.6A.3 Hazard score for aspect

Aspect	Hazard score
North to North-West	3.5
North-West to West	3
West to South	2
North to East	1
East to South and all land under 5% slope	0

Figure SC6.7A. Compass degree ranges for each aspect category



Step 4: Combining scores to identify the severity of bushfire hazard

- 4.1 The scores for the individual factors determined for vegetation communities, slope and aspect are added together to give a total for each sub-unit as follows:

Total hazard score = vegetation community hazard score + slope hazard score + aspect hazard score.

- 4.2 The total hazard score determines the severity of bushfire hazard for each sub-unit as set out in **Table SC6.6A.4 (Hazard score ranges to identify the severity of bushfire hazard)**.

Table SC6.6A.4 Hazard score ranges to identify the severity of bushfire hazard

Total hazard score	Severity of bushfire hazard
13 or greater	High ²
6 to 12.5	Medium
1 to 5.5	Low

Note 2—Buildings in High severity bushfire areas should be constructed in accordance with the Level 1 requirements of AS 3959:1999 'Construction of Buildings in Bushfire-prone Areas'.

Step 5: Field verification

- 5.1. Preliminary bushfire hazard maps should be prepared based on the results of Step 4 above by aggregating all sub-units with similar levels of bushfire hazard severity into High and Medium severity classifications³. Field verification or 'ground truthing' of these preliminary results should then be undertaken. A number of sample areas should be evaluated to test the accuracy of the preliminary bushfire hazard findings.

Step 6: Qualitative assessment

- 6.1. Known bushfire behaviour complements the quantitative assessment and should be considered as part of the qualitative review.
- 6.2 Known bushfire behaviour is extremely difficult to use as a quantitative planning tool. This is because the absence of bushfire, even for an extended period of time, does not mean that an area will not burn and may lead to massive fuel accumulation with dangerous bushfire behaviour if it does ignite. Known bushfire behaviour may identify sites where combinations of slope and wind have led to severe bushfire behaviour in the past, and where extra precautions to protect assets might be required. The reliability of known bushfire behaviour may be difficult to assess and Queensland Fire and Rescue Service (QFRS) should be consulted if problems are indicated.

Step 7: Safety buffers

- 7.1. The final step in identifying bushfire hazard areas is to add a safety buffer, as land adjacent to bushfire hazard areas is vulnerable to bushfire attack from these areas.
- 7.2. Any land within 100 metres of an area identified as having a High bushfire severity classification should be included in the High bushfire hazard area and any land within 50 metres of an area identified as having a Medium bushfire severity classification should be included in the Medium bushfire hazard area⁴. The safety buffers should be integrated into the preparation of maps identifying bushfire hazard areas. Table SC6.7A.5 (Total hazard score and severity of bushfire hazard with safety buffers) shows the width of the safety buffers that apply to the various bushfire hazard severity classifications.

Table SC6.6A.5 Total hazard score and severity of bushfire hazard with safety buffers

Total hazard score	Severity of bushfire hazard	Width of safety buffer
13 or greater	High	100 metres
6 to 12.5	Medium	50 metres
1 to 5.5	Low	Not applicable

Note 3—areas of Low bushfire hazard severity may also be mapped, but the natural hazard management area (bushfire) for the purposes of the SPP comprises only areas identified as being of High or Medium severity.

Note 4—safety buffer areas on the boundary between High and Medium bushfire severity areas should be included in the High bushfire severity area.

Appendix 1 Index and glossary of abbreviations and acronyms

Table AP1.1—Abbreviations and acronyms

Abbreviation/ acronym	Description
DSS	Desired standard of service
EDU	Equivalent demand unit
EP	Equivalent persons
LGA	Local government area
LGIP	Local government infrastructure plan
MCU	Material change of use as defined in the <i>Planning Act 2016</i> .
PFTI	Plans for trunk infrastructure
PIA	Priority infrastructure area
QUU	Queensland Urban Utilities
ROL	Reconfiguring a lot as defined in the <i>Planning Act 2016</i>
SRC	Somerset Regional Council
the Act	<i>Planning Act 2016</i>
the Regulation	<i>Planning Regulation 2017</i>
the SP Act	<i>Sustainable Planning Act 2009</i> (repealed)
the SP Regulation	Sustainable Planning Regulation 2009 (repealed)

Appendix 2 Table of amendments

Table AP2.1—Table of amendments

Date of adoption and effective date	Planning scheme version number	Amendment type	Summary of amendments
Adoption on 28 th June 2017; Effective commencement date on 3 rd July 2017.	Version2	Alignment amendment made under the Alignment amendment rules and Section 293 of the Planning Act 2016.	The purpose and general effect of the alignment amendment is to improve the clarity and workability of the planning scheme under the new Act, providing consistency with the new terminology and reflecting changes to the decision rules for the categories of development and assessment. The Alignment Amendment Template prepared by the Department of Infrastructure, Local government and Planning(DILGP) has provided guidance to Council on how a Queensland Planning Provisions (QPP) compliant planning scheme should be amended for alignment with the new Act. In addition to the changed terminology, particular drafting amendments to codes have: i. not altered the policy intent or outcomes of the previously drafted assessment criteria of any Somerset Region Planning Scheme (SRPS) code; ii. ensured that SRPS's assessment benchmarks satisfy the 'bounded assessment' decision rules for a code assessable development under the new Act; iii. provided that the SRPS codes, specifically the acceptable outcomes (AOs), are sufficiently clear, objective and measurable; iv. removed any reference to the Strategic framework mapping within the SRPS codes and replaced with a common reference to

Date of adoption and effective date	Planning scheme version number	Amendment type	Summary of amendments
			the overlay mapping (where in the Overlay codes), or to mapping placed directly in the particular code where a Chapter 8 Development code; v. updated the references (where necessary) to particular legislative standards and like for contemporary consistency and compliance.
Adoption and Effective commencement date on 27 th April 2018	Version 3	Major amendment made under the Statutory guideline 01/16: Making and amending local planning instruments, the Statutory guideline 03/14: Local government infrastructure plan and Section 117 of the Sustainable Planning Act 2009.	The purpose and general effect of the major amendment is to replace the Somerset Regional Council's Priority Infrastructure Plan with a Local Government Infrastructure Plan and introduction of a new Planning Scheme Policy-Design Standards to support the proposed Local Government Infrastructure Plan. The Local Government Infrastructure Plan identifies the Council's plans for trunk infrastructure that are necessary to service urban development at the desired standard of service in a coordinated, efficient and financially sustainable way. The new Planning Scheme Policy-Design Standards seeks to provide an uniform standard for infrastructure and works associated with development across the Somerset Region. The amendment also updated the references (where necessary) to reflect the changes adopted. The amendment did not alter the policy intent or outcomes of the previous assessment criteria of any Somerset Region Planning Scheme code.