



9. WORKS AND SERVICES POLICIES
9.1 TECHNICAL SERVICES
9.1.14 Road Hierarchy

Background & Issues

Road hierarchies have been developed by Main Roads Western Australia and by the Western Australian Planning Commission (WAPC). The benefit of the road hierarchy is that it assists in the prioritisation of funds, and determines standards for construction that balance budget with road efficiency and safety.

Most roads within the Shire are already defined by the existing hierarchies of Main Roads and the WAPC. However, these hierarchies omit some road types and do not provide enough scope to differentiate between similar roads of different importance or differing traffic volumes. In addition, lower classification roads within the Shire often take heavy vehicles, which is usually not the case for metropolitan urban roads of similar characteristics.

The Shire of Manjimup directly manages approximately 1400km of road, both sealed (~900km) and unsealed (~500km). Collectively known as Local Government Roads, they all have a similar role; to provide for the efficient mobility of people and goods.

Objectives

The intent of the road hierarchy is to provide minimum standards for construction and maintenance of roads within the Shire and to prioritise the same. The standards of maintenance and construction will represent the adopted Levels of Service (LOS) for each road within the Shire.

Specifically, the road hierarchy will provide the following:

- a guidance to staff in preparing annual budgets and allocating resources to road maintenance determined by Shire’s Road Asset Maintenance Management System Road Asset Maintenance Management (RAMM) System ; and
- to define minimum standards for construction that balance the cost of ownership and construction against community expectations.

Area of Application

All roads under the control or maintained by the Shire.

Policy Measures

1. Road Hierarchy Classifications

Roads within the Shire shall be defined by one of the following classifications:

| Classification Name | Classification Code | Classification Description |
|---------------------------------|----------------------------|---|
| Primary Distributor (Sealed) | SPD | These roads are the primary road traffic links within the Shire. These roads provide town to town links within the Shire and beyond the Shire’s boundary. The standard of construction and maintenance has the largest impact on overall road network efficiency, making up the largest part of town to town trips. These roads are |

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| | | currently all under the control of Main Roads Western Australia. |
| District Distributor Road (Sealed) | SDD1 & SDD2 | <p>District distributor roads are strategically important links within the Shire. Generally these roads connect large population or industry areas to primary distributor roads or other large population or industry areas. These roads might also provide a link between towns within or beyond the boundaries of the Shire, although with lower transport volumes, or as a secondary route to primary distributor roads.</p> <p>Two levels of service (LOS) classifications exist for district distributor roads to recognise the requirement for a higher LOS where the road is the only connection to a major industry or population centre.</p> |
| Rural Local Distributor (Sealed) | SRLD | Sealed rural local distributor roads are the higher volume local roads within the rural areas. Generally, these roads are contained wholly within a population or industry area and provide the main link within the area to a district distributor road or primary distributor road. |
| Main Street Roads (Sealed) | SMS1, SMS2, SMS3 & SMS4 | Main Street roads are within the commercial centres of each town. These roads will normally have a high level of pedestrian and vehicular traffic, with a large number of parked vehicles within the street. The focus of main street roads is business access by the public and aesthetics. |
| Urban Local Distributors (Sealed) | SUD | Urban distributor roads, similarly to rural local distributors, are higher volume local roads providing a link within a local population area (e.g. within a single suburb). These roads provide the link from other local roads to district distributor roads or other higher classification roads. |

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| Industrial Roads (Sealed) | SI1 & SI2 | Industrial roads may be either a local distributor or local access type road. Industrial roads vary in need from other sealed roads due to the larger vehicle masses and vehicle lengths that need to be accommodated. |
| Urban Local Roads (Sealed) | SUL | These roads are all other sealed urban roads. |
| Rural Local Roads (Sealed) | SRL | These roads are all other sealed rural roads. |
| Tourist Roads (Un-sealed) | GT1 & GT2 | <p>Un-sealed tourist roads have differing needs to other un-sealed roads. The peak traffic types are often not use to driving on gravel roads, and a poorly maintained un-sealed tourist road could discourage the use of the road by tourists. These roads are also likely to have a relatively high volume of caravans and similar vehicles, which require additional width for passing and parking.</p> <p>The differing classifications within the un-sealed tourist roads allow differentiation between different tourist types and the volumes of tourist traffic on the road. GT1 roads are high volume tourist roads generally traversed by 2wd vehicles and are likely to be frequented by inter-state or international tourists. GT2 roads are lower volume tourist roads or those that are more likely to be used by 4wd vehicles.</p> |
| Local Distributor Roads (Un-sealed) | GLD | Un-sealed local distributor roads are currently higher standard gravel roads. Some of these roads provide an alternative efficient connection between large population areas, or provide a 'short-cut' to a sealed road. These roads have a higher speed environment than other un-sealed roads within the Shire. |
| School Bus Routes (Un-sealed) | GSB | School bus routes will change year by year. These roads could be any type of existing un-sealed road, so the LOS defined for these roads could be over- |

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| | | ridden where the road's LOS is otherwise higher. |
| Rural Local Roads (Un-sealed) | GLR | All other un-sealed local roads. |
| Laneways (Sealed & Unsealed) | LWY | Typically secondary access roads in urban areas. |
| Right of Ways | ROW | A specific road or track through grounds or property belonging to another. |
| Unallocated Crown Land & Vacant Crown Land | UCL & VCL | Section 3.53 of the Local Government (LG) Act 1995 "A local government is responsible for controlling and managing every otherwise unvested facility within its district". An 'otherwise unvested facility' means a thoroughfare, bridge, jetty, drain or watercourse belonging to the crown, the responsibility for controlling or managing which is not vested in any person other than under this section of the LG Act 1995. |
| Un-named Tracks | UT | A specific track accessing one property |
| Roads not under the care and control of the Shire but maintained by the Shire | Other | Private Roads |

An example of some roads included in each hierarchical classification are listed in Appendix 1.

2. Road Hierarchy Priority for Construction and Maintenance

The capacity of the Shire to upgrade and maintain roads varies from year to year. Capital works are significantly funded through grants, which in some cases constrains where funds can be spent. In particular, Regional Road Group funding is restricted to certain roads within the District Distributor classification so these funds are not available for any other roads.

Due to the same plant and human resources being used to complete construction and maintenance works, the capacity to complete maintenance works is dependent on the size of the capital works program. In addition, poor weather can impact both the capital and maintenance programs. This is particularly the case where poor weather results in maintenance budgets being consumed in labour costs, with little on-ground benefit.

Within the context of these constraints when allocating maintenance tasks (these priorities will also be used for prioritising emergency response) equivalent road needs or equivalent road risks, should be prioritised in accordance with the following:

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| Priority Sealed | Road Classification |
|------------------------|----------------------------|
| 1 | SDD1 & SDD2 |
| 2 | SMS1, SMS2, SMS3 |
| 3 | SRLD |
| 4 | SUD |
| 5 | SI1 & SI2 |
| 6 | SUL |
| 7 | SRL |
| 8 | LWY/ROW |
| 9 | Other |

| Priority Un-sealed | Road Classification |
|---------------------------|----------------------------|
| 1 | GLD |
| 2 | GSB |
| 3 | GT1 |
| 4 | GLR |
| 5 | GT2 |
| 6 | LWY/ROW |
| 7 | UCL/VCL |
| 8 | Other |

Where budget or other resource constraints (including those resulting from weather) prevent achieving the LOS in policy point 3.

3. Road Hierarchy Levels of Service (LOS)

Primary Distributor (Sealed) – SPD

SPD roads are all under the control of Main Roads. At this stage, standards for construction and maintenance are determined by Main Roads.

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District Distributor (Sealed) – SDD1 & SDD2

New Construction (excluding new subdivision roads) LOS - SDD1 & SDD2

| | |
|---|---|
| Pavement Width | Minimum 9m |
| Seal Width | Minimum 7m |
| Seal Type | 2 coat chip seal |
| Design Speed | 90km/hr with desirable minimum curve speed 70km/hr |
| Linemarking | As per Australian Standards with edge marking on both lanes. |
| Vegetation Clearance (within constraints of clearing regulations) | Clear of bushy vegetation within 3m of shoulder and removal of large trees within 1m of shoulder |
| Drainage Design | SDD1: 1 in 20 year storm SDD2: 1 in 10 year storm (in the case of new subdivisions, the requirements of Policy 9.1.4 shall prevail). |
| Guide Posts | To Australian Standards on curves |
| Speed Advisory Signs | To Australian Standards |

Road Maintenance LOS – SDD1 & SDD2

| | |
|---|---|
| Road Inspections | Day Inspection – Minimum 4 times per year Night Inspection – Minimum 1 time per year |
| Road Re-sealing | Every 15 to 20 years |
| Shoulder Grading | Prior to drop-off reaching 60mm |
| Pot Holes/Edge Break | Patching truck to travel each road at least 3 times per year, to fix edge break (exceeding 150mm) and potholes. Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 1 week (subject to weather) of notification. Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 1 week (subject to weather) of notification. |
| Vegetation Management (within constraints of Native Clearing Regulations) | Verge spraying – once per year Removal – as per priority listing |

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| Drainage | Clear known problem areas at least 1 time per year. - Inspect and clear all pipes and drains at least one time in each 3 years. - Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 3 hours of notification and remove tree within 2 working days of notification. |
| Other Infrastructure (e.g. advisory signs, guide posts etc) | As per policy point 4. below. |
| Other Maintenance | Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints. |

Rural Local Distributor (Sealed) – SRLD

New Construction (excluding new subdivision roads) LOS

| | |
|---|---|
| Pavement Width | Minimum 8m |
| Seal Width | Minimum 6m |
| Seal Type | 2 coat chip seal |
| Design Speed | 90km/hr 70km/hr with desirable minimum curve speed 70km/hr 50km/hr |
| Vegetation Clearance (within constraints of clearing regulations) | Clear of bushy vegetation within 3m of shoulder and removal of large trees within 1m of shoulder |
| Drainage Design | 1 in 10 year storm (in the case of new subdivisions, the requirements of Policy 9.1.4 shall prevail). |
| Guide Posts | To Australian Standards on curves |
| Speed Advisory Signs | To Australian Standards |

Road Maintenance LOS

| | |
|------------------|---|
| Road Inspections | Day Inspection – Minimum 2 times per year Night Inspection – Minimum 1 time per year |
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|---|--|
| Road Re-sealing | Every 15 to 20 years |
| Shoulder Grading | Prior to drop-off reaching 60mm. |
| Pot Holes/Edge Break | <p>Patching truck to travel each road at least 2 times per year, to fix edge break (exceeding 150mm) and potholes.</p> <p>Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 2 weeks (subject to weather) of notification.</p> <p>Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 2 weeks (subject to weather) of notification.</p> |
| Vegetation Management (within constraints of Native Clearing Regulations) | <p>Verge spraying – once per year</p> <p>Removal – as per priority listing</p> |
| Drainage | <ul style="list-style-type: none"> - Clear known problem areas at least 1 time per year. - Inspect and clear all pipes and drains at least one time in each 3 years. - Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 5 hours of notification and remove tree within 3 working days of notification. |
| Other Infrastructure (e.g. advisory signs, guide posts etc) | As per policy point 4. below. |
| Other Maintenance | Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints. |

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Main Street Roads (Sealed) – SMS1, SMS2, SMS3 & SMS4

New Construction LOS

| | |
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| Pavement and Seal Width | In accordance with applicable main street design. Otherwise, seal width to comprise a minimum 6m vehicle carriageway. |
| Seal Type | SMS1, SMS2, SMS3, SMS4: Asphalt including tack coat, kerb both sides (SMS1, SMS2, SMS3). |
| Design Speed | In accordance with applicable main street plan. Otherwise, generally low speed environment due to pedestrian movements and parking manoeuvres. |
| Vegetation | In accordance best practice |
| Drainage Design | 1 in 10 year storm for CBD underground drainage. 1 in 10 year storm for residential underground network. |
| Speed Advisory Signs | To Australian Standards |
| Footpath | In accordance with Shire of Manjimup Bicycle and Footpath Plan |
| Street Lighting | In accordance with applicable main street design and to Australian Standards). |

Road Maintenance LOS

| | |
|--|--|
| Road Inspections (including footpaths) | SMS1: Day Inspection – Minimum 4 times per year SMS2, SMS3 & SMS4: Day Inspection – Minimum 2 times per year SMS1, SMS2, SMS3 & SMS4: Night Inspection (excluding footpaths) – Minimum 1 time per year |
| Road Re-sealing | Asphalt – every 25 to 30 years |
| Pot Holes | Where pot hole exceeding 300mm in diameter appears, the pot hole is to be repaired within 1 week (subject to weather) of notification. |
| Vegetation Management | In accordance with Parks & Gardens |
| Drainage | Street sweeping: SMS1: 1 time per week SMS2: 1 time per quarter |

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| | <p>SMS3: 1 time per quarter SMS4: Nil</p> <ul style="list-style-type: none"> - Educt drainage gullies 1 time per year. - Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response). |
| Kerb Maintenance | Repair damaged kerb within 3 months of notification or identification. |
| Footpath Sweeping | Removal of reported hazards within 1 week of notification. |
| Footpath Repairs | Repair identified hazards, within budget constraints within 3 months of identification. Allocation of budget to be in accordance with policy point 2.. |
| Street Bins | Clear 3 times per week |

Urban Local Distributor Roads (Sealed) SUD

New Construction (excluding new subdivision roads) LOS

| | |
|-------------------------|---|
| Pavement and Seal Width | Seal width to comprise a minimum 6m vehicle carriageway. |
| Seal Type | Desirably asphalt and kerb both sides |
| Design Speed | 60km/hr with desirable minimum curve speed 40km/hr within constraints of existing road reserves and services. |
| Vegetation | In accordance with best practice |
| Drainage Design | 1 in 10 year storm for underground network |
| Speed Advisory Signs | To Australian Standards |
| Footpath | In accordance with Shire of Manjimup Bicycle and Footpath Plan |
| Street Lighting | In accordance with Policy 9.1.3 |

Road Maintenance LOS

| | |
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| Road Inspections (including footpaths) | <p>Day Inspection – Minimum 1 time per year.</p> <p>Night Inspection (excluding footpath) - Minimum 1 time every 2 years</p> |
| Road Re-sealing | <p>2 coat seal - every 15 to 20 years</p> <p>Asphalt – every 25 to 30 years</p> |

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| Pot Holes | Patching truck to travel each road at least 1 time per year to fix potholes. Where pot hole exceeding 300mm in diameter appears, the pot hole is to be repaired within 3 weeks (subject to weather and repairs to higher priority roads) of notification. |
| Vegetation Management | In accordance with Parks & Gardens |
| Drainage | Educt drainage gullies 1 time every 3 years. Removal of reported hazards within 2 weeks of notification. Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response). |
| Kerb Maintenance | Repair damaged kerb if risk to vehicle or pedestrian or likely to affect drainage, within 3 months of notification or identification. |
| Footpath Sweeping | Street sweeping: 4 times per year. |
| Footpath Repairs | Repair identified hazards, within budget constraints within 3 months of identification. Allocation of budget to be in accordance with policy point 2. |

Industrial Roads (Sealed) SI1 & SI2

New Construction (excluding new subdivision roads) LOS

| | |
|-------------------------|---|
| Pavement and Seal Width | Seal width to comprise a minimum 8m vehicle carriageway. |
| Seal Type | SI1: Desirably 40mm industrial asphalt SI2: 2 coat seal |
| Design Speed | 60km/hr with desirable minimum curve speed 40km/hr within constraints of existing road reserves. Corners and road sweeps to accommodate vehicle combinations to 27.5 m in length (within constraints |

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| | of existing road reserves and services) |
| Vegetation | In accordance with best practice |
| Drainage Design | 1 in 10 year storm |
| Speed Advisory Signs | To Australian Standards |
| Street Lighting | In accordance with Policy 9.1.3 |

Road Maintenance LOS

| | |
|---|---|
| Road Inspections | Day Inspection – Minimum 1 time per year Night Inspection – Minimum 1 time every 2 years |
| Road Re-sealing | 2 coat seal - every 15 to 20 years Asphalt – every 25 to 30 years |
| Shoulder Grading | Prior to drop-off reaching 60mm. |
| Pot Holes/Edge Break | Patching truck to travel each road at least 1 times per year, to fix edge break (exceeding 150mm) and potholes. Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 4 weeks (subject to weather) of notification. Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 4 weeks (subject to weather) of notification. |
| Vegetation Management (within constraints of Native Clearing Regulations) | Verge spraying –once per year Removal – as per priority listing |
| Drainage | - Clear known problem areas at least 1 time per year. - Inspect and clear all pipes and drains at least one time in each 5 years. - Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 10 hours of |

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| | notification and remove tree within 3 working days of notification. |
| Other Infrastructure (e.g. advisory signs, guide posts etc) | As per policy point 4. below. |
| Other Maintenance | Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints. |

Urban Local Sealed Roads SUL

New Construction (excluding new subdivision roads) LOS

| | |
|-------------------------|---|
| Pavement and Seal Width | Seal width to comprise a minimum 6m vehicle carriageway. |
| Seal Type | 2 coat seal (desirably asphalt and kerb both sides). Asphalt to be used in cul-de-sac heads |
| Design Speed | 40km/hr with desirable minimum curve speed 20km/hr within constraints of existing road reserves and services. |
| Vegetation | In accordance with best practice |
| Drainage Design | 1 in 10 year storm for underground network. |
| Speed Advisory Signs | To Australian Standards |
| Footpath | In accordance with Shire of Manjimup Bicycle and Footpath Plan |
| Street Lighting | In accordance with Policy 9.1.3 |

Road Maintenance LOS

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| Road Inspections (including footpaths) | Day Inspection – Minimum 1 time every 3 years. Night Inspection - Nil |
| Road Re-sealing | 2 coat seal - every 15 to 20 years Asphalt – every 25 to 30 years |
| Pot Holes | Pot holes exceeding 200mm in diameter, is to be repaired within 3 weeks (subject to weather and repairs to higher priority roads) of notification. |
| Vegetation Management | In accordance with Parks & Gardens |
| Drainage | Street sweeping: 4 times per year. Educt drainage gullies 1 time every 3 years. |

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| | Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response). |
| Kerb Maintenance | Repair damaged kerb if risk to vehicle or pedestrian or likely to affect drainage, within 3 months of notification or identification. |
| Footpath Sweeping | Removal of reported hazards within 2 weeks of notification. |
| Footpath Repairs | Repair identified hazards, within budget constraints within 3 months of identification. Allocation of budget to be in accordance with policy point 2. |

Rural Local Road (Sealed) – SRL

New Construction (excluding new subdivision roads) LOS

| | |
|---|--|
| Pavement Width | Minimum 8m |
| Seal Width | Minimum 6m |
| Seal Type | 2 coat chip seal |
| Design Speed | 50km/hr with desirable minimum curve speed 30km/hr |
| Vegetation Clearance (within constraints of clearing regulations) | Clear of bushy vegetation within 3m of shoulder. |
| Drainage Design | 1 in 10 (in the case of new subdivisions, the requirements of Policy 9.4.1 shall prevail). |
| Guide Posts | To Australian Standards on curves |
| Speed Advisory Signs | To Australian Standards |

Road Maintenance LOS

| | |
|----------------------|---|
| Road Inspections | Day Inspection – Minimum 1 time every 2 years Night Inspection – Minimum 1 time every 2 years |
| Road Re-sealing | Every 15 to 20 years |
| Shoulder Grading | Prior to drop-off reaching 60mm |
| Pot Holes/Edge Break | Where pot hole exceeding 300mm in diameter appears in wheel paths, pot hole to be repaired within 3 weeks (subject to weather) of notification. |

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| | Where edge break exceeding 400mm appears on apex of curve, edge break to be repaired within 3 weeks (subject to weather) of notification. |
| Vegetation Management (within constraints of Native Clearing Regulations) | Verge spraying –once per year Removal – as per priority listing |
| Drainage | <ul style="list-style-type: none"> - Clear known problem areas at least 1 time per year. - Inspect and clear all pipes and drains at least one time in each 3 years. - Attend (make safe and clear if possible) pipe blockages causing road flooding on day of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 5 hours of notification and remove tree within 3 working days of notification. |
| Other Infrastructure (e.g. advisory signs, guide posts etc) | As per policy point 4 below. |
| Other Maintenance | Other maintenance, such as bitumen edging or shoulder re-sheeting, will be determined by staff based on a minimum whole of life cost approach, within budget constraints. |

Un - Sealed Road Design

As per “Australian Road Research Board Unsealed Roads Manual – Guide to Best Practice”

Tourist Roads (Un-sealed) – GT1 (Priority 3) & GT2

Road Maintenance LOS

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| Road Inspections | GT1: Day Inspection – Minimum 1 time every year GT1: Night Inspection – Minimum 1 time every 2 years GT2: Nil |
| Road Grading | GT1: Prior to School Holiday periods (providing the road contains |

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| | <p>corrugations or potholes). Otherwise when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm.</p> <p>GT2: 1 time per year.</p> |
| Vegetation Management (within constraints of Native Clearing Regulations) | <p>GT1: Verge spraying – once per year</p> <p>GT2: maintained with grader.</p> |
| Drainage | <p>GT1: Clear known problem areas at least 1 time per year.</p> <p>GT1: Inspect and clear all pipes and drains at least one time in each 3 years.</p> <p>GT1: Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response).</p> <p>GT2: Attend (make safe and clear if possible) pipe blockages causing road flooding within 5 days of notification (subject to weather conditions and emergency response).</p> |
| Trees Over Road | <p>GT1: Attend (remove tree or provide alternative access and make safe) trees over road within 24 hours of notification and remove tree within 5 working days of notification.</p> <p>GT2: Attend and remove tree over road within 5 days of notification.</p> |
| Other Infrastructure (e.g. guide posts etc) | As per policy point 4. below, excluding speed advisory signs. |
| Re-sheeting | <p>To be determined by staff based on a minimum whole of life cost approach, within budget constraints.</p> <ul style="list-style-type: none"> • To be determined by Shire’s Road Asset Maintenance Management System RAMM based on a minimum whole of |

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| | life coast approach, within budget constraints. |
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Local Distributor Roads (Un-sealed) GLD

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| Road Inspections | Day Inspection: Minimum 1 time every year Night Inspection – Minimum 1 time every 3 years |
| Road Grading | 4 times per year and when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm. |
| Vegetation Management (within constraints of Native Clearing Regulations) | Maintained with grader. |
| Drainage | Attend (make safe and clear if possible) pipe blockages causing road flooding within 2 days of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 24 hours of notification and remove tree within 5 working days of notification. |
| Other Infrastructure (e.g. guide posts etc) | As per policy point 4 below, excluding speed advisory signs. |
| Re-sheeting | To be determined by staff based on a minimum whole of life cost approach, within budget constraints. <ul style="list-style-type: none"> • To be determined by Shire’s Road Asset Maintenance Management System RAMM based on a minimum whole of life coast approach, within budget constraints. |

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School Bus Routes (Un-sealed) GSB
Road Maintenance LOS

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|---|---|
| Road Inspections | Day Inspection: Minimum 1 time every year Night Inspection: nil |
| Road Grading | 4 times per year and when corrugations exceed 25mm in depth over more than 20% of the road (or where corrugations exceeding 25mm in depth exist on tight bends) or potholes exceed 30% of the driving path, where the potholes are over 450mm in diameter with depth exceeding 35mm. |
| Vegetation Management (within constraints of Native Clearing Regulations) | Maintained with grader. |
| Drainage | Attend (make safe and clear if possible) pipe blockages causing road flooding within 1 day of notification (subject to weather conditions and emergency response). |
| Trees Over Road | Attend (remove tree or provide alternative access and make safe) trees over road within 12 hours of notification and remove tree within 5 working days of notification. |
| Other Infrastructure (e.g. guide posts etc) | As per policy point 4. below, excluding speed advisory signs. |
| Re-sheeting | To be determined by staff based on a minimum whole of life cost approach, within budget constraints. <ul style="list-style-type: none"> • To be determined by Shire's Road Asset Maintenance Management System RAMM based on a minimum whole of life cost approach, within budget constraints. |

Rural Local Roads (Un-sealed) GLR

Road Maintenance LOS

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|---|--|
| Road Inspections | Nil |
| Road Grading | <p>For the extent that the road provides a direct frontage to a property and the logical connection to the next road: minimum 2 times per year with additional grades up to a total of 4 times a year where corrugations or pot holes are considered excessive for the speed environment, or where adjacent roads are being graded and the road users would benefit if the road is graded.</p> <p>Where the road is a secondary access, provides no (or is a secondary) link to a property access or provides a link to a 4wd only area: only where resources allow (i.e. time and budget in that financial year) otherwise nil.</p> |
| Vegetation Management (within constraints of Native Clearing Regulations) | Maintained with grader. |
| Drainage | Attend (make safe and clear if possible) pipe blockages causing road flooding within 5 days of notification (subject to weather conditions and emergency response). |
| Trees Over Road | <p>For the extent that the road provides a direct frontage to a property and the logical connection to the next road: attend (remove tree or provide alternative access and make safe) trees over road within 12 hours of notification and remove tree within 5 working days of notification.</p> <p>Where the road is a secondary access, provides no (or is a secondary) link to a property access, or provides a link to a 4wd only area: within 4 weeks attend (remove tree or provide alternative access).</p> |
| Other Infrastructure (e.g. guide posts etc) | As per policy point 4 below, excluding speed advisory signs. |

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| | |
|-------------|--|
| Re-sheeting | <p>To be determined by staff based on a minimum whole of life cost approach, within budget constraints.</p> <ul style="list-style-type: none"> • To be determined by Shire’s Road Asset Maintenance Management System RAMM based on a minimum whole of life cost approach, within budget constraints. |
|-------------|--|

4. Other Infrastructure

The following infrastructure shall be installed at the time of construction or re-construction of a road. Where the infrastructure is required on roads where construction or re-construction is not taking place, installation shall be prioritised in accordance with policy point 2 above.

- Vegetation removal;
- Speed Zoning;
- Speed advisory signage (not to be installed on un-sealed roads);
- crash barrier (unless funded through Blackspot program); and
- guide posts.

Administration

Responsibility for implementing this policy is delegated to the Manager Technical Services for new construction works. Responsibility for implementing this policy is delegated to the Manager of Works for maintenance works.

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Adoption and Date Due for Revision

ADOPTED 24 APRIL 2014
REVIEWED 13 FEBRUARY 2020

NEXT DUE FOR REVIEW JULY 2023

The Administration of this Policy is by the Work and Services directorate.

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Appendix 1

Primary Distributor (Sealed) – SPD

| Level of Service | Road Name | From | To |
|-------------------------|----------------------------|--------------------|---------------------|
| SPD | South West Highway | Shire Boundary | South Coast Highway |
| SPD | Vasse Highway | Shire Boundary | South West Highway |
| SPD | Pemberton Northcliffe Road | Vasse Highway | Wheatley Coast Road |
| SPD | Muir Highway | South West Highway | Shire Boundary |
| SPD | South Coast Highway | South West Highway | Shire Boundary |

District Distributor (Sealed) - SDD1 & SDD2

| Level of Service | Road Name | From | To |
|-------------------------|--------------------|---------------------|--------------------|
| SDD1 | Windy Harbour Road | Zamia Street | Windy Harbour |
| SDD2 | Middleton Road | Wheatley Coast Road | South West Highway |
| SDD2 | Wheatly Coast Road | Zamia Street | South West Highway |
| SDD2 | Channybearup Road | South West Highway | Vasse Highway |
| SDD2 | Perup Road | South West Highway | Mordalup Road |
| SDD2 | Mordalup Road | Perup Road | Shire Boundary |
| SDD2 | Graphite Road | Finch Street | Shire Boundary |

Rural Local Distributor (Sealed) – SRLD

| Level of Service | Road Name | From | To |
|-------------------------|------------------|---------------|----------------|
| SRLD | Ralston Road | Graphite Road | Ringbark Road |
| SRLD | Yanmah Road | Ralston Road | Donnelly Road |
| SRLD | Donnelly Road | Yanmah Road | Sears Road |
| SRLD | Sears Road | Donnelly Road | Shire Boundary |

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| | | | |
|------|----------------------|----------------------------|--------------------|
| SRLD | Palgarup Road West | Ralston Road | South West Highway |
| SRLD | Balbarup Road | South West Highway | Perup Road |
| SRLD | Seven Day Road | South West Highway | Palings Road |
| SRLD | Middlesex Road | South West Highway | South West Highway |
| SRLD | Stirling Road | Channybearup Road | Pump Hill Road |
| SRLD | Pump Hill Road | Stirling Road | Vasse Highway |
| SRLD | Ipsen Street | Lintott Street | Wildwood Road |
| SRLD | Pemberton North Road | Vasse Highway | Diamond Tree Road |
| SRLD | Diamond Tree Road | Pemberton North Road | Eastbrook Road |
| SRLD | Eastbourne Road | Diamond Tree Road | Vasse Highway |
| SRLD | North Walpole Road | South Coast Highway | End of Bitumen |
| SRLD | Richardson Road | Northcliffe-Pemberton Road | Holliwell Road |
| SRLD | Allen Road | North Walpole Road | End of Bitumen |
| SRLD | Bridge Road | North Walpole Road | Shire Boundary |
| SRLD | Karri Lane | Wheatly Coast Road | Cul-de-sac |
| SRLD | Wheatly Coast Road | South West Highway | Karri Lane |
| SRLD | Mullineaux Road | Golf Links Road | Big Brook Dam |
| SRLD | Golf Links Road | Vasse Highway | Mullineaux Road |

Main Street Roads (Sealed) – SMS1, SMS2, SMS3 & SMS4

| Level of Service | Road Name | From | To |
|-------------------------|---------------------|------------------|----------------|
| SMS1 | Giblett Street (M) | Pritchard Street | Rose Street |
| SMS1 | Brockman Street (M) | Bath Street | Giblett Street |
| SMS1 | Rose Street (M) | Ipsen Street | Mount Street |
| SMS1 | Ipsen Street (M) | Bath Street | Giblett Street |
| SMS1 | Mount Street (M) | Giblett Street | Bath Street |

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| | | | |
|------|-------------------------|--------------------------|---------------------|
| SMS1 | Ralston Road (M) | Giblett Street | Highway |
| SMS2 | Brockman Street (P) | Dean Street | Robinson Road |
| SMS3 | Bath Street (M) | Ipsen Street | Mount Street |
| SMS3 | Ellis Street (P) | Brockman Road | Kennedy Street |
| SMS3 | Guppy Street (P) | Dean Street | Robinson Street |
| SMS3 | Dean Street (P) | Brockman Street | Guppy Road |
| SMS3 | Robinson Street (P) | Brockman Street | Guppy Road |
| SMS3 | Nockald Street (W) | Inlet Street | Swan Street |
| SMS3 | Wheatly Coast Road (N) | Richards Street | Boorara Road |
| SMS3 | North Street (N) | Zamia Street | Rear of Pub |
| SMS3 | Zamia Street (N) | Richardson Road | Wheatley Coast Road |
| SMS3 | Vista Street (W) | Nockolds Street | Pier Street |
| SMS3 | Nockolds Street (W) | Inlet Street | Swan Street |
| SMS4 | Wheatley Coast Road (Q) | Karri Lane to 300m south | |

Urban Local Distributor (Sealed) – SUD

| Level of Service | Road Name | From | To |
|------------------|-------------------|--------------------|-----------------|
| SUD | Ipsen Street | Bath Street | Linton Street |
| SUD | Hospital Avenue | Mottram Street | Blackbutt Drive |
| SUD | Blechynden Street | South West Highway | Stokes Street |
| SUD | Somerville Street | Pritchard Street | Ipsen Street |
| SUD | Pritchard Street | Somerville Street | Mottram Street |
| SUD | Graphite Road | South West Highway | Finch Street |

Industrial Roads (Sealed) – SI1 & SI2

| | | | |
|-----|------------------|--------------------|------------------|
| SI1 | Wetherell Street | South West Highway | Cul-de-sac |
| SI1 | Franklin Street | South West Highway | Wetherell Street |
| SI1 | Franklin Street | Wetherell Street | Muir's Highway |
| SI1 | Margerson Street | Franklin Street | Wetherell Street |
| SI1 | Gandy Street | Franklin Street | Crouch Street |
| SI1 | Crouch Street | Franklin Street | Gandy Street |

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| | | | |
|-----|--------------|---------------------|----------------|
| SI2 | Miguel Place | Chugg Street | Cul-de-sac |
| SI2 | Boorara Road | Windy Harbour Road | End of Seal |
| SI2 | Vista Street | South Coast Highway | Walpole Street |
| SI2 | Chugg Street | South Coast Highway | Miguel Place |

Urban Local Roads (Sealed) - SUL

SUL – All other urban roads

Rural Local Roads (Sealed) - SRL

SRL – All other sealed rural roads

Tourist Roads (Un-sealed) – GT1 & GT2

| Level of Service | Road Name | From | To |
|------------------|-------------------|--------------------|----------------------------|
| GT1 | Old Vasse Highway | Vasse Highway | Pemberton-Northcliffe Road |
| GT1 | Kemp Road | Golf Links Road | Cul-de-sac |
| GT2 | Broke Inlet Road | South West Highway | Broke Inlet |
| GT2 | Seven Day Road | Waist Coat Road | Vasse Highway |

Local Distributor (Un-sealed) – GLD

| Level of Service | Road Name | From | To |
|------------------|-------------------|-----------------------|----------------------------|
| GLD | Fernhill Road | Balbarrup Road | Perup Road |
| GLD | Grays Road | South Western Highway | Vasse Highway |
| GLD | Springdale Road | Muir Highway | Balbarrup Road |
| GLD | Balbarrup Road | Muir Highway | Perup Road |
| GLD | Boorara Road | End of Seal | Preston Road |
| GLD | Muirillup Road | End of Seal | Rudd Road |
| GLD | Datchet Road | Wheatley Coast Road | Pemberton Northcliffe Road |
| GLD | Ralston Road | End of Seal | Mitchelldean Road |
| GLD | Mitchelldean Road | Ralston Road | Sears Road |

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| | | | |
|-----|---------------------|---------------------|---------------------------------|
| GLD | Gardiner Road | North Walpole Road | End |
| GLD | Smiths Road | Channybearup Road | Pemberton North Road |
| GLD | Double Bridges Road | Windy Harbour Road | Gabbedy Road |
| GLD | Tattenham Road | Richardson Road | Guernsey Gully Road |
| GLD | Southfield Road | Mordalup Road | Wingebellup Road |
| GLD | Smithbrook Road | Middlesex Road | Peppermint Grove Road |
| GLD | Dixvale Road | Yanmah Road | Graphite Road |
| GLD | Gibillenis Road | Linfarne Road | Tower Road |
| GLD | Springall Road | West Boundary Road | Dean Mill |
| GLD | Hillbrook Road | Wheatley Coast Road | Wheatley Coast Road |
| GLD | Deeside Coast Road | Middleton Road | Preston Road (Great Tree Drive) |

School Bus Route (Un-sealed) - GSB

GSB - Extent of School Bus Routes

Rural Local Roads (Un-sealed) - GLR

GLR – All other un-sealed rural roads

Laneways & Right of Ways – LWY/ROW

| Level of Service | Road Name | From | To |
|------------------|-----------------|------------|-----------|
| LWY/ROW | Guadagnino Lane | Mount St | Ipsen St |
| LWY/ROW | LOT 66 | Lintott St | Limmer St |

Unallocated/Vacant Crown Land - UCL & VCL

| Level of Service | Road Name | From | To |
|------------------|----------------|------------------------------|--------------------|
| UCL/VCL | Loverock Road | Windy Harbour Road | Beebe/Preston Road |
| UCL/VCL | Waistcoat Road | Section outside state forest | |

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| Level of Service | Road Name | From | To |
|-------------------------|------------------|-----------------------|---------------------|
| OTHER | Wetherell Road | South Western Highway | Lot 10878 |
| OTHER | Langley Road | South Western Highway | Wheatley Coast Road |