



mainroads  
WESTERN AUSTRALIA

# ROADS 2040

Gascoyne

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Western Australia.*

## Regional Strategies for Significant Local Government Roads

2022



## Document Control

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## Amendments

Revision Number	Revision Date	Description of Key Changes	Section / Page No.
1	December 2021	Addition of Shark Bay Airport Road	
2	February 2022	Updated year to reflect year of publication 2022	All
3	September 2022	Updated to reflect minor changes and updates	various

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# Significant Local Government Roads Development Strategy

The Roads 2020 Regional Road Development Strategies, released during 1997 and 1998, were an initiative of the 1992 Memorandum of Understanding between the State Government and the Western Australian Local Government Association, then known as the Western Australian Municipal Association. The Memorandum of Understanding requires that the road development strategies be reviewed at five yearly intervals to assess the effects of changing circumstances.

The Roads 2025 Regional Road Development Strategy, for all regions constituted the first review of Roads 2020 Regional Road Development Strategy. Local Governments within the Regions were consulted and engaged in the process of reviewing and defining the Roads 2025 road network. Local Governments reviewed and updated the Roads 2025 documents to produce Roads 2030 in 2013.

The latest iteration *Regional Strategies for Significant Local Government Roads (Roads 2040)* are live documents which allow amendments from the Regional Road Groups. An overall review will take place approximately every five years.

Only projects on local roads in the *Roads 2040* will be eligible for *Road Project Grant* funding under the *State Road Funds to Local Government Agreement*.

## CHANGES AND AMENDMENTS

Should a Regional Road Group agree to seek an amendment to the endorsed road development strategy this should be documented and endorsed by the *State Road Funds to Local Government Advisory Committee*. If an affected road crosses into another Region, agreement should be reached with the adjoining Regional Road Group on the proposed change.

All roads submitted to be added to *Roads 2040* should meet the criteria specified within the *GUIDELINES AND CRITERIA for the Identification of Significant Local Government Roads with Regional Importance*.

Note - A separate Main Roads WA process is required to amend the [WA Road Hierarchy](#) category.

## THE GASCOYNE REGION

The Gascoyne Region is comprised of the Shires of Carnarvon, Exmouth, Shark Bay and Upper Gascoyne. It captures more than 600km of Indian Ocean coastline and stretches about 500km inland. The coastal area incorporates internationally recognised features such as the Ningaloo Coast and Shark Bay World Heritage Areas, Monkey Mia, and Coral Bay. The resident population is concentrated in the key centres of Carnarvon, Exmouth, Denham, Gascoyne Junction, Burringurrah and Coral Bay. The hinterland includes the outstanding features of the

Kennedy Ranges and Mount Augustus. While many economic opportunities exist, attracting capital investment for infrastructure and business development remains one of the main challenges facing the Region.

The Gascoyne has a diverse economy with the major industries being tourism, retail trade, mining, fishing, manufacturing, pastoralism and horticulture. In recent years, the tourism industry has grown rapidly and is now one of the largest contributors to the Region's economy. The Department of Local Government and Regional Development estimated the Gascoyne's Gross Regional Product was \$1.22 billion in 2017. Carnarvon is the Region's major commercial and administrative centre and has a broad range of service industries.

The 2016 Census found a resident population of 9 757, of which the Shire of Carnarvon held the largest population of 5 528 people in 2016 (57% of the Region's total population).

Several significant land development projects are currently underway in the Region. In Carnarvon, stage 4 of the North Water residential development has been released, with future land releases planned.

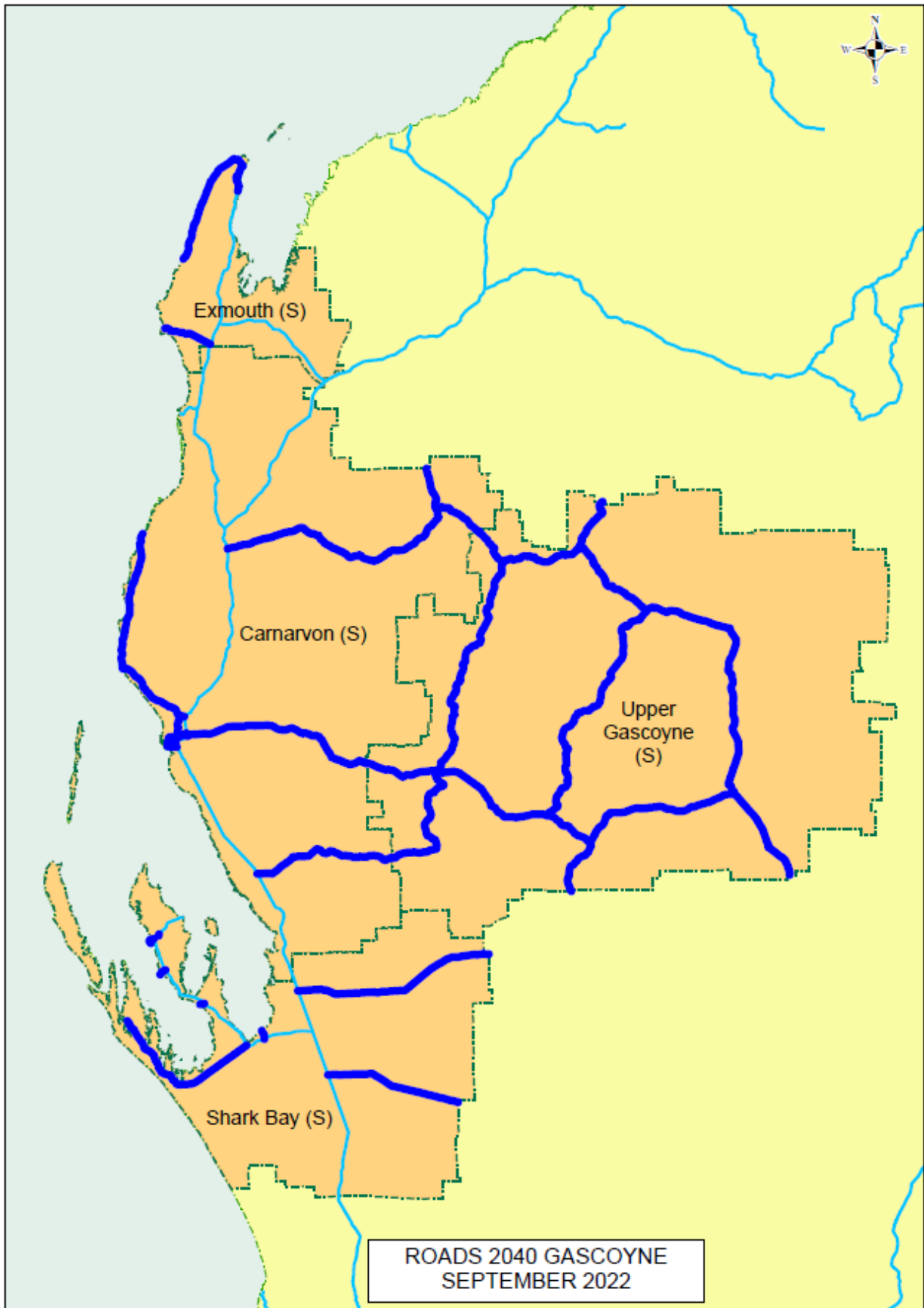
Development of the Exmouth Marina Village Site is ongoing. In early 2021, Expressions of Interest were invited to purchase and develop Superlot D within the Exmouth Marina. A decision on the successful proponent is expected in late 2021. Superlot D is a 17.8ha waterfront development opportunity and is the last superlot to be released in the Exmouth Marina. Construction of the four-star tourist resort's accommodation facilities has seen an increase in tourist interest in the Marina.

Additional residential land has been released in Denham and Carnarvon, and a future land release has been planned in Exmouth. The Cornish Street Industrial Estate has also been established in Carnarvon.

The Ningaloo Coast Regional Strategy, from Carnarvon to Exmouth that was released in August 2004. The strategy provides a framework for future land management, tourism and recreation development, to ensure an integrated and sustainable future for the Ningaloo coast, including important nodes such as Coral Bay and the Blowholes.

The aim of the *Regional Strategies for Significant Local Government Roads* is to identify and develop a significant road network to support and facilitate the development of the Gascoyne Region. Tourism, centred on the Shark Bay World Heritage Area, Monkey Mia and the Ningaloo Marine Park continues to play a major role in driving the Region's road infrastructure requirements.

Development of onshore support facilities for the Oil and Gas industry at Exmouth will also have a significant impact on the road infrastructure of North West Cape. Other important developments in the Region include the Carnarvon Flood Mitigation project and the associated road works on North West Coastal Highway.



## BUTCHERS TRACK

**Road No. 8040038**  
**Local Distributor**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### FUNCTION

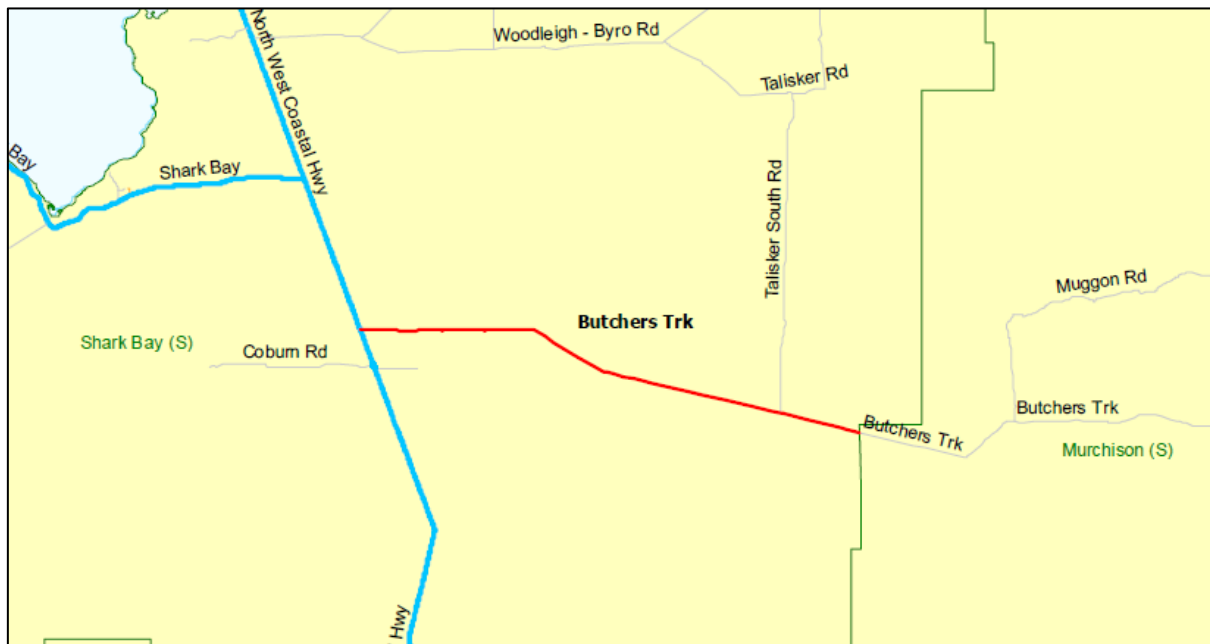
The road was upgraded some years ago to provide access from North West Coastal Highway for the construction of the Dampier to Perth natural gas pipeline project. The road connects with local pastoral roads and provides access to the Shark Bay coastal region from the Murchison. It is part of a regionally significant radial link between Mt Magnet and North West Coastal Highway via Dalgargana and Murchison Settlement.

### DEVELOPMENT NEED

The road is the most direct link to the Shark Bay region for people commuting from the Murchison and is in need of upgrading to cater for the increasing traffic.

### DEVELOPMENT STRATEGY

The development strategy for the route is to construct the road to a Type 3 gravel standard.





## **CARNARVON – MULLEWA ROAD**

**Road No. 8030242 and 8050045**  
**Regional Distributor**

**Carnarvon and Upper Gascoyne Shires**

**Last Reviewed: May 2021**

### **ROAD FUNCTION**

This road begins at North West Coastal Highway, passes through Gascoyne Junction, Murchison Settlement and south to Mullewa.

This road is an important link between Carnarvon, Gascoyne Junction and the Murchison settlement servicing the mining, pastoral and tourism industries.

A section of the road forms part of a broader inter-regional and interstate route from the Gascoyne Region through the Mid West and Goldfields – Esperance Regions via Glenburgh, Landor and Mount Gould to Meekatharra.

Some horticultural produce from Carnarvon to the Eastern States is transported via this road, in addition to livestock and general freight. Access to Mt Augustus, a significant tourist destination, is also via this road.

Carnarvon – Mullewa Road (8030242) is a RAV Network 8 road.

Carnarvon – Mullewa Road (8050045) is a RAV Network 9 road (conditional) from the Carnarvon / Upper Gascoyne Shire boundary to the Dalgety Downs Glenburgh Rd intersection and a RAV Network 8 road (conditional) from the Dalgety Downs Glenburgh Rd intersection to the Murchison / Upper Gascoyne Shire boundary.

### **ROAD DEVELOPMENT NEED**

A demand exists for an improved standard of road and a more direct east west link between the Gascoyne and Mid West and Goldfields – Esperance Regions to access new markets in these regions and in the Eastern States.

The development need is to continually improve the standard of this road to better facilitate the growing users of this road.

### **ROAD DEVELOPMENT STRATEGY**

#### NWCH - Gascoyne Junction

To reseal sealed sections to improve skid resistance and seal shoulders to improve safety for road users.

#### Gascoyne Junction - Dalgety Downs Glenburgh Rd

The development strategy is:

1. Reseal existing sealed pavement as required.
2. Reconstruct the existing gravel pavement and construct new suitable gravel pavement and seal to a min. of 7.2m wide.
3. Improve the horizontal and vertical geometry to provide a more consistent speed environment.

4. Upgrade flood ways to either a 9m wide cement stabilized and sealed floodway structure or an 8m wide concrete floodway as appropriate.
5. Improve roadside drainage via new and renewal of existing table drains and offshoot drainage.
1. The priority is to continue works from the eastern end of the existing seal to Dalgety Downs Glenburgh Rd.



## **CARNARVON TOWNSITE ROADS**

**Robinson Street (8030241) – Local Distributor**

**Cornish Street (8030052) – Access Road**

**Harbour Road (8030209) – Access Road**

**Carnarvon Shire**

**Last Reviewed: May 2021**

### **ROAD FUNCTION**

The function of these roads is to provide access from the road train assembly area to the boat harbour, industrial area and town site.

Cornish Street is a RAV Network 8 road (conditional).

Harbour road is a RAV Network 9 road (conditional).

Harbour Road / Cornish Street will be the primary heavy vehicle access route to the industrial area of Carnarvon.

Robinson Street is the main route through the Central Business District of Carnarvon. In addition it is used for community events and activities such as displays, Christmas street parties and NAIDOC marches – all of which contribute to improving the social wellbeing of the community.

It is the primary access road to the economic centre of town, which includes the majority of retail and food outlets that front to Robinson Street. This road also leads traffic to the Fascine Waterway which is Carnarvon's premier recreation precinct

### **ROAD DEVELOPMENT NEED**

With the increased demand for freight and local traffic, the Carnarvon community has identified a need to improve access and road safety to the industrial, boat harbour and CBD areas.

Road pavement areas requires renewal works to rectify poor quality subgrades and pavements and failing seals. Drainage capacity needs to be improved at the northern end. The Shire of Carnarvon has received DOT funding to undertake a feasibility study of Robinson Street to provide options for improved cyclist access.

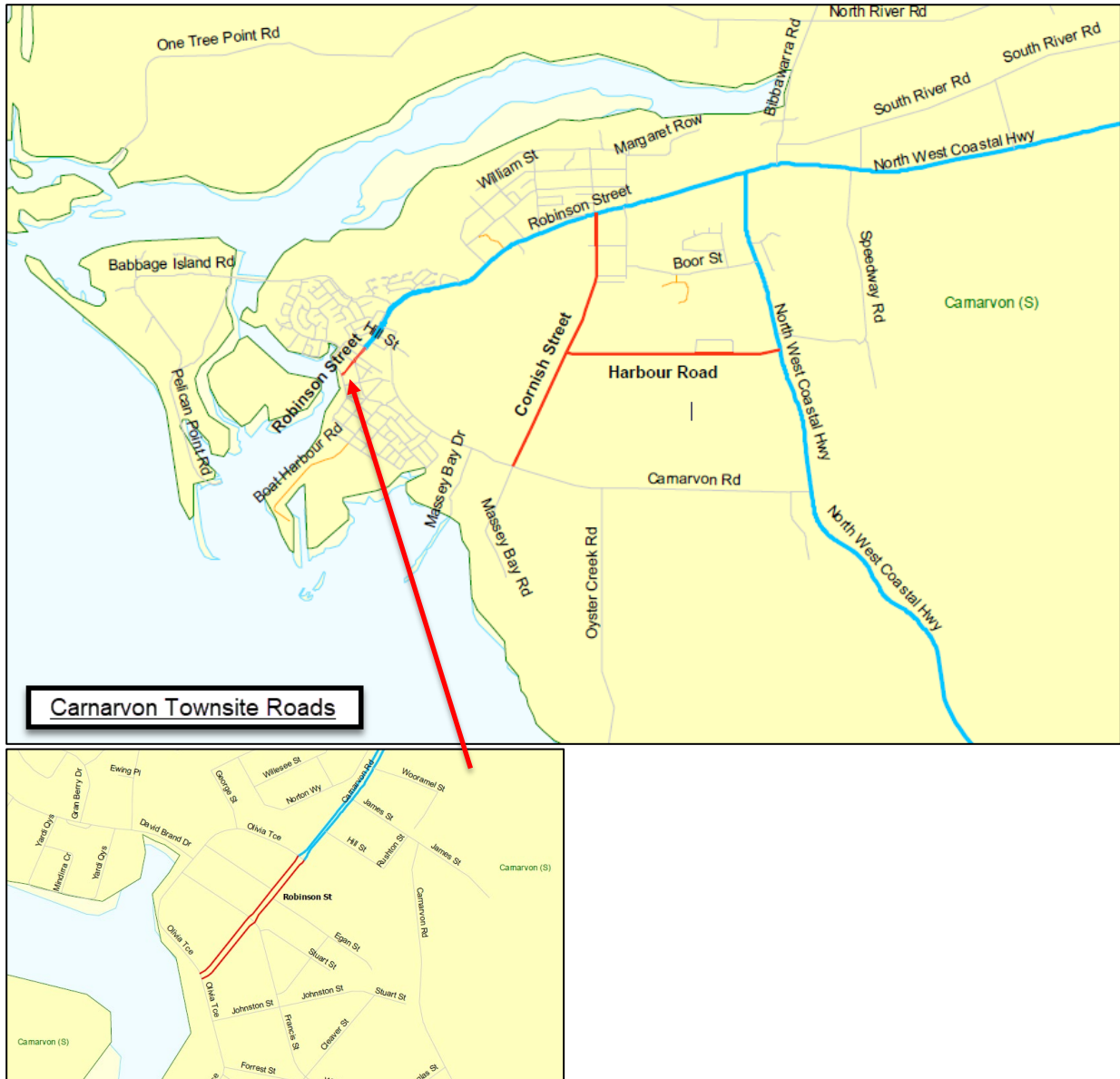
Renewal of existing Type 8 standard is required.

### **ROAD DEVELOPMENT STRATEGY**

Widening of Cornish Street to facilitate the increasing demand of heavy haulage vehicles.

Construction and sealing of Harbour Road between Hudson and Cornish Streets, as a better link to the road train assembly area.

Reconstruction of Douglas Street to improve safety for tourism and the increasing freight traffic to the boat harbour.



## DALGETY DOWNS ROUTE

**Dalgety Downs – Glenburgh Road (8050013)**

**Dalgety Downs – Landor Road (8050005)**

**Regional Distributors**

**Upper Gascoyne Shire**

**Last Reviewed: May 2021**

### ROAD FUNCTION

These two regional distributor roads form part of the Carnarvon - Meekatharra route which is an inter-regional and interstate route from the Gascoyne Region through the Mid West and Goldfields – Esperance Regions via Glenburg, Landor and Mount Gould to Meekatharra.

The roads provide alternative access from the Carnarvon Mullewa Rd to Mount Augustus, local pastoral stations, and the Burringurrah Indigenous Community. Both roads are RAV Network 6 (conditional).

### DEVELOPMENT NEED

Both roads are largely Type 3 roads with the existing pavement wearing in places due to the traffic volume and poor natural pavement materials. There are various segments where the horizontal alignment needs improving to deliver a more consistent speed environment. There are also numerous drainage improvements required particularly at flood ways including vertical geometry improvements.

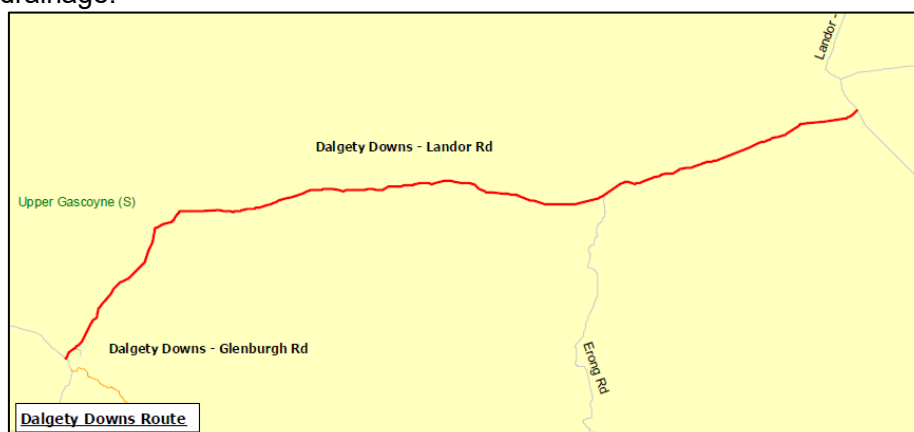
Due to the quality of the road materials and the various drainage issues, the road is often closed for long periods of time during and following rain events. Road closures have a significant impact on the local economy and restrict movement of local people.

There is a need to upgrade the road to a consistent Type 5 road which will provide improved road access and reduce the periods of road closure during and after rain events. A Type 5 road will also reduce the damage sustained by the current existing unsealed road network from rain events.

### DEVELOPMENT STRATEGY

The development strategy is to:

1. Reconstruct the existing gravel pavement and construct new suitable gravel pavement and seal to a min. of 7.2m wide.
2. Improve the horizontal and vertical geometry to provide a more consistent speed environment.
3. Upgrade flood ways to either a 9m wide cement stabilized and sealed floodway structure or an 8m wide concrete floodway as appropriate.
4. Improve roadside drainage via new and renewal of existing table drains and offshoot drainage.



## EAGLE BLUFF ROAD

**Road No. 8040015**  
**Access Road**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### ROAD FUNCTION

Eagle Bluff Road is mainly used by tourist traffic. The road is 4.4km long and terminates at a cul de sac and car park which overlooks the water and surrounding landscape. In 1999 CALM (now DPaW) upgraded the car park facility and constructed a wooden boardwalk and lookout area to reduce degradation.

### ROAD DEVELOPMENT NEED

The road at present is a Type 3 standard with gravel and clay sheeting to cover the soft natural material. The road has an AADT count of 90. It is subject to closure due to rain during the winter months.

### ROAD DEVELOPMENT STRATEGY

Development strategy is for the road to be constructed and sealed to a 7 m width.



## **GASCOYNE JUNCTION TO KENNEDY RANGE AND MOUNT AUGUSTUS**

**Cobra – Dairy Creek Road (8050001) – Local Distributor**  
**Cobra – Gifford Creek Road (8050007) –Local Distributor**  
**Cobra – Mount Augustus Road (8050020) – Local Distributor**  
**Edmund – Gifford Creek Road (8050006) – Local Distributor**  
**Ullawarra Road (8050002) – Local Distributor**

### **Upper Gascoyne Shire**

**Last Reviewed: May 2021**

#### **FUNCTION**

The roads which comprise this route provide access to abutting pastoral stations and to the Kennedy Range and Mount Augustus National Parks. They link several station properties with Gascoyne Junction and form part of the road network linking the Carnarvon – Meekatharra route with North West Coastal Highway and Paraburdoo.

Cobra – Dairy Creek Road is a RAV Network 6 road (conditional).

Cobra – Gifford Creek Road is a RAV Network 6 road (conditional).

Edmund – Gifford Creek Road is a RAV Network 6 road (conditional).

Ullawarra Road is a RAV Network 6 road (conditional).

This route starts at Gascoyne Junction on Carnarvon–Mullewa Road and is a district mail run.

Tourists use this route to visit the Kennedy Ranges and drive its length to Mount Augustus. At times throughout the year, cattle trucks use it to cart produce to market.

There is future potential that a segment of Edmund Gifford Creek Rd and the northern segment of Ullawarra Rd (to Lyndon Minnie Creek Rd) will be used to access and service a rare earths' mine proposed to be developed north of Gifford Creek station homestead.

#### **DEVELOPMENT NEED**

The Kennedy Range and Mount Augustus National Parks are becoming increasingly popular as tourist destinations. In addition to intra-state visitors, the area attracts interstate as well as overseas visitors. The route is suitably positioned to best serve the tourist and pastoralist needs in this area and appropriate upgrading of the route is required to properly reflect its significance.

The segment of Ullawarra Rd within this route varies between a Type 2 and Type 3 road. There are numerous segments which would benefit from realignments to improve the consistency of the design speed as well as horizontal and vertical sight distance. The formation is losing shape in various locations and various gravel sheeted segments are worn and in need of renewal.

Cobra Gifford Creek Rd and Edmund Gifford Creek Rd also have variable standards between a Type 2 and Type 3 road. There are several segments on both road that are unpaved and isolated small radii horizontal curves that need improvement. Both roads also require significant drainage improvements particularly with respect to improving the vertical geometry at flood ways to provide a more consistent speed environment.

Cobra Dairy Creek Rd is largely of a Type 3 standard and the Shire has invested significant funds upgrading various segments of this road in recent years. However, the horizontal and vertical geometry would still benefit from various improvements to improve the consistency of the speed environment particularly at flood ways. The existing formation and gravel pavement

also lose shape and wears quickly with traffic and because of poor-quality materials in the area.

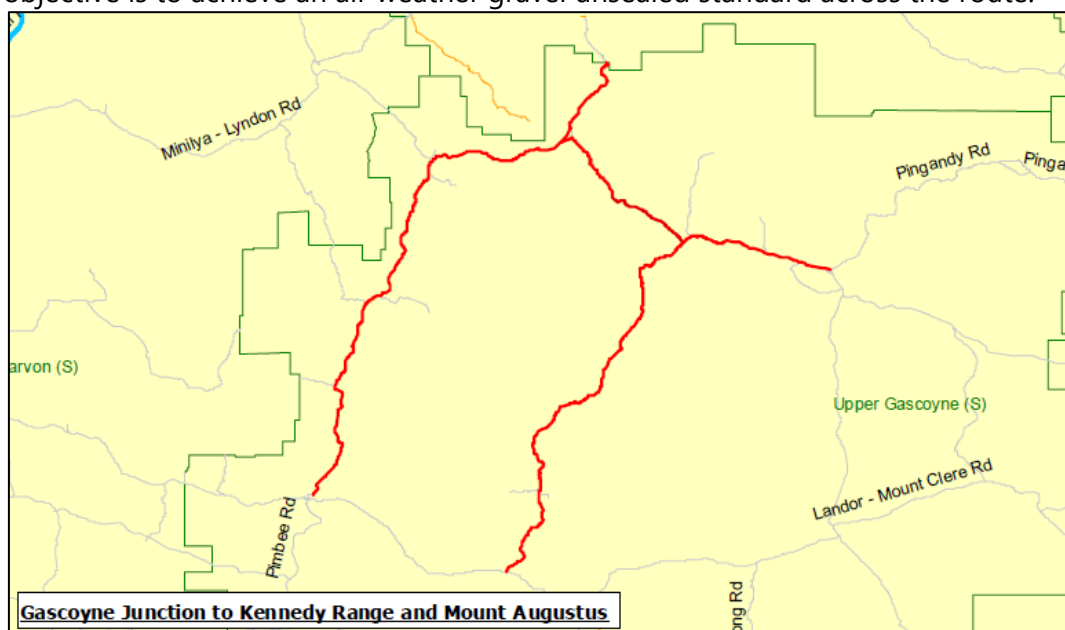
All four roads warrant an improvement to a consistent Type 3 standard based on the current and expected traffic volumes (i.e. tourist vehicles towing caravans, stock trucks and mail truck). Additionally, due to the nature of rainfall in the local area and the poor standard of various areas of the road and poor-quality materials, these roads can be closed for significant periods of time during and following small and large rainfall events. Road closures have a significant impact on the local economy and improving the standard of this route is expected to reduce the road closure duration.

Additionally, the segment of Ullawarra Rd from Gascoyne Junction to Kennedy Range National Park (approx. 42km) warrants upgrading to a consistent Type 5 standard road due to the volume of tourist traffic.

### DEVELOPMENT STRATEGY

The development strategy is to:

1. Ullawarra Rd (Gascoyne Junction to Kennedy Range National Park)
    - a. Reconstruct the existing gravel pavement and construct new suitable gravel pavement and seal to a min. of 7.2m wide.
    - b. Improve the horizontal and vertical geometry to provide a more consistent speed environment.
    - c. Upgrade flood ways to either a 9m wide cement stabilized and sealed floodway structure or an 8m wide concrete floodway as appropriate.
    - d. Improve roadside drainage via new and renewal of existing table drains and offshoot drainage.
  2. Remainder of road segments
    - a. Construct a Type 3 standard road throughout the route with targeted horizontal and vertical geometry improvements.
    - b. Upgrade existing flood ways and cement stabilize or construct sealed / concrete flood ways where warranted.
1. The objective is to achieve an all-weather gravel unsealed standard across the route.





## HAMELIN POOL ROAD

**Road No. 8040012**  
**Access Road**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### ROAD FUNCTION

This road is a type 5 access road. It starts at Shark Bay Road and terminates at Hamelin Pool Caravan Park and the world-renowned Stromatolites. Along this road is also the access to Hamelin Station Stay.

This road is part of the World Heritage Drive scenic route and has tourist traffic as the main users.

### ROAD DEVELOPMENT NEED

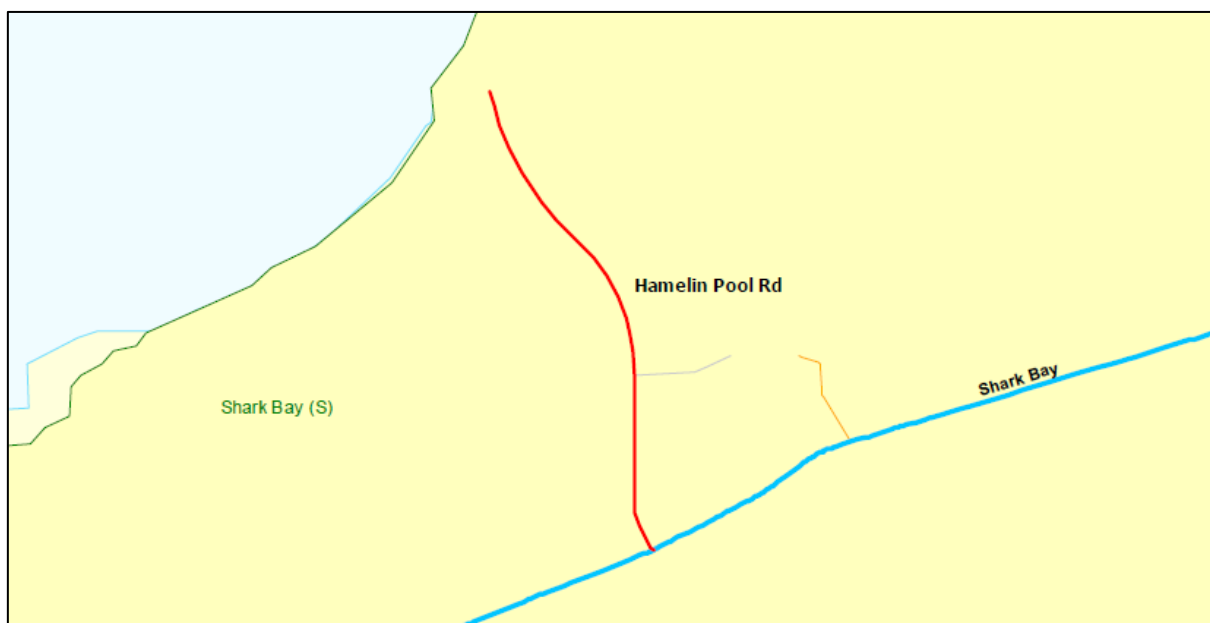
The Stromatolites are a significant tourist attraction and draw a large number of tourist traffic. This traffic will only increase as more tourists are attracted to this pristine World Heritage listed area.

Hamelin Pool Caravan Park is undergoing significant upgrades to cater for the increased influx of tourists with Hamelin Station Stay, being a new establishment, contributing to the increase in numbers.

As tourist traffic numbers increase, there will be a need to improve the safety along the Hamlin Pool Road.

### ROAD DEVELOPMENT STRATEGY

The development strategy for this road is to have a surface retreatment program with the addition of line marking.



## MINE AND COASTAL ACCESS

### Blowholes Road (8030066) Quobba-Gnaraloo Road (8030121) Local Distributors

Carnarvon Shire

Last Reviewed: May 2021

#### ROAD FUNCTION

Sections of the Quobba - Gnaraloo Road are of an extremely low standard. It provides access to some of the region's highly prized tourist attractions. Blowholes Road services the tourist industry, as well as the Rio Tinto Mine site.

The Blowholes road is a RAV Network 7 road.

#### ROAD DEVELOPMENT NEED

With the greater demand on Blowholes Road from the increasing numbers of tourist and mine site activities, the road is lacking the standards to cater for this demand.

Quobba – Gnaraloo Road is severely lacking in both safety and serviceability standards to meet the increasing number of tourists visiting the area.

#### ROAD DEVELOPMENT STRATEGY

The development strategy is to widen the seal and seal the shoulders on Blowholes Road and upgrade parts to a Type 5 standard.

The development strategy for Quobba – Gnaraloo Road is to remove blind corners and sharp crests and curves. Upgrade parts of the road to a Type 3 standard.



## MOUNT AUGUSTUS – PARABURDOO ROAD

### Proposed Road

### Upper Gascoyne Shire

Last Reviewed: May 2021

#### FUNCTION

A more direct through road would provide substantial travel time savings for tourists and for the transport of livestock and supplies. The development of this road would avoid the present inconvenience of having to backtrack or follow an indirect road via a series of pastoral station roads.

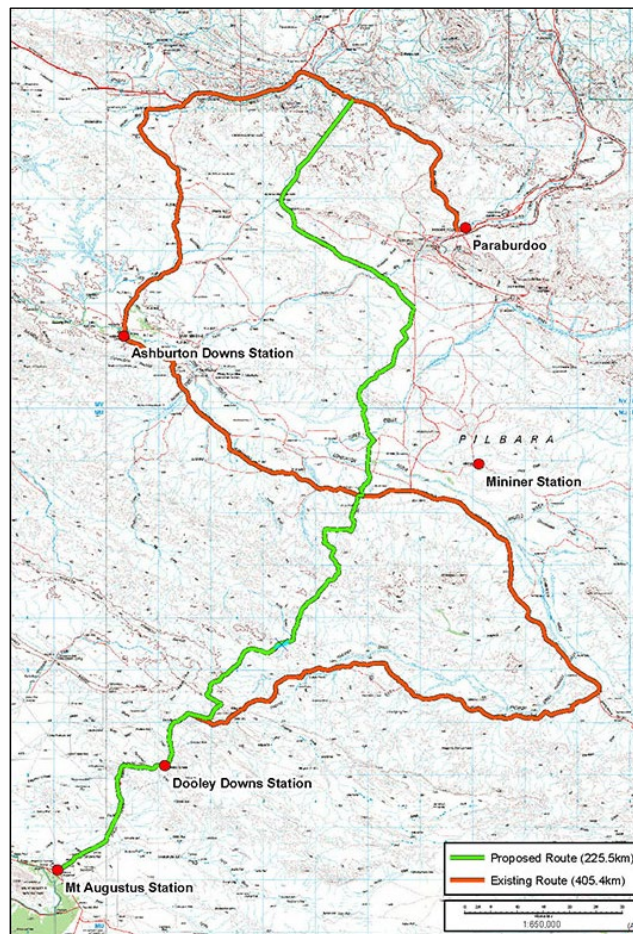
#### DEVELOPMENT NEED

There is a need to connect the tourism and pastoral areas of the northern Gascoyne to the central Pilbara and to provide a more direct route between Paraburadoo, Mount Augustus, Meekatharra and Carnarvon. The regional road network lacks a suitable connection to Mount Augustus from a northern population centre.

#### DEVELOPMENT STRATEGY

Develop a route corridor by linking Paraburadoo and Mt Augustus. This route will be developed as a road ultimately to Type 3 formed gravel standard.

A route/alignment has been identified, but the alignment needs to be developed by on-ground works.



## **MOUNT AUGUSTUS TO GREAT NORTHERN HIGHWAY**

**Landor – Meekatharra Road (8050032) Regional Distributor**

**Landor – Mount Augustus Road (8050004) Local Distributor**

**Upper Gascoyne Shire**

**Last Reviewed: May 2021**

### **FUNCTION**

The route provides access to Mount Augustus from Great Northern Highway via Mount Gould, Errabiddy and Landor and services numerous pastoral properties in addition to increasing tourist traffic. It also provides access to the Burringurrah Indigenous Community located south of Mount Augustus homestead.

The section from Mount Gould to Meekatharra is part of the Carnarvon – Meekatharra Route which is an inter-regional link between the Mid West and Gascoyne Regions. Both these roads are RAV Network 6 roads (conditional).

### **DEVELOPMENT NEED**

A reliable link to Great Northern Highway is required to cater for the increasing number of tourists visiting Mount Augustus National Park each year. There needs to be a more clearly defined “official” route from Great Northern Highway and this route best satisfies the need from a regional perspective.

Additionally, providing safe and reliable access to the local indigenous community is important for the local residents.

Both roads are typically of a Type 2 and Type 3 standard and the Shire has made significant investments in upgrading various segments of the route in recent years via reforming, resheeting and smaller floodway upgrades.

Due to the proximity of the Landor Mount Augustus Rd to the Landor homestead, the Shire is planning a realignment of approximately 8km of this road which will include a new crossing of the Gascoyne River.

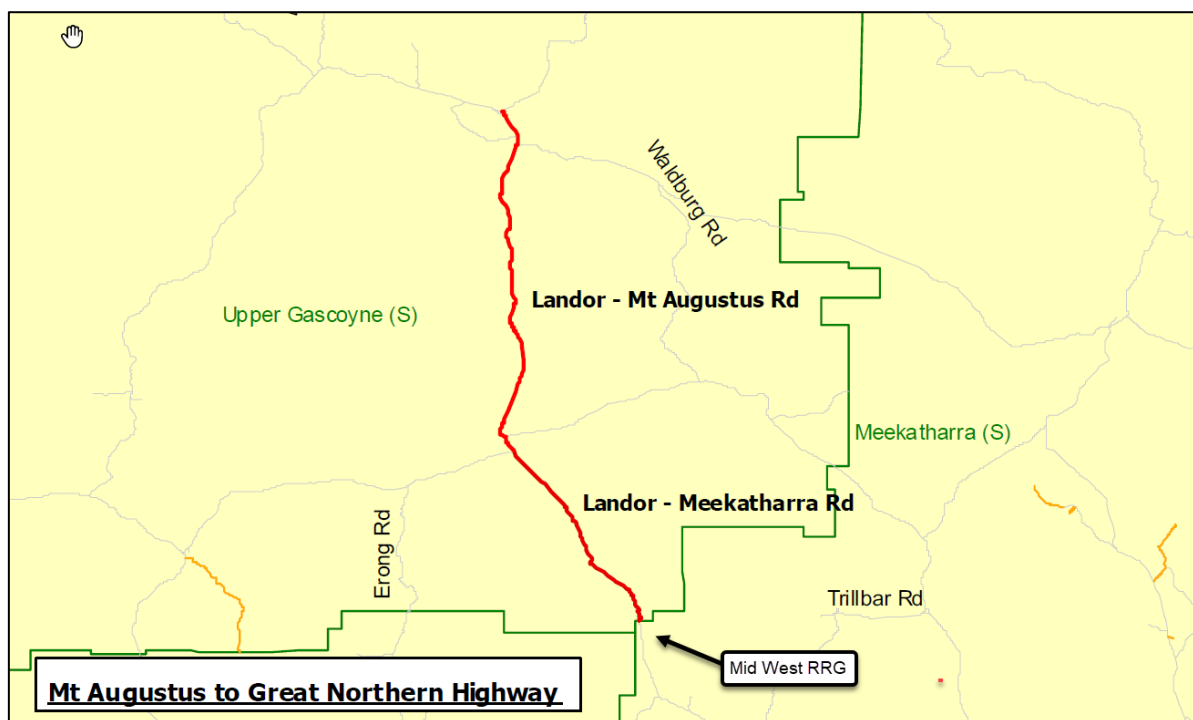
Given the current and future traffic demands and that Landor Meekatharra Rd is part of the Carnarvon Meekatharra route (described elsewhere), there is a need to upgrade the Landor Meekatharra Rd to a consistent Type 5 standard and the Landor Mount Augustus Rd to a consistent Type 3 standard.

### **DEVELOPMENT STRATEGY**

The development strategy is to:

1. Landor Mount Augustus Rd
  - a. Construct the realignment bypass road around Landor station homestead.
  - b. Reform, resheet and cement stabilize unsealed flood ways to provide a consistent Type 3 standard road.
2. Landor Meekatharra Rd

- a. Reconstruct the existing gravel pavement and construct new suitable gravel pavement and seal to a min. of 7.2m wide.
- b. Improve the horizontal and vertical geometry to provide a more consistent speed environment.
- c. Upgrade flood ways to either a 9m wide cement stabilized and sealed floodway structure or an 8m wide concrete floodway as appropriate.
- d. Improve roadside drainage via new and renewal of existing table drains and offshoot drainage.



## MURAT ROAD

Road No. 8060066

Regional Distributor and Local Distributor

Exmouth Shire

Last Reviewed: May 2021

### ROAD FUNCTION

Murat Road is the only entrance road into the Exmouth town site. The road was originally designed and constructed in 1966.

Murat Road services a significant tourist destination and the Exmouth community. It links the town site with the Naval Communication Base 'Harold E Holt'. The road extends north to Yardie Creek Road near the coastline, providing visitor access to the Ningaloo shore and reef and Cape Range National Park which is encapsulated within the Ningaloo Coast World Heritage Area.

With Exmouth being promoted as the "Northern Gateway" to the Ningaloo Reef and with development increasing in the town site and increased usage of the World Heritage coastline in between Exmouth and Carnarvon, it is critical that the entrance road into in Exmouth is appropriately designed to improve vehicle and pedestrian safety.

Murat Road is included in the RAV 4 Network system (conditional).

### ROAD DEVELOPMENT NEED

Increasing traffic to the Exmouth region is placing high demands on the existing road which was designed in 1966. The road is under-engineered and its design does not meet current standards. It is expected that traffic volumes will increase on Murat Road as the Shire continues to develop.

One of the main benefits to be derived from the reconstruction of Murat Road relates to the significant indirect economic benefit opportunity associated with the project. It is envisaged that the Exmouth's new and improved infrastructure associated with air, sea and road transport, land development, building construction, tourism facilities, World Heritage recognition will inevitably attract increased investment from both existing and prospective owners.

### ROAD DEVELOPMENT STRATEGY

The redesign/construct work will focus on upgrading the existing Type 4 Road to a Type 5 Road, building up the residual gravel pavement to full thickness, increase width, compact and sealed and street lighting and landscaping.



## NANGA ROAD

**Road No. 8040007**  
**Access Road**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### ROAD FUNCTION

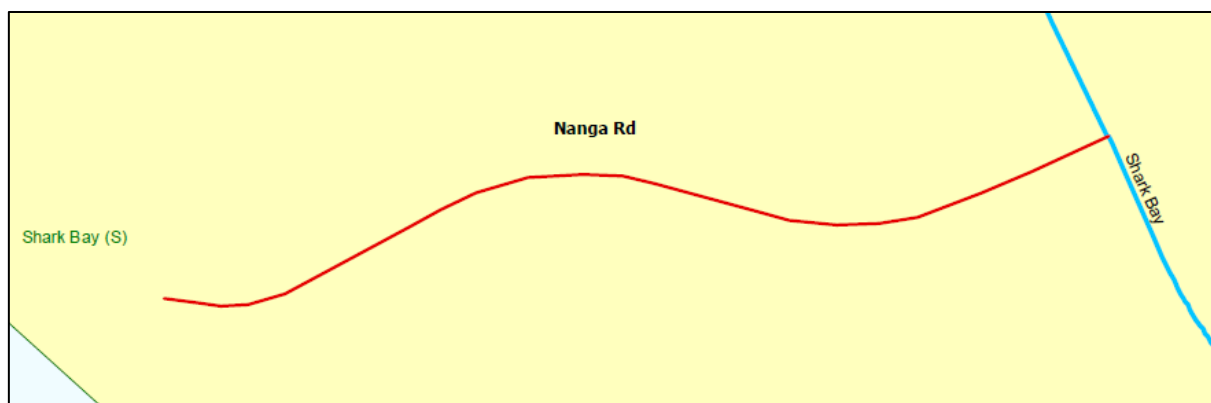
This Road is a Type 5 access road. This connects Shark Bay Road with the Nanga Bay Resort/Caravan Park. This road is part of the World Heritage Drive scenic route and has tourist traffic as the main road users, predominately caravans and buses.

### ROAD DEVELOPMENT NEED

Nanga Bay Resort/Caravan Park is undergoing a number of upgrades and as tourist numbers increase within the Shire, there will be a larger number of tourist movements along Nanga Road. There are some narrow shoulders along Nanga Road which require widening.

### ROAD DEVELOPMENT STRATEGY

The development strategy for this road is to increase the width of the narrow shoulders where required, along with surface retreatment.



## NINGALOO ROAD

**Road No. 8060083**  
**Local Distributor**

**Exmouth Shire**

**Last Reviewed: May 2021**

### **ROAD FUNCTION**

The road provides visitor access to the Ningaloo shore and reef which is encapsulated within the Ningaloo Coast World Heritage Area. It also provides access to the Ningaloo Station homestead which has become a popular destination for tourists.

With Exmouth being promoted as the “Northern Gateway” to the Ningaloo Reef and with development increasing in the town site and increased usage of the World Heritage coastline in between Exmouth, Coral Bay and Carnarvon, it is appropriate that access is maintained. World Heritage recognition will inevitably attract increased tourism and investment from both existing and prospective owners.

Ningaloo Road is not included in the RAV Network system.

### **ROAD DEVELOPMENT NEED**

Ningaloo Road provides access to the Ningaloo Coast World Heritage Area, Ningaloo Beach's, Reef, Cape Range National Park and Coral Bay. Increasing traffic to the Exmouth region is placing high demands on the existing road which is under-engineered to meet the existing road transport requirements.

The road construction gravels in proximity to Ningaloo Road are low quality and would be described calcareous material including shelly sands, coral gravel limestone and sand. The Shire cannot afford or keep up with the level of pavement disintegration that is occurring on Ningaloo Road, nor can the Shire afford to purchase, and cart processed gravels. Even if the maintenance funds and operations are maintained at the current level, asset value will degrade and then drop in severability. Ultimately it would be expected that much of the Ningaloo Road would effectively revert to a 4x4 access only road if the level of existing funding remains static.

In March 2012 a bush fire started on the southern and northern side of Ningaloo Road. The fire scar is approximately 10 kilometres long interfacing with the road. As a result of the loss of vegetation and the summer wind pattern sand is drifting in a northerly direction over the road. The road conditions sand drift assessed could be described as; very deep sand drifts and complete road coverage varying in depth to 700mm. Sand lumps forming intermittently 3 to 6 metres wide and 5 to 7 metres between formations. The sand drift road reserve volume is estimated at 30,000, 31 October 2012.

The benefits of Strategy proposed below are asset preservation, traffic safety considering increases in development and tourism

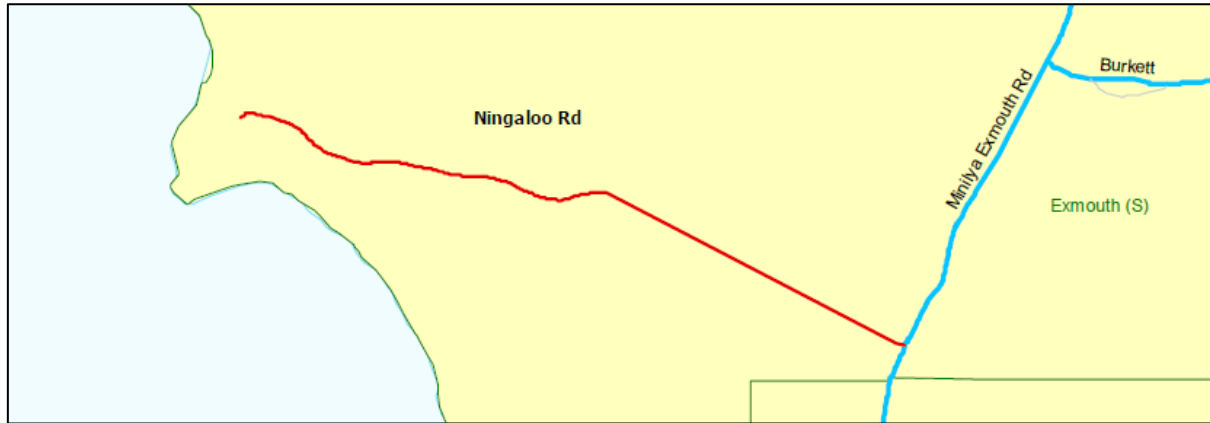
The Shire loader cleared sand for 12 days. The goal was to provide limited access through the sand to Ningaloo Station. This action become financially unachievable and the project carried increasing risk of failure. It is estimated that 15 days additional sand clearing works are required to provide temporary access. This is subject to wind conditions. The sand clearing project was stopped.



At this stage the road is open to 4 WD vehicles only.

**ROAD DEVELOPMENT STRATEGY**

The development strategy is to maintain/construct Ningaloo Road to a Type 2 formed road.



## **NORTH WEST COASTAL HWY TO KENNEDY RANGE AND MOUNT AUGUSTUS ROUTE**

**Lyndon – Minnie Creek Road (8030078, 8050048) - Local Distributors**

**Lyndon – Towera Road (8030077) - Local Distributor**

**Minilya – Lyndon Road (8030174) - Local Distributor**

**Carnarvon and Upper Gascoyne Shires**

**Last Reviewed: May 2021**

### **ROAD FUNCTION**

The function of these roads is to provide a direct link between the Kennedy Range/Mount Augustus and the Exmouth area. It is also a direct link between pastoral stations and services the pastoral station needs.

Lyndon – Minnie Creek Road is a RAV network 6 road (conditional).

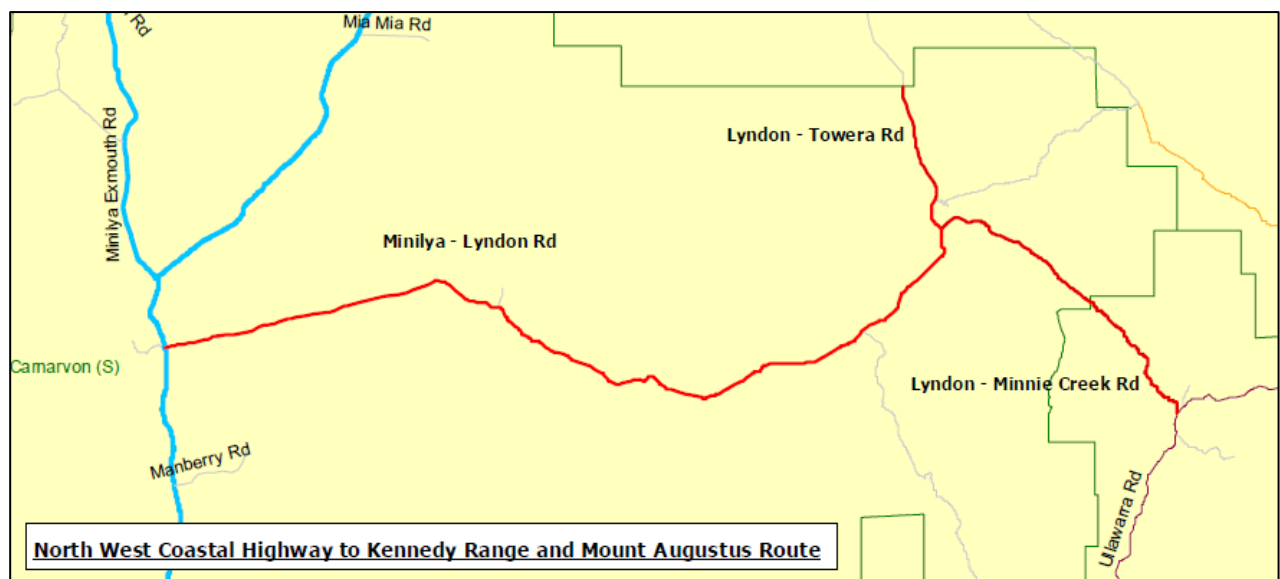
### **ROAD DEVELOPMENT NEED**

There is a need to provide more direct links and better standard roads between tourist destinations in the Gascoyne Region.

For people living in the northern parts of the region, this proposal links Exmouth more directly than travelling via Carnarvon and the North West Coastal Highway.

### **ROAD DEVELOPMENT STRATEGY**

The Strategy is to provide a good gravel road between Mangaroon and North West Coastal Highway. This will link into the Gascoyne Junction to Mount Augustus Route and provide strong connectivity to the major road network.



## PIMBEE ROAD

**Road No. 8050003**  
**Local Distributor**

**Upper Gascoyne Shire**

**Last Reviewed: May 2021**

### FUNCTION

This road serves as the main southern access route out of the Shire of Upper Gascoyne when there is no need to visit Carnarvon to the west. The actual saving is 100km in one direction. Stock transport delivering cattle, sheep and goats to the southern sale yards travel this road due to the time and fuel saved. Local and tourist traffic use this route, it is also a mail route. Pimbee Road is a RAV Network 6 road (conditional).

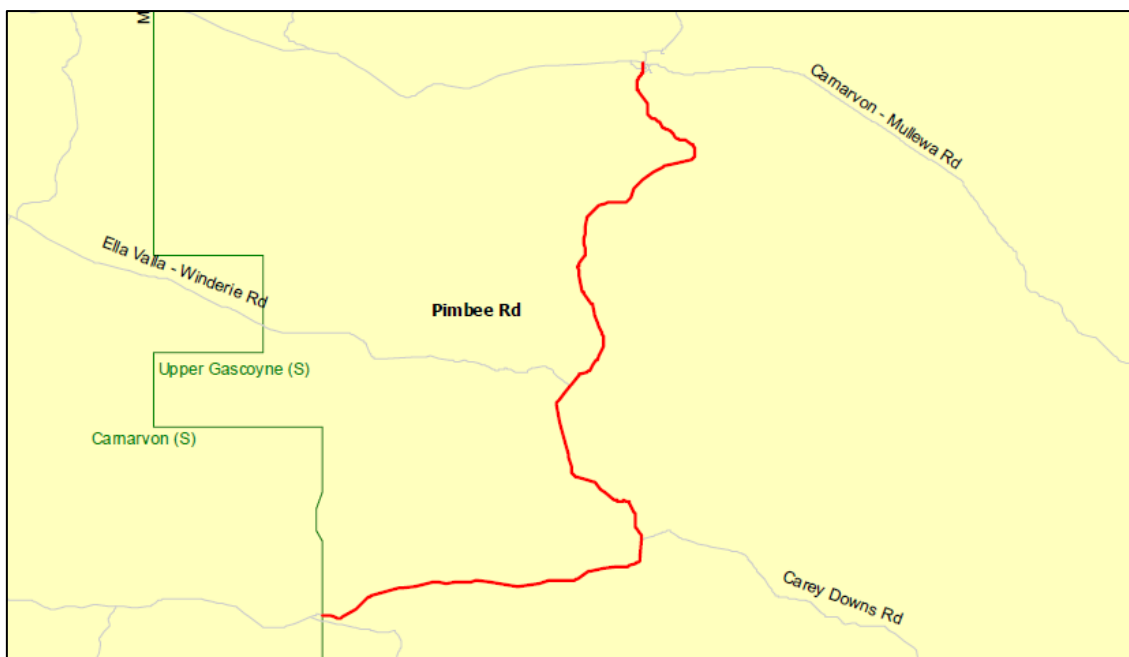
### DEVELOPMENT NEED

The road at present is mostly Type 2 and requires upgrading to a Type 3 all-weather gravel standard. Some sections require horizontal realignment to provide a more consistent speed environment. There are numerous vertical geometry improvements required particularly on the northern end of the road to address drainage issues.

There is also a need to improve roadside drainage as there are large segments of the road that currently experience long periods where water accumulates and lays on the road restricting vehicle access. Drainage and surface improvements will allow traffic to transverse these sections during normal winter conditions.

### DEVELOPMENT STRATEGY

The development strategy is to improve the road to a consistent Type 3 standard by improvements in horizontal and vertical geometry, reforming and resheeting works and drainage improvements including the construction of new drainage and renewal of existing drainage and construction of cement stabilized flood ways.



## PLANTATION ROADS

### **Bibbawarra Road 8030062 Regional Distributor and Access Road North River Road 8030053 Regional Distributor**

**Carnarvon Shire**

**Last Reviewed: May 2021**

#### **ROAD FUNCTION**

The function of these roads is to provide access for local traffic, tourism and freight for the horticulture district.

Bibbawarra Road and North River Road are heavy haulage routes which service plantations with both incoming and outgoing freight.

Bibbawarra Road is a RAV network 1 road.

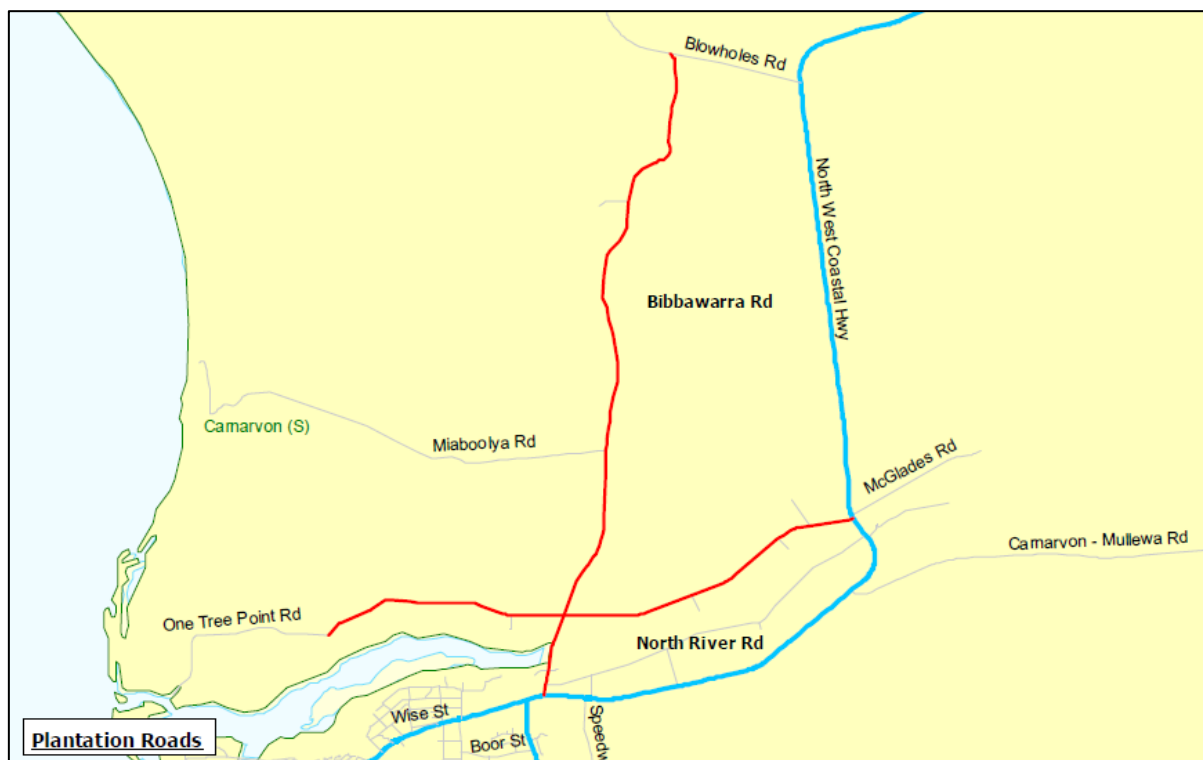
North River Road is a RAV network 8 road.

#### **ROAD DEVELOPMENT NEED**

With the ever-increasing demand of tourism and heavy vehicles utilising these roads, the standards have been found to be inadequate for safety and access.

#### **ROAD DEVELOPMENT STRATEGY**

Reconstruction of both roads in parts to satisfy drivability and safety concerns.



## **ROBINSON STREET – BANKSIA DRIVE ROUTE**

**Robinson Street (8030247)**

**Banksia Drive (8030246)**

**Access Roads**

**Carnarvon Shire**

**Last Reviewed: August 2021**

### **FUNCTION**

Robinson Street continues from Coral Bay Road (M047), terminating at a carpark area. This is the primary access road to all tourist accommodation in Coral Bay, all dining venues, the shopping area, public toilets and main beach accesses with frontage to the World Heritage Ningaloo Reef.

Banksia Drive connects Coral Bay Road (M047) and Monck Head Drive providing access to Coral Bay Boat Ramp (Department of Transport).

### **DEVELOPMENT NEED**

Robinson Street traffic has increased in recent years due to increased visitor numbers. Traffic demand will continue to increase as Coral Bay accommodation is booked to capacity for months at a time during peak periods with further expansions of visitor capacity planned. Robinson Street traffic is often caravans, RVs and boats and as the current road is a dead end, this creates bottlenecks and congestion. High levels of pedestrian and other non-vehicular traffic are also present.

The development need is for localised widening, additional on street parking, traffic calming and shared use areas to support tourism development and to improve road safety and reduced traffic congestion. Upgrade from Type 4 to Type 6 required.

The extension of Banksia Drive is identified in the Coral Bay Settlement Structure Plan (WAPC Ref SPN-0557). Extension of Banksia Drive will provide alternative access existing tourism facilities and will support future tourism development of adjacent land parcels. Development of the road is needed to assist traffic flow and reduce congestion in the Coral Bay Settlement area. Problematic at present due to the Robinson Street dead end.

Traffic numbers in the settlement continue to increase with all accommodation in Coral Bay booked to capacity for months at a time during peak visitor periods.

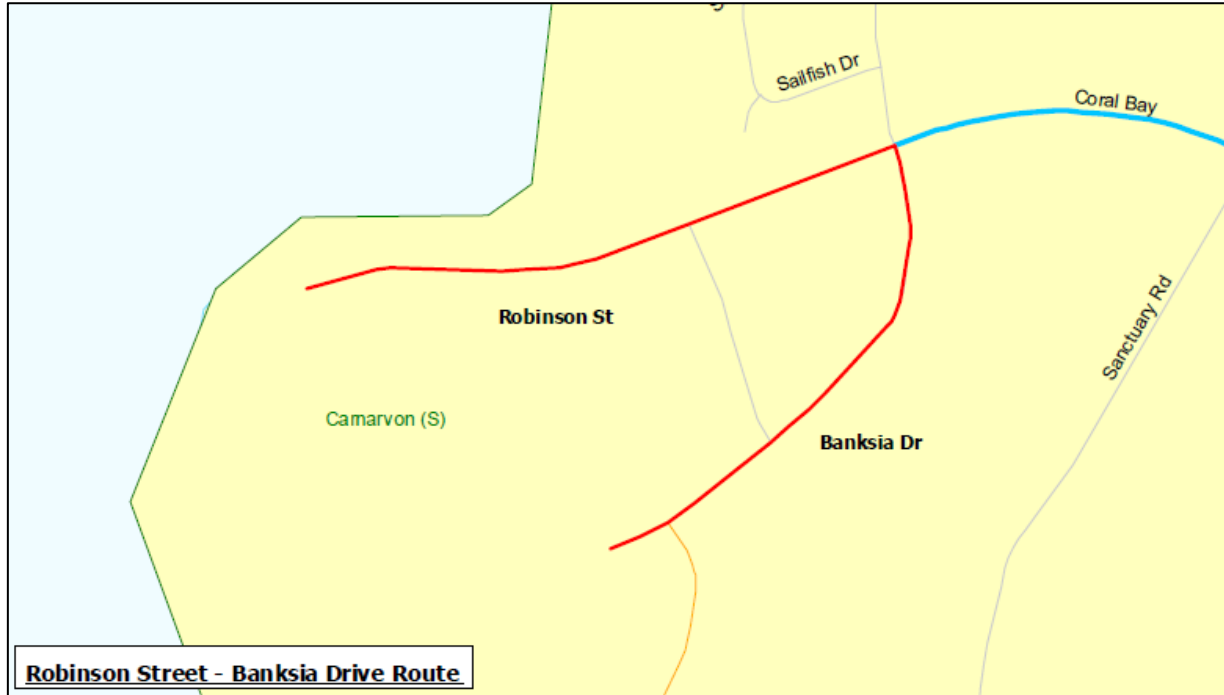
Upgrade to Type 5 road required.

### **DEVELOPMENT STRATEGY**

Road Project Grants, Roads to Recovery grants and State Initiatives grants would be utilised to fund road widening, traffic calming and the development of shared use zoned areas.

The development strategy for Banksia Drive is for construction to sealed pavement and shoulder standard of a 650m extension through the existing road reserve to link with Robinson Street. Staging may be required.

Funding sources are expected to include Road Project Grants, State Initiative Grants and Roads to Recovery grants.



## SHARK BAY AIRPORT ROAD

**Road No. 8040017**  
**Access Road**

**Shark Bay Shire**

**Last Reviewed: December 2021**

### **FUNCTION**

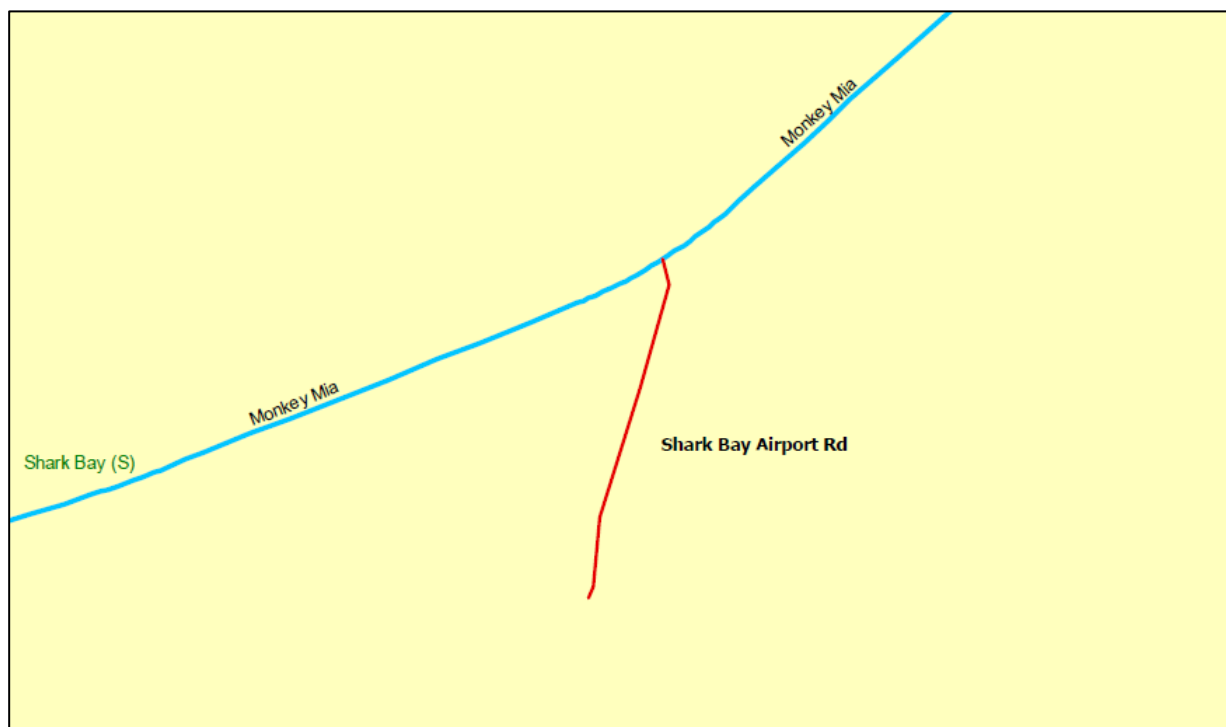
This road is an access road to the local airport. This road is a type 4 access road. This road is important for the transfer of people to and from the airport. Passengers for the commercial flights and tourists for the scenic flights.

### **DEVELOPMENT NEED**

The need is to continue to maintain this road to a suitable standard to ensure the safety of the current and future road users.

### **DEVELOPMENT STRATEGY**

The development strategy is to reseal the existing sealed pavement as required. Maintain the existing gravel shoulders until sealed shoulders can be implemented.



## STELLA ROWLEY DRIVE

**Road No. 8040067**  
**Local Distributor**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### ROAD FUNCTION

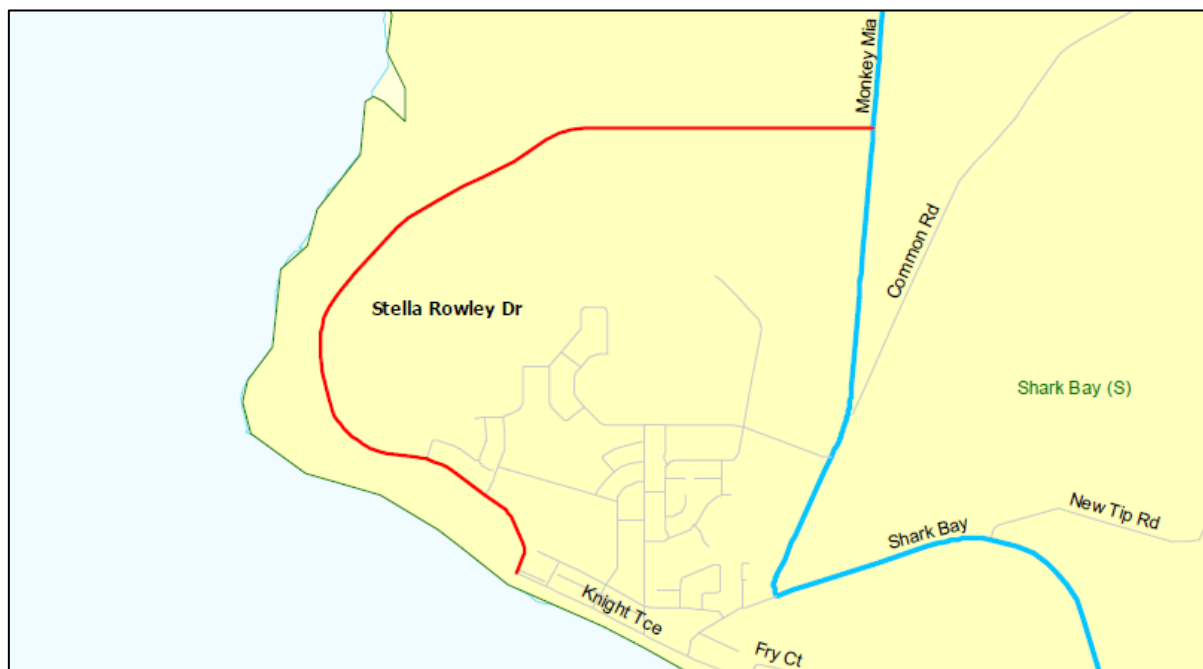
This road is a Type 5 local distributor. The road connects Monkey Mia Road with the Roundabout on Knights Terrace. Stella Rowley Drive is used by tourists and locals and is the main link between Denham and Monkey Mia. This road is also part of the World Heritage Drive scenic route that starts at the Overlander Roadhouse and terminates at Monkey Mia.

### ROAD DEVELOPMENT NEED

As traffic movements along Stella Rowley Drive continue to escalate there is an increasing chance of accidents occurring as the shoulders are narrow and very soft in places and the batter slope extremely steep.

### ROAD DEVELOPMENT STRATEGY

The development strategy for this road is to remove unsuitable material from the existing shoulders and replace with gravel to a suitable width. Additional material will also need to be imported to construct suitable batters in conjunction with surface retreatment.





## USELESS LOOP ROAD

**Road No. 8040024**  
**Local Distributor**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### FUNCTION

The road provides the only road access to the salt mining operation and community at Useless Loop. Access to Steep Point and False Entrance, which are popular tourist fishing locations, is also via the Useless Loop Road.

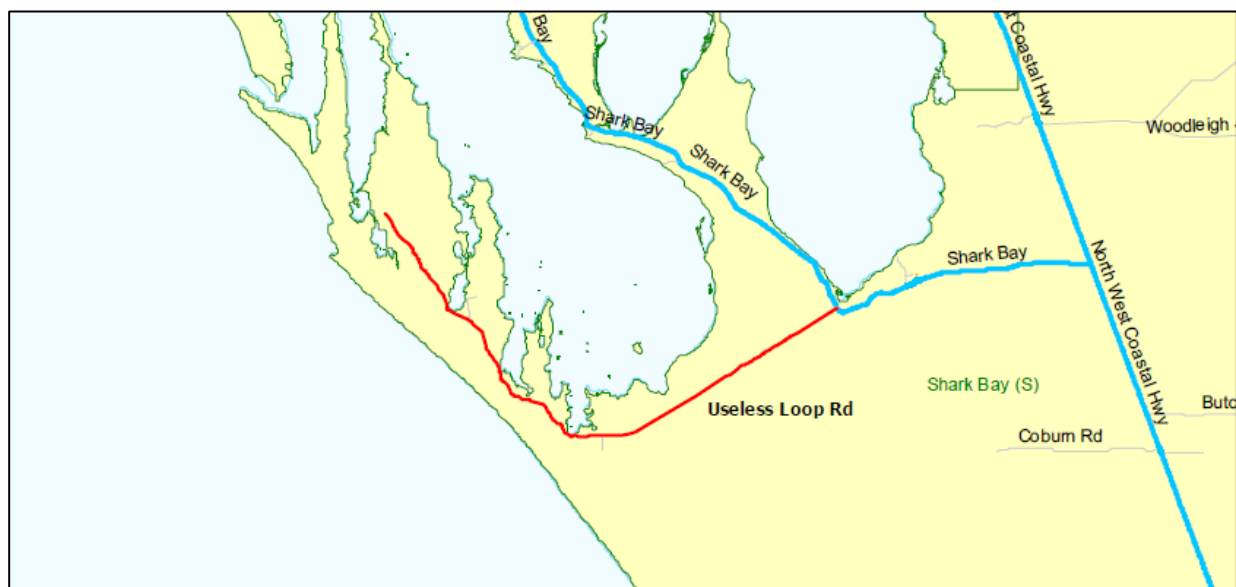
Useless Loop Road is a RAV Network 6 road.

### DEVELOPMENT NEED

The people living at Useless Loop are isolated from other regional towns by a poor standard road access. The need exists to improve the standard of road access to the Useless Loop community and Steep Point to provide social and economic benefits.

### DEVELOPMENT STRATEGY

Upgrading initially to a uniform formed road standard is required in the short term. This should be progressively improved to a formed gravel stage followed by sealing in the longer term.



## WAHROONGA – PIMBEE ROAD

**Road No. 8030086**

**Local Distributor**

**Carnarvon Shire**

**Last Reviewed: August 2021**

### FUNCTION

Wahroonga-Pimbee Road hierarchy is classified as local distributor, with a RAV rating of Network 6 tandem drive, Network 1 tri drive and PBS concession 2B.1.

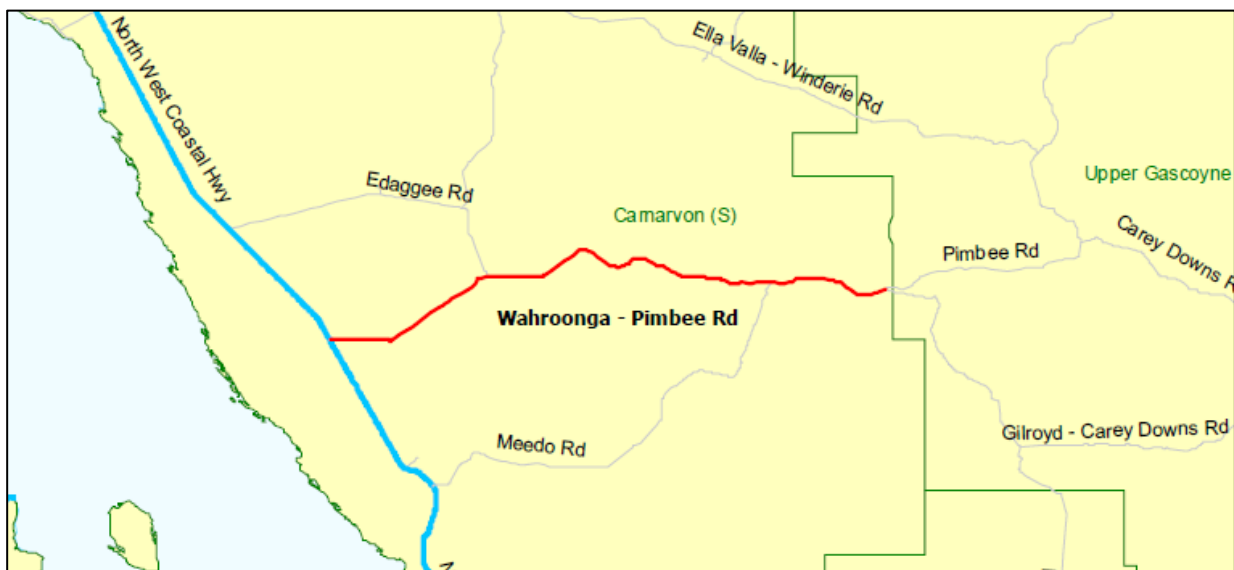
Wahroonga-Pimbee Road provides the most direct access from the North West Coastal Highway to Gascoyne Junction joining Pimbee Road (8050003) already considered a Significant Road.

### DEVELOPMENT NEED

The Wahroonga-Pimbee Road has experienced increased tourist traffic travelling between the highway and the Shire of Upper Gascoyne accessing camping destinations such as Kennedy Range and Mt Augustus. Road also used for stock transport from Shire of Upper Gascoyne as a shorter direct route bypassing the Carnarvon townsite. Road is prone to washouts and has sections of reduced pavement depths and widths. Upgrade to consistent Type 3 standard needed.

### DEVELOPMENT STRATEGY

Road Project Grants will be used for pavement works, resheeting works and installation of additional drainage (culverts and floodways). Progressive strategy required to focus firstly on known problem areas.



## WOODLEIGH – BYRO ROAD

**Road No. 8040002**  
**Local Distributor**

**Shark Bay Shire**

**Last Reviewed: May 2021**

### FUNCTION

Woodleigh – Byro Road provides access from North West Coastal Highway to local pastoral roads and provides access to the Shark Bay coastal region from the Murchison. The road also serves as access to Compressor Station No.6 on the Dampier to Bunbury natural gas pipeline.

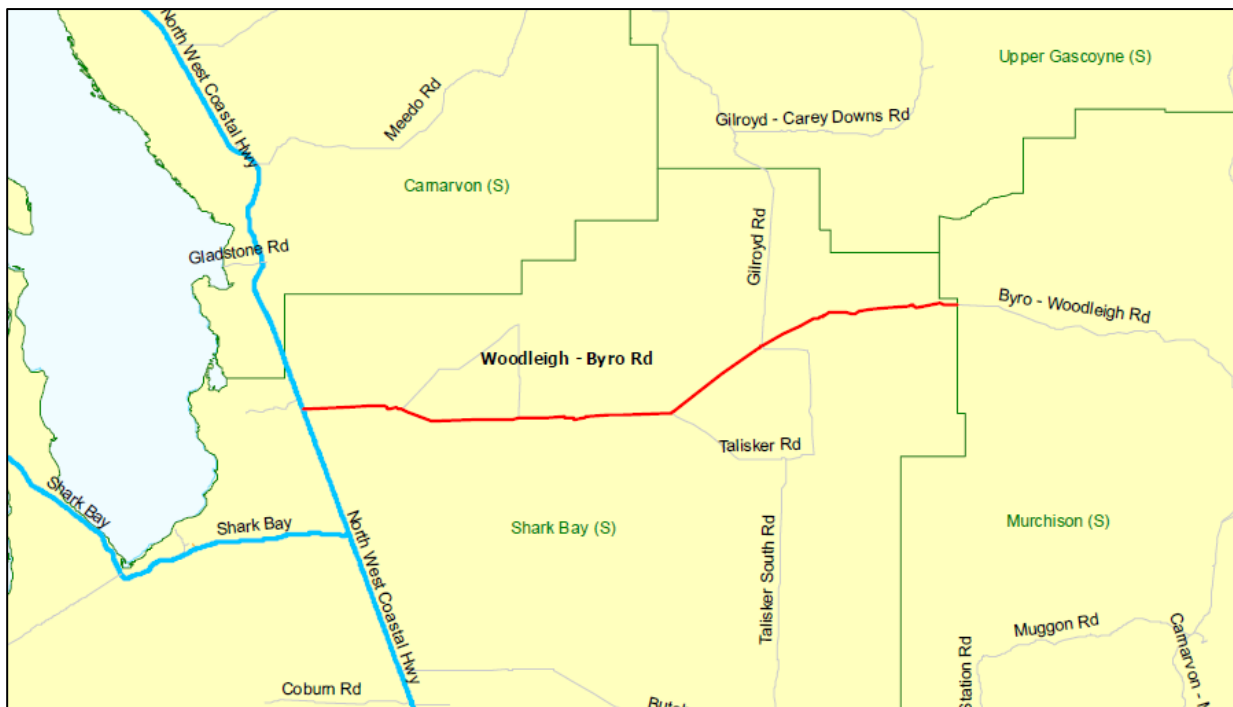
Woodleigh – Byro Road is a RAV Network 6 road.

### DEVELOPMENT NEED

The road is an alternative link to the Shark Bay region for people commuting from the Murchison and is in need of upgrading to cater for the increasing traffic.

### DEVELOPMENT STRATEGY

The Development Strategy for the route is to construct the road to a Type 3 gravel standard.



## **YARDIE CREEK ROAD**

**Road No. 8060038**

**Local Distributor**

**Exmouth Shire**

**Last Reviewed: May 2021**

### **ROAD FUNCTION**

Yardie Creek Road provides sealed access to the Ningaloo Coast World Heritage Area, Ningaloo Beach's, Reef and Cape Range National Park. Subject to Environmental conditions and Military training access south over Yardie Creek via YCR to Coral Bay through DPaW, Shire, Defence and Station lands is achievable by 4 WD.

With Exmouth being promoted as the "Northern Gateway" to the Ningaloo Reef and with development increasing in the town site and increased usage of the World Heritage coastline in between Exmouth, Coral Bay and Carnarvon, it is appropriate that access is maintained.

World Heritage recognition will inevitably attract increased tourism and investment from both existing and prospective owners.

Yardie Creek Road is included in the RAV 4 Network system (conditional)

### **ROAD DEVELOPMENT NEED**

Increasing traffic to the Exmouth region is placing high demands on the existing road which is under-engineered, and its design does not meet current standards. It is expected that traffic volumes will increase on Yardie Creek Road as the Shire continues to develop.

The benefits of works proposed in the Development Strategy are asset preservation, traffic safety considering increases in development and tourism.

### **ROAD DEVELOPMENT STRATEGY**

An evaluation examining the maintenance cycles, quantities and cost associated with maintaining the full length of YCR (76 km) has been completed. This process included the formulation of the 20-year maintenance program for YCR.

The road's redesign will focus on upgrading the existing Type 4 Road to a Type 5 Road, widening the seal to 7 m.



## SERVICE LEVELS

### **Type 1 – Unformed Road**

(Cleared-flat bladed, minimum construction, formation consists of adjacent material)

This type is the first stage development of the road when the alignment is cleared of all vegetation with the running surface constructed from materials in-situ. This type of road allows for light traffic. With minimal drainage provision, the road is prone to closure during periods of heavy rainfall.

### **Type 2 – Formed Road**

(Formed (raised) and drained road without imported material or a constructed pavement)

To avoid possible further relocation of the road and the resultant impact on the landscape environment, Type 2 earthworks are constructed using local road-making material and improved drainage control.

### **Type 3 – Gravel Road**

(Road construction from imported material of adequate thickness, shaped and drained)

When maintenance costs increase to unacceptable levels or when economic or social benefits are evident, a Type 2 road can be improved by sheeting the surface with suitable gravel material to become a Type 3 road.

### **Type 4 – Sealed Road (6m Seal Width)**

(Sealed with no kerbing)

Sealing is carried out to improve road-user comfort and safety when the road is experiencing higher traffic volumes or when significant numbers of heavy vehicles are required to use a Type 3 road. A Type 3 road is upgraded to Type 4 by building up the residual gravel pavement to full thickness. This is then compacted and sealed.

### **Type 5 – Sealed Road (7m Seal Width)**

This is further development of the Type 4 road with extra seal width being provided to cater for higher traffic volumes and a high proportion of heavy vehicles.

### **Type 6 – Sealed Road (8 - 9m Seal Width)**

This stage represents further development of a Type 4 or Type 5 road with additional seal width being provided as traffic volumes increase to improve safety; reduce maintenance costs; provide space for a stationary vehicle to stand clear of traffic lanes; and to assist cyclists.

### **Type 7 – Sealed Road with Overtaking Lane**

An additional lane is provided on two-laned sealed roads when the traffic volume; proportion of heavy vehicles; and overtaking opportunities on adjoining sections of road cause traffic bunching to occur.

### **Type 8 – Dual Carriageway**

An additional carriageway is provided to improve safety and increase the capacity on high volume roads.

## ROAD NUMBERING SYSTEM

The road numbering system used throughout this Strategy document is explained as follows.

Local Roads, managed by Local Government Authorities (LGAs), have seven digit road numbers. The first three digits indicate the LGA that manages the Local Road, the final four digits denote the number, or label, assigned to that road by the LGA. The following table summarises the LGA codes for the Gascoyne region.

<b>Local Government Authority</b>	<b>Code</b>
Carnarvon	803
Shark Bay	804
Upper Gascoyne	805
Exmouth	806

As an example, consider the Carnarvon – Mullewa Road. The portion of Carnarvon-Mullewa Road (8030242) managed by Carnarvon Shire has been numbered “0242” by this shire. Upper Gascoyne Shire has numbered its portion of Carnarvon – Mullewa Road (8050045) as “0045”.

## RESTRICTED ACCESS VEHICLE (RAV) NETWORKS

Main Roads Western Australia has granted certain Restricted Access Vehicles (RAVs) conditional access to specified Western Australian roads, through the gazettal of a Class 2 and 3 Notice under the provisions of the Road Traffic (Vehicle Standards) Regulations 2002.

Refer to the Heavy Vehicle website:

<https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/>

### APPENDIX 1: TABLE OF ROUTES WITH SLKS

GASCOYNE RRG ROADS										
Route Name	Road Name/s	Road Number	Road Hierarchy	Local Government	SLKS & LENGTH				ROAD SURFACE KMS	
					SLK FROM	SLK TO	ROAD LENGTH	TOTAL KMS	SEALED	UN SEALED
BUTCHERS TRACK	Butchers Track	8040038	Local Distributor	Shark Bay	0.000	79.440	79.440	79.440		
CARNARVON MULLEWA ROAD	Carnarvon Mullewa Road	8030242	Regional Distributor	Carnarvon	0.000	117.950	117.950	305.000		
	Carnarvon Mullewa Road	8050045	Regional Distributor	Upper Gascoyne	0.000	187.050	187.050			
CARNARVON TOWNSITE ROADS	Cornish Street	8030052	Access Road	Carnarvon	0.000	3.390	3.390	6.300		
	Robinson Street	8030241	Local Distributor	Carnarvon	0.000	0.000	0.440			0.44
	Harbour Road	8030209	Access Road	Carnarvon	0.000	2.470	2.470			
DALGETY DOWNS ROUTE	Dalgety Downs Glenburgh Road	8050013	Regional Distributor	Upper Gascoyne	0.000	21.850	21.850	98.600		
	Dalgety Downs Landor Road	8050005	Regional Distributor	Upper Gascoyne	0.000	76.750	76.750			
EAGLE BLUFF ROAD	Eagle Bluff Road	8040015	Access Road	Shark Bay	0.000	4.380	4.380	4.380		
GASCOYNE JUNCTION TO KENNEDY RANGE AND MOUNT AUGUSTUS	Cobra Dairy Creek Road	8050001	Local Distributor	Upper Gascoyne	0.000	161.495	161.495	331.855		
	Cobra Gifford Creek Road	8050007	Local Distributor	Upper Gascoyne	0.000	31.770	31.770			
	Cobra Mount Augustus Road	8050020	Local Distributor	Upper Gascoyne	0.000	46.940	46.940			
	Edmund Gifford Creek Road	8050006	Local Distributor	Upper Gascoyne	0.000	28.650	28.650			
	Ullawarra Road	8050002	Local Distributor	Upper Gascoyne	0.000	226.000	63.000			
HAMELIN POOL ROAD	Hamelin Pool Road	8040012	Access Road	Shark Bay	0.000	5.300	5.300	5.300		
MINE AND COASTAL ACCESS	Blowholes Road	8030066	Local Distributor	Carnarvon	0.000	48.820	48.820	132.750		
	Quobba-Gnaraloo Road	8030121	Local Distributor	Carnarvon	0.000	83.930	83.930			
MOUNT AUGUSTUS TO GREAT NORTHERN HIGHWAY	Landor Meekatharra Road	8050032	Regional Distributor	Upper Gascoyne	0.000	180.010	180.010	283.270		
	Landor Mount Augustus Road	80500040	Local Distributor	Upper Gascoyne	0.000	103.260	103.260			
MURAT ROAD	Murat Road	8060066	Regional Distributor / Local Distributor	Exmouth	0.000	16.450	16.450	16.450		
NANGA ROAD	Nanga Road	8040007	Access Road	Shark Bay	0.000	2.650	2.650	2.650		
NINGALOO ROAD	Ningaloo Road	8060083	Local Distributor	Exmouth	0.000	29.330	29.330	29.330		
NORTH WEST COASTAL HIGHWAY TO KENNEDY RANGE AND MOUNT AUGUSTUS ROUTE	Lyndon Minnie Creek Road	8030078	Local Distributor	Carnarvon	0.000	30.650	30.650	231.521		
	Lyndon Towera Road	8030077	Local Distributor	Carnarvon	0.000	20.760	20.760			
	Minilya Lyndon Road	8030174	Local Distributor	Carnarvon	0.000	154.200	154.200			

	Lyndon Minnie Creek Road	8050048	Local Distributor	Upper Gascoyne	0.000	25.911	25.911				
PIMBEE ROAD	Pimbee Road	8050003	Local Distributor	Upper Gascoyne	0.000	86.630	86.630	86.630			
PLANTATIONS ROADS	Bibbawarra Road	8030062	Regional Distributor / Access Road	Carnarvon	0.000	15.340	15.340	27.060			
	North River Road	8030053	Regional Distributor	Carnarvon	0.000	11.720	11.720				
ROBINSON STREET BANKSIA DRIVE ROUTE	Robinson Street	8030247	Access Road	Carnarvon	0.000	0.000	0.700	1.350			
	Banksia Drive	8030246	Access Road	Carnarvon	0.000	0.000	0.650			1.35	
SHARK BAY AIRPORT ROAD	Airport Road	8040017	Access Road	Shark Bay	0.00	0.00	0.89	0.89		0.89	
STELLA ROWLEY DRIVE	Stella Rowley Drive	8040067	Local Distributor	Shark Bay	0.000	4.830	4.830	4.830			
USELESS LOOP ROAD	Useless Loop Road	8040024	Local Distributor	Shark Bay	0.000	98.000	98.000	98.000			
WAHROONGA PIMBEE ROAD	Wahroonga Pimbee Road	8030086	Local Distributor	Carnarvon	0.000	86.460	84.460	84.460			
WOODLEIGH BYRO ROAD	Woodleigh Byro Road	8040002	Local Distributor	Shark Bay	0.000	119.900	119.900	119.900			
YARDIE CREEK ROAD	Yardie Creek Road	8060038	Local Distributor	Exmouth	0.000	76.110	76.110	76.110			
							2026.076	2026.076		2.68	
			<b>TOTAL KMS SLGR FOR RRG = 2026.076 KMS</b>								
			<b>TOTAL SLKS RRG=</b>					2026.076	2026.076		2.68

Sealed / Unsealed SLKS not provided where blank.



## **APPENDIX 2: GUIDELINES AND CRITERIA FOR THE IDENTIFICATION OF SIGNIFICANT LOCAL GOVERNMENT ROADS WITH REGIONAL IMPORTANCE**



# ROADS 2040

*We're working for  
Western Australia.*

**GUIDELINES AND CRITERIA  
for the Identification of  
Significant Local  
Government Roads with  
Regional Importance**

# Document Control

<b>Owner</b>	ROAD CLASSIFICATION WORKING GROUP
<b>Custodian</b>	ROAD CLASSIFICATION MANAGER
<b>Document Number</b>	D21#507063 (File 19/5378)
<b>Issue Date</b>	October 2021
<b>Review Frequency</b>	5 years maximum

# Amendments

<b>Revision Number</b>	<b>Revision Date</b>	<b>Description of Key Changes</b>	<b>Section / Page No.</b>

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# Background

The *Regional Strategies for Significant Local Government Roads with Regional Importance* short title *ROADS 2040* are documented lists of regionally significant Local Government roads for each Regional Road Group (RRG) and the development strategies for them.

The first editions, , were released during 1997 and 1998 and were an initiative of the 1992 Memorandum of Understanding between the State Government and the Western Australian Local Government Association (WALGA), then known as the Western Australian Municipal Association (WAMA). This document will inform the compilation of the latest version, which will supersede *Roads 2030* published in 2013.

Local Governments (via RRGs) work collaboratively to review and update the current list of Significant Local Roads to produce this next strategy. This provides an agreed, strategic approach to the allocation of limited funding across the extensive road network within the state of Western Australia. Only projects on local roads included in *ROADS 2040* will be eligible for *Road Project Grant* funding under the latest *State Roads Funds to Local Government Agreement*. These Guidelines will be included in the annexure of each document.

*ROADS 2040* documents for each RRG are available on the [WALGA website](#).

Note - A separate Main Roads process is required to amend any Road Hierarchy classification. Enquiries regarding *ROADS 2040*, Road Hierarchy or other road classification process should be addressed to the Road Classification Manager at [RoadClassification@mainroads.wa.gov.au](mailto:RoadClassification@mainroads.wa.gov.au)

## Intent of these Guidelines

The intent of these guidelines and criteria is to assist Regional Road Groups to identify Significant Local Government Roads. Ideally, a consistent set of criteria will ensure equity for all Local Governments throughout the state when selecting roads to be added to *ROADS 2040*. However, a flexible arrangement is required to address the many geographical and other variations across the State, especially in the more remote and sparsely populated areas. To that end, the Regional Road Groups have autonomy to identify those circumstances where it is felt a road should be added, even if only one of the Criteria is met.

## Strategy Principles

*ROADS 2040* are an investment-planning tool to assist with allocating funding in a systematic fashion to achieve long-term significant planning goals for the Region and State through improvement of road infrastructure. These documents are created for each Regional Road Group from the lists of *Significant Local Government Roads with Regional Importance*.

## Roads Maintenance

Funds to implement the *ROADS 2040* improvement strategy are sourced from the Road Project Grants (Category 1) of the State Road Funds to Local Government Agreement (SRFLGA). State funding to assist with general maintenance needs of the local road network are typically allocated as Direct Grants.

The Office of the Auditor General (OAG) defines maintenance under two main types:

**Reactive maintenance** includes sealing cracks and fixing potholes, cleaning up verges, road markings and signs. It is short term and needs to be done on a day-to-day basis to keep roads safe and serviceable,

**Planned maintenance** is more costly but has long-term benefits. It includes:

- Resurfacing of roads in response to aging, traffic wear and to prevent water damage, bridge repairs and replacing road markings;
- Rebuilding to restore the structure of roads and bridges. That may include strengthening the roads and bridges, correcting the shape of the road or minor changes in road width.

## Routine Maintenance

Reactive maintenance is often referred to as Routine Maintenance. Routine maintenance work is not to be included in strategies for individual roads within *ROADS 2040* as it is assumed such activities will always be undertaken on roads and thus do not need to be referred to in improvement strategies. Furthermore, by its nature, routine maintenance does not improve the road.

## Periodic Maintenance

Planned maintenance is more often referred to as Periodic Maintenance.

The need for major periodic maintenance works can be included in strategies for individual roads in *ROADS 2040*. This includes works such as reseals and re-sheeting, rehabilitation, shoulder reconditioning and other heavy maintenance type works.

The potential need for inclusion of any periodic heavy maintenance work on a road must be documented as part of the overall strategy for the road.

## Reconstruction

Reconstruction of roads is not maintenance as it replaces the existing asset with a new one, typically with a design life of 40 years. Where appropriate, the need to undertake reconstruction of all or part of a road is to be included in strategies for individual roads within *ROADS 2040*.

## Roads Forming Routes

The terms “road” and “road/route” are used throughout this document. In some instances, a number of roads may be combined to create a route that is given an appropriate name for the purposes of identification. In the context of this document, “road” may include routes which have more than one individual road and an identifying route name.

# ROADS 2040 Amendments

Should a RRG agree to seek an amendment to the endorsed *ROADS 2040* this must be documented on the attached *Road Justification and Development Strategy Submission Form*. After approval by the RRG, the application must be sent to the Road Classification Manager (RCM) at Main Roads ([RoadClassification@mainroads.wa.gov.au](mailto:RoadClassification@mainroads.wa.gov.au)) who will assess the application and provide advice to SAC concerning alignment of the road/route with the criteria. If the RCM determines that the road does not meet the criteria, the RCM will refer the application back to the RRG requesting further investigation. The RCM will then submit the application to the *State Road Funds to Local Government Advisory Committee* (SAC) for endorsement. If endorsed, the Road Classification Manager shall update the relevant *ROADS 2040* documents (including on-line documents).

If an affected road/route crosses into an adjoining Region, then agreement should be reached with the adjoining RRG on the proposed change and both RRGs must apply for the amendments submitting copies of the approved forms from the adjoining RRG with the application.

Roads forming part of a larger Route should be shown as forming part of the Route and should be listed under the Route details on the *Road Justification and Development Strategy Submission Form*.

# Criteria

For any road/route proposed for inclusion in ROADS 2040, it shall meet **two (2)** of these criteria (from at least two of the five sections) unless motivated under section 5: **REGIONAL ROAD GROUP CRITERIA**

## CRITERIA FOR SIGNIFICANT LOCAL ROADS/ROUTES

### SECTION 1: NETWORK / SIGNIFICANT

- Roads/routes connecting areas or towns of significance to the Region
- A road/route that is a **Regional or Inter Regional Route** providing the main connection between this region and other regions, in the State and interstate. Note – “region” does not refer specifically to Main Roads or RRG Regions in this instance refers to a generic region of significance i.e. tourist region, mining region, major town or centre etc.
- A road/route that connects **major transport terminals** or connects a **major transport terminal** to a major route. Examples of a **Major Transport Terminal include** Bulk Storage facilities, Container yards, Rail or Air terminals and other terminals that generate a significant freight movement.
- A road/route that serves a **major resource or industrial site**. Such as mine sites, abattoirs, stock yards etc.
- A road/route providing access to **significant institutions or regional community service centres**. Such as schools, hospitals etc.
- A road/route that provides access to a remote community (including Aboriginal communities), OR a road that is the only land access between a remote community (including Aboriginal communities) and at least one town centre.
- **URBAN ROADS** – A road (or section of a road) which is the main connector to a significant hub e.g. industrial area, port facility, airport, major shopping centre or activity centre. A road (or section of a road) which connects two rural routes/roads qualifying as Significant Local Government Roads through a townsite via the most direct and/or suitable route (e.g. a heavy vehicle bypass). This is only for roads that do not form part of another significant route/road.

### SECTION 2: ROAD FUNCTION/FREIGHT

- **RURAL ROADS ONLY** - A **Major Route** that performs a Regional Distributor function as shown in the Road Hierarchy.
- **URBAN ROADS ONLY** – A road that is a Local Distributor or higher category in the Road Hierarchy.
- **RURAL ROADS ONLY** - A road that forms part of the **Restricted Access Vehicle notice** network 2 or above.
- **URBAN ROADS ONLY** A road that forms part of the **Restricted Access Vehicle notice** network 4 or above.
- A road used for hauling grain from an off rail bin to a railhead OR is included in a network such as the [Secondary Road Freight Network Map](#). (Follow link and see page 24).



### **SECTION 3: TRAFFIC VOLUME**

- Has a PCU adjusted traffic seasonal ADT count (see the attached table) of greater than 200. To ensure the traffic figures represent seasonal demand, traffic counts should show the high demand during the peak season. This should be taken over 6 to 8 weeks during the peak activity period  
(PCU = Passenger Car Unit. ADT = Average Daily Traffic)
- URBAN ROADS ONLY- has a PCU adjusted traffic count (see the attached table) of over 10% of the town or city's current population OR a minimum 200 PCU.

### **SECTION 4: TOURISM**

- Roads that provide access to tourist attractions or recreation areas of State or regional significance, OR Roads that form part of a State tourist drive or way. The Regional Road Group can also determine that a road is a significant Tourist Route.

### **SECTION 5: REGIONAL ROAD GROUP CRITERIA**

- The Regional Road Group (RRG) may allow the submission of a road/route only meeting one criteria if it feels that the road/route in their opinion has merit for consideration as a Significant Local Government Road. The RRG must show why they consider the road/route as being significant.

### **OTHER CONSIDERATIONS**

Parallel routes should be avoided. However, this is not to be a determining factor to reject an application if the Local Government and RRG approve the proximity of a parallel route being appropriately warranted.

## DEFINITIONS

**Regional Route** – Shall be defined as a road that provides a connection between inter – regional routes (State Roads) or between inter – regional routes (State Roads) and areas or towns of significant population.

**Major Route** – A road that provides both regional and inter-regional access and is a Regional Distributor in the Western Australian Road Hierarchy.

**Urban Road** – A road mainly located within a built up area of a town or city.

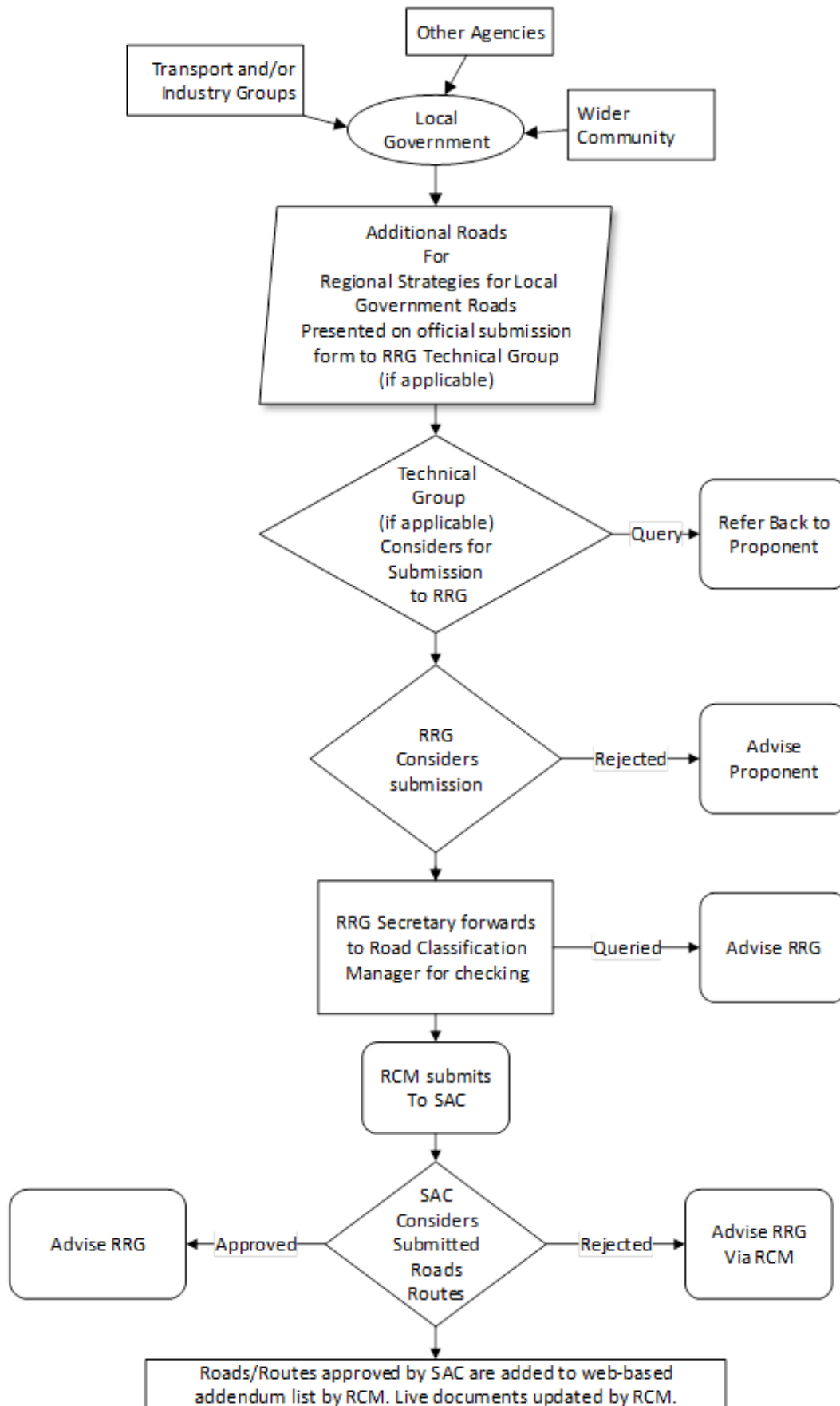
## PCU CONVERSION

The table below adjusts the AADT count to show approximate equivalent volumes of Passenger Car Units on the roads within Western Australia.

Austroads Class	Max Length in WA.	Passenger Car Unit
1 (1:1)	12.0m	1
2 to 5	14.5m	2.0
6 to 9	20.0m	3.0
10	27.5m	4.0
11	36.5m	6.0
12	53.5m	8.0
Motor cycle	-	0.4
Pedal cycle	-	0.2

Note – this conversion table is for traffic counts of mixed class vehicle types to approximate the counts to equivalent Passenger Car Units and may not be applicable to road design applications

## ONGOING REVIEW AND UPDATE PROCESS



N.B. Local Government includes Council Approval

## USEFUL LINKS

Town and City populations WA <https://www.citypopulation.de/php/australia-westernaustralia.php>

[ABS population data by region](#)

[Aboriginal Community Maps](#)

[Dept. Mines, Industry Regulation and Safety Mineral and Petroleum deposits.](#)

[Tourist Spot Map WA](#)

[Census quick stats data 2016 - Link Here](#)

[Secondary Road Freight Network Map](#)

[MRWA Traffic Map](#)

[RAV Map](#)

[Main Roads Portal Mapping](#)

### CONTACT AT MAIN ROADS:

ROAD Classification Manager – [RoadClassification@mainroads.wa.gov.au](mailto:RoadClassification@mainroads.wa.gov.au)

Other Enquiries - [enquiries@mainroads.wa.gov.au](mailto:enquiries@mainroads.wa.gov.au)

**SUBMISSION FORM ROADS 2040**

**Significant Local Roads with Regional Importance – Route/Road Justification and Development Strategy**

**Submission/Assessment Form..... Regional Road Group**

<b>RRG Determination</b>		
Office Use Only	Accepted <input type="checkbox"/>	Rejected <input type="checkbox"/>

<b>Local Government:</b>
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MRWA Road Classification Manager – does the route meet the criteria	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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Endorsed by SAC. Date.....	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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**Road Description and Location**

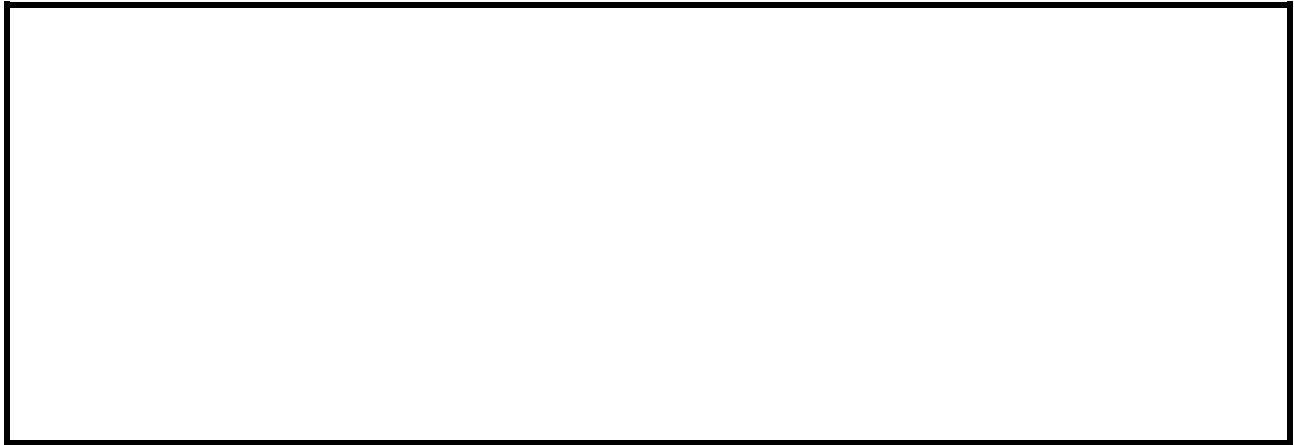
Road/Route Name: .....

Road Name	Road Number	Road Type (LoS)	Start SLK	Finish SLK	Length (kms)	Un sealed (kms)	Sealed (kms)

If Route Name nominated provide details of all roads forming the route otherwise enter details of above road on the first line below  
Note – **Location map MUST be attached**

## Road Justification

<b>Road Function</b>
Include road hierarchy category, RAV Network No (if applicable) and a comment on how the road makes a positive contribution to the economic and/or social wellbeing of the region and WA as a whole
<b>Road Development Need</b>
Provide details of the road's future use
<b>Road Development Strategy</b>
Provide a brief high level summary for the future development of the road including proposed funding sources (i.e. Road Project Grant, Black Spot)
<b>Criteria Met</b>
List the Criteria items consider to be met against the <i>CRITERIA FOR SIGNIFICANT LOCAL ROADS</i>



## SERVICE LEVELS

### **Type 1 – Unformed Road**

(Cleared-flat bladed. Minimum construction. Formation consists of adjacent material)

This type is the first stage development of the road when the alignment is cleared of all vegetation with the running surface constructed from materials in-situ. This type of road allows for light traffic. With minimal drainage provision, the road is prone to closure during periods of heavy rainfall.

### **Type 2 – Formed Road**

(Formed (raised) and drained road without imported material or a constructed pavement)

To avoid possible further relocation of the road and the resultant impact on the landscape environment, Type 2 earthworks are constructed using local road-making material and improved drainage control.

### **Type 3 – Gravel Road**

(Road construction from imported material of adequate thickness, shaped and drained)

When maintenance costs increase to unacceptable levels or when economic or social benefits are evident, a Type 2 road can be improved by sheeting the surface with suitable gravel material to become a Type 3 road.

### **Type 4 – Sealed Road (6 m Seal Width)**

(Sealed with no kerbing)

Sealing is carried out to improve road-user comfort and safety when the road is experiencing higher traffic volumes or when significant numbers of heavy vehicles are required to use a Type 3 road. A Type 3 road is upgraded to Type 4 by building up the residual gravel pavement to full thickness. This is then compacted and sealed.

### **Type 5 – Sealed Road (7 m Seal Width)**

This is further development of the Type 4 road with extra seal width being provided to cater for higher traffic volumes and a high proportion of heavy vehicles.

### **Type 6 – Sealed Road (8 – 9 m Seal Width)**

This stage represents further development of a Type 4 or Type 5 road with additional seal width being provided as traffic volumes increase to improve safety; reduce maintenance

costs; provide space for a stationary vehicle to stand clear of traffic lanes; and to assist cyclists.

### **Type 7 – Sealed Road with Overtaking Lane**

An additional lane is provided on two-laned sealed roads when the traffic volume; proportion of heavy vehicles; and overtaking opportunities on adjoining sections of road cause traffic bunching to occur.

### **Type 8 – Dual Carriageway**

An additional carriageway is provided to improve safety and increase the capacity on high volume roads.