

Midland Highway 10 Year Action Plan

Midland Highway Final Stages: Oatlands, Ross and North of Campbell Town

Submission to the Parliamentary Standing Committee on Public Works

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I. Introduction

I.1. Project Name

Midland Highway Final Stages: Oatlands, Ross and North of Campbell Town

I.2. Project Summary

The Midland Highway forms part of Tasmania's National Transport Network and is the major transport link between Tasmania's north and south.

The Australian and Tasmanian Governments have committed \$565 million in funding over 10 years to the Midland Highway Action Plan to upgrade the highway to the Australian Road Assessment Program (AusRAP) 3-star safety rating. AusRAP is part of the International Road Assessment Program (iRAP) that uses star ratings to measure the safety of a road's infrastructure. Each road is assigned a star rating which tells us how safe the road itself is and allows road safety improvements to be identified and costed. The AusRAP rating for the highway prior to the commencement of the Action Plan was predominantly 2-star, with some sections only achieving a 1-star rating.

The majority of the highway has been completed, with approximately 52km remaining in the Final Stage sections. The Midland Highway Final Stages: Oatlands, Ross and North of Campbell Town project is split into three different packages, the locality of the packages is shown in section 1.3 Project Location of this report. The Oatlands section is approximately 16.8 km long, bounded by Jericho and south of York Plains. The Ross section is 14.3 km long, starting at Mona Vale Road up to the southern entrance to Campbell Town. The Campbell Town section is the longest of the three at approximately 20.8 km, beginning at the northern entrance to Campbell Town and ending at Epping Forest.

The project aims to improve road safety and driver amenity by providing a safer road with more dedicated overtaking opportunities. This will be achieved through the provision of a flexible safety barrier within a central median, widened sealed shoulders and regular use of a "2+1" lane arrangement. This will reduce the likelihood of head-on collisions, while maintaining a speed environment of 110 km/h. The design has aimed to use the existing pavement where feasible to deliver the most cost-effective solution, ensuring the project delivers a good use of public funds while maximising the safety benefits of the road upgrades.

The project is now in the Reference Design Phase, with construction forecast to start in Spring 2021.

1.3. Project Location

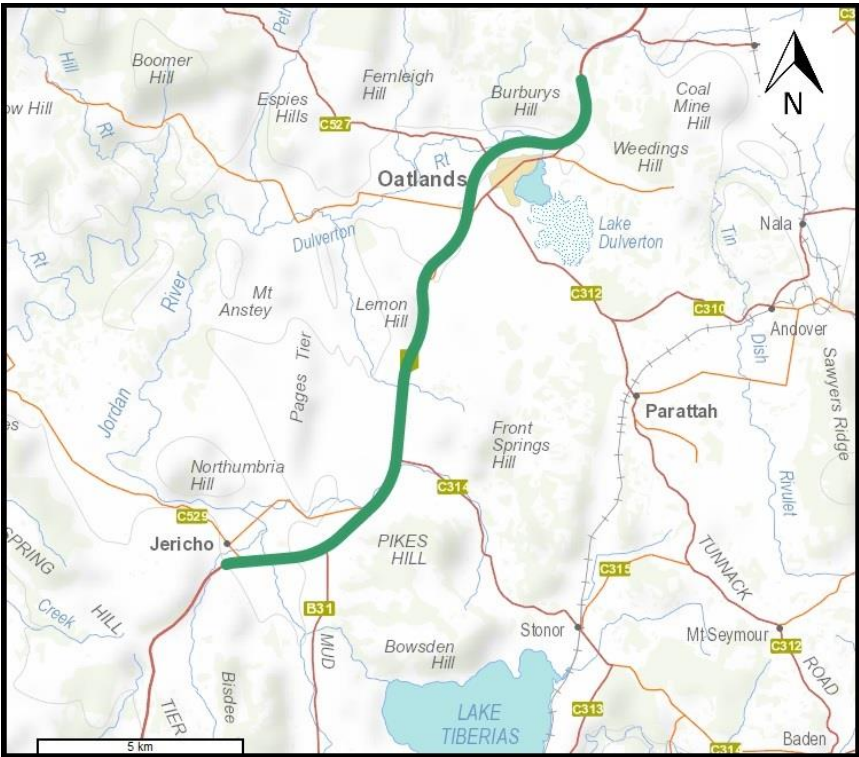
The Midland Highway Final Stage project is broken up into three packages, all located on the Midland Highway (A0087). The three packages, Oatlands, Ross, and Campbell Town total approximately 52 km in length, their locality within Tasmania is displayed below in Figure 1.

Figure 1: Project Location Map



The Oatlands Package begins near Jericho until York Plains, covering 16.8km. Figure 2 below illustrates the locality of the Oatlands section.

Figure 2: Oatlands Project Site



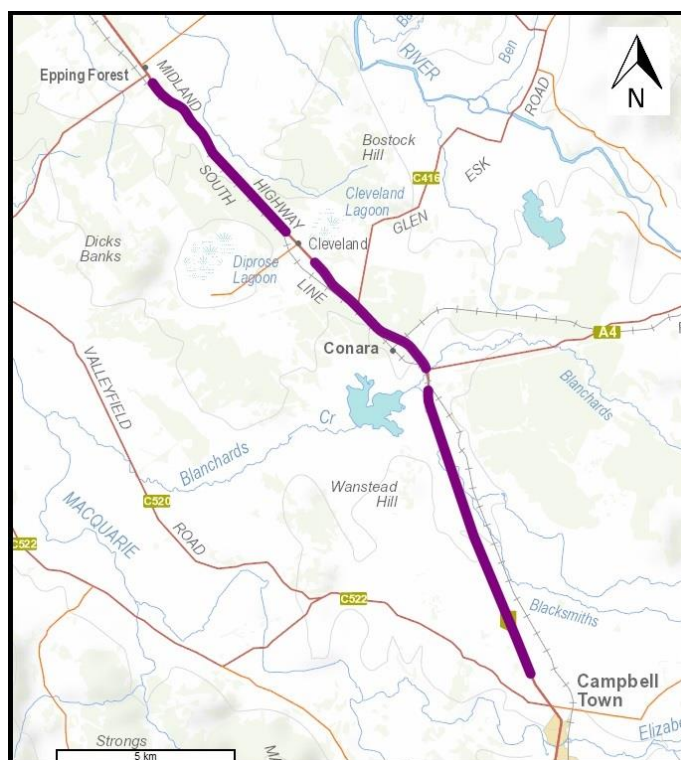
The Ross Package is located between Mona Vale Road to Campbell Town, with a total length of approximately 14.2km. Figure 3 below illustrates the locality of the Ross Section.

Figure 3: Ross Project Site



The Campbell Town to Epping Forest segment of the Midland Highway Safety Upgrade project is a 20.8 km stretch of road just to the north of Campbell Town to a point just south of Epping Forest. No works occur within the 80km/h signed section of the highway through Cleveland. There is also no road widening near Conara to avoid impacts to the rail overpass, where a previous project has undertaken some road widening. Figure 4 below illustrates the locality of the Campbell Town section.

Figure 4: Campbell Town Project Site



I.4. Related Projects and Strategic Context

The Australian and Tasmanian Governments have committed \$565 million in funding over 10 years to the Midland Highway Action Plan. The Midland Highway Final Stage project is a component of this Plan and aims to improve safety to a minimum 3-star AusRAP rating integrated with additional safe overtaking facilities, and a staged approach to capacity improvements.

To date, the Midland Highway Action Plan has delivered safety upgrades to:

- Perth Link Roads
- St Peters Pass to South of Tunbridge
- Epping Forest to Powranna
- White Lagoon (Tunbridge) to Mona Vale
- Symmons Plains to south of Perth
- South of Tunbridge Stages 1 and 2
- Kempton to Melton Mowbray Stage 1
- Mangalore to Bagdad Stage 1 (Bagdad)
- Mangalore to Bagdad Stage 2 (Mangalore)
- South of Kempton
- South of Spring Hill
- North of Spring Hill
- Mud Walls Road Junction
- Kings Meadows roundabout
- Perth-Breadalbane Duplication
- Conara to Cleveland Stage 1
- York Plains to St Peters Pass
- Kempton to Melton Mowbray Stage 2

As of March 2021, works close to completion of construction include:

- Melton Mowbray to Lovely Banks Road
- Spring Hill
- Tunbridge
- Powranna Road to south of Symmons Plains

2. Project Scope

2.1. Problem/ Opportunity Statement

The Midland Highway forms part of Tasmania's National Transport Network and is the major transport link between Tasmania's north and south. The current AusRAP rating for the highway within the project sections is predominantly 2-star, with some sections only achieving a 1-star rating.

Measured Annual Average Daily Traffic (AADT)¹ used for the design of the safety upgrades are as follows:

- 4,457 vehicles per day (2018), with 18.9% heavy vehicles for Oatlands (Jericho to south of York Plains),
- 5,031 vehicles per day (2019), with 21.5% heavy vehicles for Ross (Mona Vale Road to Campbell Town) and,
- 6,595 vehicles per day (2019), with 20.6% heavy vehicles for Campbell Town (Campbell Town to Epping Forest).

A total of 177 crashes were recorded between 2009 and 2019 within the project sites. The crashes involved out of control vehicles, vehicles travelling off the carriageway or bends into objects/parked vehicles, rear end collisions, head on collisions, and overtaking vehicles. The majority of the crashes recorded in this timeframe are associated with turning movements, with the 5 observed fatalities a result of out-of-control vehicles, vehicles travelling off the carriageway, and head on collisions. A summary of the crash history is shown in Table 1.

Table 1: Oatlands, Ross, and Campbell Town Crash Data, 2009-2019

Crash Type	Number			
	Oatlands	Ross	Campbell Town	Total
Fatal	-	2	3	5
Serious	7	5	6	18
Minor	14	21	11	46
First Aid	7	3	3	13
Property Damage	29	32	34	95
TOTAL	57	63	57	177

The upgrades to the Midland Highway in the Oatlands, Ross and Campbell Town sections will provide safety benefits to all road users and will, in particular, help to prevent serious injuries and fatalities caused by head-on collisions through the provision of a flexible safety barrier within a central median and wider sealed shoulders for the majority of the project sites.

2.2. Options Evaluation

The current AusRAP rating for the project sections is predominantly 2-star, with some sections only achieving a 1-star rating. The highway upgrades as part of the Midland Highway Final Stage Project expect to deliver a minimum 3-star AusRAP rating for the project sections through a combination of two-lane single carriageway, climbing lanes and some "2+1" and "2+2" lane arrangements, with a posted speed limit of 110 km/h. For the majority of the project areas, traffic travelling in opposing directions are separated by a flexible safety barrier.

¹ AADT data was obtained from DSG's 'geocounts database'

During the design phase, options were explored to address constraints including:

- Geotechnical issues regarding ground conditions
- Environmental values
- Overtaking lane arrangements
- Constrained road geometry
- The positioning of turning facilities in relation to local accesses, overtaking facilities and road geometry affecting sight distances

The developed design implements the Midland Highway 10 Year Upgrade Strategy, including a centre median with flexible safety barrier, whilst aiming to minimise the impact of the works. Design options have generally been considered based on the safety benefits provided, the impact of the option, and the estimated costs at a high level. The final preferred design was chosen as the combination of the design options that were expected to achieve the project objectives most efficiently and cost-effectively, with minimal impact where possible.

2.3. Scope of Project

The scope of the Project is to improve safety, reduce head on crashes, and will seek to achieve a minimum AusRAP 3-star safety rating where the highway has been upgraded.

This is to be accomplished by widening the existing Highway in some areas through the provision of alternating lengths of “2+1” lane arrangements, safe turning facilities and widened sealed shoulders. This will provide dedicated overtaking opportunities in each direction to help meet safety objectives and community expectations.

The key outcomes of the Project are:

- Additional safe overtaking opportunities through the provision of overtaking and climbing lanes.
- Reduction of Head-on collisions, by minimisation of risk through the provision of a flexible safety barrier within a central median
- The upgraded sections of highway within the Project areas are expected to be rated a minimum 3-star under the AusRAP star rating system

Turning opportunities will be provided for emergency vehicles and general traffic within the project sites, with breaks in the central median barrier provided at intersections, as well as the installation of on and off highway turn facilities.

Northbound and southbound overtaking opportunities will be provided within the project sites, with the climbing lanes developed to cater for heavy vehicle speeds. A summary of the overtaking opportunities are shown below in Table 2.

Table 2: Proposed Overtaking Opportunities

Direction	Project Section		
	Oatlands	Ross	Campbell Town
Northbound	3,200 m	3,440 m	4,330 m
Southbound	1,750 m	2,440 m	5,820 m

A number of accesses along the highway will be upgraded or relocated as part of the works, with many designed as left-in / left-out only.

Other features within this project’s scope include reinstatement of roadside drainage, pavement rejuvenation and earthworks. The scope also includes all pre-construction activities such as locating, documenting, and relocating services within the project footprint where required.

3. Project Cost

3.1. Overall Project Cost Summary Table

The total Midland Highway 10 Year Upgrade program budget is now \$565 million, with an additional \$52m of Australian Government funding and \$13m of Tasmanian Government funding confirmed during 2020. The program has sufficient budget available within the Midland Highway Final Stage project allocations to meet the projected cost estimates.

The following project cost estimates have been prepared based on Concept Designs. The total project outturn cost for the proposed upgrades to the Midland Highway Final Stage project areas is \$166 million for the P50 case and \$185 million for the P90 case. These costs are broken down in Table 3, where the base cost estimate includes design development which is underway and ongoing.

The total program is forecast to be delivered within the total budget.

Table 3: Cost Estimate Summary

	P50	P90
Base Cost Estimate	\$127 million	\$127 million
Contingency	\$35 million	\$53 million
Total Project Cost Estimate	\$162 million	\$180 million
Escalation	\$4 million	\$4 million
Total Outturn Cost Estimate	\$166 million	\$185 million

3.2. Budget profile for the Project

The Midland Highway 10 Year Upgrade program is funded via the Australian Government (80%) and Tasmanian Government (20%). The Australian and Tasmanian Government budget papers provide budget allocation for the balance of the program, including these Final Stage projects.

4. Project Benefits

4.1. Expected positive outcomes and benefits to be delivered by the Project

The purpose of the project is to improve road safety and achieve a minimum 3-star AusRAP rating on a key route in Tasmania. A total of 177 accidents were recorded between 2009 and 2019 within the Midland Highway Final Stage project areas, 5 of which caused fatalities. The 5 observed fatal accidents were a result of out-of-control vehicles, vehicles travelling off the carriageway, and head on collisions.

The project will help to reduce the crash risk along the highway, in particular the risk of fatal crashes and serious injuries caused by head-on collisions, through the provision of a flexible safety barrier within a central median. Other key safety benefits include improved junctions and wider sealed shoulders for the majority of the project. The project will also provide road users with additional dedicated overtaking opportunities, and turn facilities for general traffic, heavy vehicles and emergency services.

5. Finance and Procurement

5.1. Preferred procurement method for the Project

The procurement method for the project is through an Early Contractor Involvement (ECI) contract. Under an ECI engagement, the construction contractor is engaged during the design phase for input in identifying and mitigating engineering and constructability issues. The benefit to this kind of model is generally faster and more cost-effective delivery, as the constructor has a longer lead in time to the project and some input into design decisions.

ECI contracts were signed with two separate contractors for the three project sites in June 2020, with the ECI process still ongoing. The current intent is to award the construction contracts in Winter 2021 in order to start constructions works in Spring 2021.

5.2. Project Timeline

The critical path is based on the delivery of design and tender documentation by July 2021. Meeting the project's critical dates will help construction works begin in the 2021/2022 construction season, starting in Spring. The key dates for the project are shown in Table 4 below.

Table 4: Project Tasks and Timeline

Activity	Timeline
Submission of Project Proposal Report Development and Delivery Phase for Federal Government approval	April 2021
Development Applications submitted	April 2021
Final Design delivered	June 2021
Tender documents delivered	June 2021
Award of contract	September 2021
Commencement of works	October 2021
Practical completion of works	April 2024
Project close out	June 2024

The key assumptions of the project schedule developed for the Midland Highway Final Stage project include:

- No environmental or heritage delays impact the project.
- Property acquired prior to the start of construction.
- No delays from works related to relocating and protecting utilities / services.
- Any Development Applications are approved within normal timeframes.

6. Risk and Sustainability

6.1. Major risks, and proposed mitigation strategies

The Department of State Growth has established a Risk Assessment process which has been set up to support delivery of this project. The risk assessment includes impact, risk rating, mitigation strategies and revised risk rating, throughout the Planning, Scoping and Delivery Phases of the project. The risk assessment has been continually updated through the project lifecycle as appropriate.

The risk assessment considered the key areas such as scope, communication, design, approvals, construction and implementation. Mitigation strategies have been developed for all of the risk items identified within these general areas, with the identified risks and mitigation strategies outlined in Table 5. At this stage the residual risk ratings for all the items are either Medium or Low. A consolidated list of the identified risk events for the project has been incorporated into the P50/P90 cost estimates. The major risks that have been identified are:

Table 5: Identified risks and mitigation strategies

Identified Risk	Mitigation Strategies
Project timeframes	Frequent discussions between contractors and the Department of State Growth to review project progress, this is to allow appropriate forward planning where required.
Geotechnical risks / latent conditions	Geotechnical investigations have been undertaken, with further investigations planned as the design progresses. The design has been influenced by the findings of these investigations to minimise risk of impacts.
Approvals timelines	Approval documentation approvals to be submitted to councils, PSCPW and relevant environmental authorities as soon as possible to allow maximum time to obtain these approvals without delay to the project schedule.
Stakeholder opposition and protracted landowner negotiations	Stakeholders have been consulted early in the design process, with continual consultation as design changes occur to help become aware of issues as soon as possible and allow the development of strategies to deal with these issues.
Significant construction works required in winter months	Project timeframes have been developed to ensure adequate time in Spring and Summer months to complete construction, avoiding the risks associated with construction during winter.

6.2. Major dis-benefits including likely impacts to the community and environment

There are no dis-benefits that are considered to be major.

A number of environmental and heritage impacts are being investigated, however the design has avoided impacts where possible and reduced impacts elsewhere. Where required, approvals will be sought for any impacts on environmental and heritage values. The construction contract documents will include protection and advice measures for environmental and heritage values where relevant.

Property acquisition will be required to allow for the widened road cross section. Due to the central median barrier, some accesses will be restricted to left-in, left-out movements and additional travel distance will be required. There will also be short term, minor impacts on the road user community during the construction phase, as speed limits will be reduced to manage safety of road works and road users.

6.3. Detail any sustainability strategies that will be adopted

There are currently no specific sustainability strategies that will be adopted for the project however, the design has reduced impact to environmental and heritage values where possible. In addition, impacts have been reduced through the following:

- Highway geometry and pavement designs have maximised the use of existing pavement material
- Adopting construction methodologies to increase productivity
- “No-go zones” will be implemented during construction to avoid sensitive flora adjacent to the works sites
- Fauna and flora mitigation strategies will be implemented as part of Construction Environmental Management Plan (CEMP)

7. Stakeholder Engagement

7.1. Public and Stakeholder participation and consultation

Extensive stakeholder engagement has been undertaken, which included:

- Three rounds of visits to adjacent property owners to gather local knowledge to help inform development of designs, and hear feedback on design proposals.
- Early, strategic individual discussions with key stakeholder organisations including utilities and service providers to provide them an overview of the projects and agree timeframes and communication protocols.
- One round of public consultation on concept designs.

All feedback from discussions have been captured and location specific information has been included in a stakeholder register. Individual property owner and key stakeholder issues have been raised with design leads for further discussion and development of design options/solutions, where required. Discussions with some property owners are ongoing and not limited to set engagement periods.

Further stakeholder engagement will include another round of formal public consultation using online tools, further visits to adjacent property owners, and further meetings with key stakeholder organisations.

7.2. Record of Stakeholder Consultation

Stakeholders engaged to date include:

- 62 adjacent property owners
- Department of State Growth
- Department of Primary Industries, Parks, Water and Environment
- Northern Midlands and Southern Midlands Councils
- Public utilities:
 - TasNetworks
 - Telstra
 - NBN Co
 - TasGas
 - TasWater
 - TasIrrigation
- National Heavy Vehicle Regulator
- Tasmanian Transport Association
- RACT
- Passenger Transport operators
- Tasmanian Farmers and Grazers Association

Individual property owner issues and key stakeholder issues have been raised with design leads for further discussion and development of design options/solutions where required. Attached in Appendix B is a copy of the Consultation & Feedback Findings Summary Report from the first round of public consultation. Further stakeholder engagement will occur as the design is finalised.

7.3. Directly affected landowners and property acquisition

Indicative new property boundaries have been determined based on the new highway cross section and expected extent of works. An estimated total of approximately 24 ha across 54 titles throughout the project sites is expected to be acquired.

Additional acquisition may be identified as the design progresses.

8. Compliance

8.1. List Commonwealth or State legislation triggered by the Project

As part of the design process and risk identification the following legislation has been identified as being potentially triggered:

Commonwealth

- *Environmental Protection and Biodiversity Conservation Act 1999.*

State

- *Threatened Species Protection Act 1995,*
- *Nature Conservation Act 2002,*
 - *Wildlife (General) Regulations 2010*
- *Weed Management Act 1991,* and
- *Environmental Management and Pollution Control Act 1994.*

Local Government

- *Land Use Planning and Approvals Act 1993.*

The design process has been undertaken to avoid triggering these acts where feasible and are addressed in the following sections.

8.2. Noise

There are numerous dwellings located within the project sites, with larger concentrations occurring where the highway approaches the townships of Oatlands, Ross, and Campbell Town. Noise impacts at these properties are not expected as the safety upgrade to the highway remains on the same alignment.

The project will follow the Department of State Growth's Traffic Noise Management Guidelines with regard to determining whether noise mitigation measures are required.

8.3. Environment (Flora, Fauna, Landscaping and visual amenity)

Detailed Ecological Assessment (Natural Values Assessment) has occurred from Spring 2019 through to February 2021. These surveys included detailed vegetation assessments, threatened flora searches and weed mapping. The Assessment Area provided for the 2019/ 2020 surveys incorporated a 20 m buffer either side of the Concept Design. Further surveys following design changes within December 2020 were undertaken with an updated Assessment Area.

Results of these surveys have been combined across project sections and are detailed below. The results presented are based off the current draft project area boundaries' (i.e. construction footprint) for each project section. Key findings of the Ecological Assessment are summarised below.

A range of Commonwealth and State threatened flora species were observed within the Assessment Area and currently fall within the construction footprint. Threatened Ecological Communities have also been observed during the Ecological Assessment and are likely to be impacted by the project. The results are listed below.

Declared weed species listed under the *Weed Management Act 1991*, have been mapped across the construction footprint. The main species observed include Gorse (*Ulex europaeus*), Brooms (*Ulex* spp.), Blackberry (*Rubus fruticosus* spp. agg.), St John's-wort (*Hypericum perforatum*) and Spanish Heath. Weed management measures as detailed under the Weed Management Act will be implemented during construction and specified in the Construction Environmental Management Plan.

Refinement of design and the construction footprints are currently occurring. Following confirmation of this final determination of impacts, including species counts, can occur. The "Likelihood of Impact" assessment was determined based on whether or not the species is mapped within the construction footprint;

- Low – Species likely to fall outside of the construction corridor, or no-go zones have been implemented.
- Medium – numbers impacted likely reduced through refinement of the construction corridor.
- High – high numbers of a species are impacted within the construction corridor.

Species identified in the field study area are listed below.

Threatened Ecological Communities:

- Lowland Native Grasslands of Tasmania - Lowland Themeda triandra (Kangaroo Grass) Grassland
- Community 15: Eucalyptus amygdalina inland forest and woodland on Cainozoic deposits

Threatened Species:

- Smooth New-Holland Daisy (*Vittadinia burbidgeae*)
- Fuzzy New-Holland Daisy (*Vittadinia cuneata* var. *cuneata*)
- Woolly New-Holland Daisy (*Vittadinia gracillis*)
- Silky Bushpea (*Pultenaea prostrata*)
- Cutleaf Daisy (*Brachyscome rigidula*)

Assessment Areas for targeted fauna surveys are dependent on the target species biology. For instance, den searches incorporated a 50 m buffer from the edge of design (inclusive), Tasmanian Masked Owl surveys occurred with a 200 m buffer from the edge of design (inclusive), and Tasmanian Wedge-tailed Eagle surveys were undertaken up to one kilometre from the highway. Targeted threatened fauna species surveys have also occurred during 2020 and 2021, including surveys for:

- Ptunarra Brown Butterfly (*Oreixenica ptunarra*) walking transects
- Green and Gold Frog (*Litoria raniformis*) habitat assessments
- Tasmanian Wedge-tailed Eagle (*Aquila audax fleayi*) nest searches
- Tasmanian Masked Owl (*Tyto novaehollandiae castanops*) hollow tree search and hollow inspections
- Tasmanian Devil (*Sarcophilus harrisii*), Spot-tailed Quoll (*Dasyurus maculatus maculatus*) and Eastern Quoll (*Dasyurus viverrinus*) den searches.

Habitat for seven fauna and two invertebrate species listed as threatened under the *Threatened Species Protection Act 1995* or *Environmental Protection and Biodiversity Conservation Act 1999* were identified within or adjacent to the Assessment Area in areas of suitable habitat.

Re-alignment of passing lanes within the Oatlands project section has occurred where Ptunarra Brown Butterfly habitat and individuals have been observed within the Assessment Area. Re-alignment of the passing lane has avoided direct removal of suitable habitat, and the species is not considered to be significantly impacted by the project. Removal of suitable habitat for ground-dwelling mammals, such as Tasmanian Devils and Spot-tailed Quoll, may occur within the Campbell Town project section where the TASVEG 3.0 native vegetation community; *Eucalyptus amygdalina* inland forest and woodland on Cainozoic deposits (DAZ), is present. With targeted surveys for avian species undertaken in February 2021, final impacts to these species and species habitat can be determined following the completion of the targeted surveys and finalisation of construction footprints.

Residual impacts associated with construction activities, such as increased noise during the breeding season, will be considered for all the identified species, particularly avian species. The levels of mitigation used will depend on the final proximity of the design and subsequent works to the breeding habitat for each species. Consideration for the cumulative impacts of direct habitat removal for these species will also occur.

Protection of native wildlife, under the Wildlife (General) Regulations of the *Nature Conservation Act 2002*, will also occur during construction. Mitigation measures to be implemented to avoid impacts to these native species include diversion fencing, salvage during tree removal, and the covering of open pits at night. Burrow and hollow-bearing trees providing breeding habitat for various threatened fauna species have been observed. Targeted hollow and burrow checks for use by threatened fauna species are currently underway. Decommissioning of burrows and hollows is likely to be required prior to construction. *Chytridiomycosis* (Chytrid Fungus) controls are to be implemented for areas of the project where Green and Gold Frog have been observed moving throughout the landscape as per the Tasmanian Chytrid Management Plan, Department of Primary Industries, Parks, Water and Environment 2010.

Only minor changes are proposed to the existing Highway alignment. The works involve widening of the existing road footprint to allow for a safer road cross-section and will remain within the existing road reserve for majority of the works. Therefore, these works are expected to have low landscape and visual impacts on the surrounding area. However, a landscaping plan is being developed which will include strategies to replace impacted vegetation at key view fields such as the entrances to towns. In addition, impacts to Pioneer Avenue Trees have been reduced where possible, and replacement of these trees will also be incorporated into the landscaping plan for the project.

8.4. Heritage (Aboriginal and Historic)

As part of the Reference Design, an Aboriginal Heritage Assessment of the Midland Highway within the project extents was undertaken by Cultural Heritage Management Australia Pty Ltd (CHMA). The assessment utilised existing reported Aboriginal sites supplemented by field surveys and found 19 recorded Aboriginal heritage sites that are confirmed as being situated either within, or in a 50m radius of the project area. From the study, the following summary recommendations were provided with steps now in place to implement these actions:

- Apply for and obtain a Permit for these Aboriginal heritage sites that are confirmed as being situated within the construction footprint and are likely to be impacted by the road upgrade works.
- For the Aboriginal heritage sites that are located within a 20m radius of the construction footprint, a management strategy will be prepared and implemented, which is directed towards ensuring these sites are not inadvertently impacted.

These sites will be incorporated into the development of the Final Design and any approval processes that may be required triggered. Since the completion of the CHMA (2020) assessment, the road design footprint has been reviewed and amended, with the width of the road corridor generally reduced. This means that it is anticipated that the majority of 19 Aboriginal heritage sites will be avoided.

In conjunction to the Aboriginal Heritage Assessment undertaken as part of the Reference Design, a Heritage Assessment of the Midland Highway within the project extents was undertaken by Cultural Heritage Management Australia (CHMA) Pty Ltd. The assessment found a large number of historically significant sites along the project corridor. Majority of these features have been determined as being of sufficient distance from the project footprint to avoid being impacted. Those features determined as being impacted or potentially impacted are listed in Table 6. Since the completion of the CHMA assessment, the road design footprint has been reviewed and amended, with the width of the road corridor generally reduced. This means that it is anticipated that several of the historic features listed in Table 6 will be avoided.

Table 6: Summary of Heritage Features

Site	Expected Effect	Proposed Management Strategy
Lemon Springs	Proposed G-Turn facility intersects horizontal areas.	Finalise infrastructure corridor. If required, obtain relevant approvals.
Huntworth (State Significant)	Midland Highway alignment runs through and crosses corridor.	Clarification is needed from Heritage Tasmania on the registered property boundary in relation to the current road reserve.
Stone Drain – Midland Highway near Oatlands	Site is located 8m west of the current centreline.	Finalise infrastructure corridor, if required, obtain relevant approvals.
Wanstead Park	Proposed double G-turn facility will impact the park on both sides of the highway. Also widening works which result in land acquisition through this area.	Finalise infrastructure corridor. If required, obtain relevant approvals. Proposed widening on the eastern side to limit impacts to the area on the western side of the highway.
Tsaktris & Dellas Memorial	Widening at this area which will impact the memorial site.	Jacobs have contacted the family and presented options for relocation of the memorial.
Smart and Gardner Families Roadside Memorials	Widening at this area which will impact the memorial site.	Memorial to be removed during construction and reinstated to new verge once complete.
Section of Old Highway	Widening on the western side of the highway which will impact the start of this section.	Site is currently used as a property access which is being maintained in the Reference Design.
Midland Highway Markers	Highway markers are all located in the road reserve where widening is occurring on this side of the road.	Markers will all be removed or relocated.

8.5. Planning Approvals

The Midland Highway Final Stage project is located within two council municipalities. This means that two different development approval processes will have to be undertaken for the respective councils.

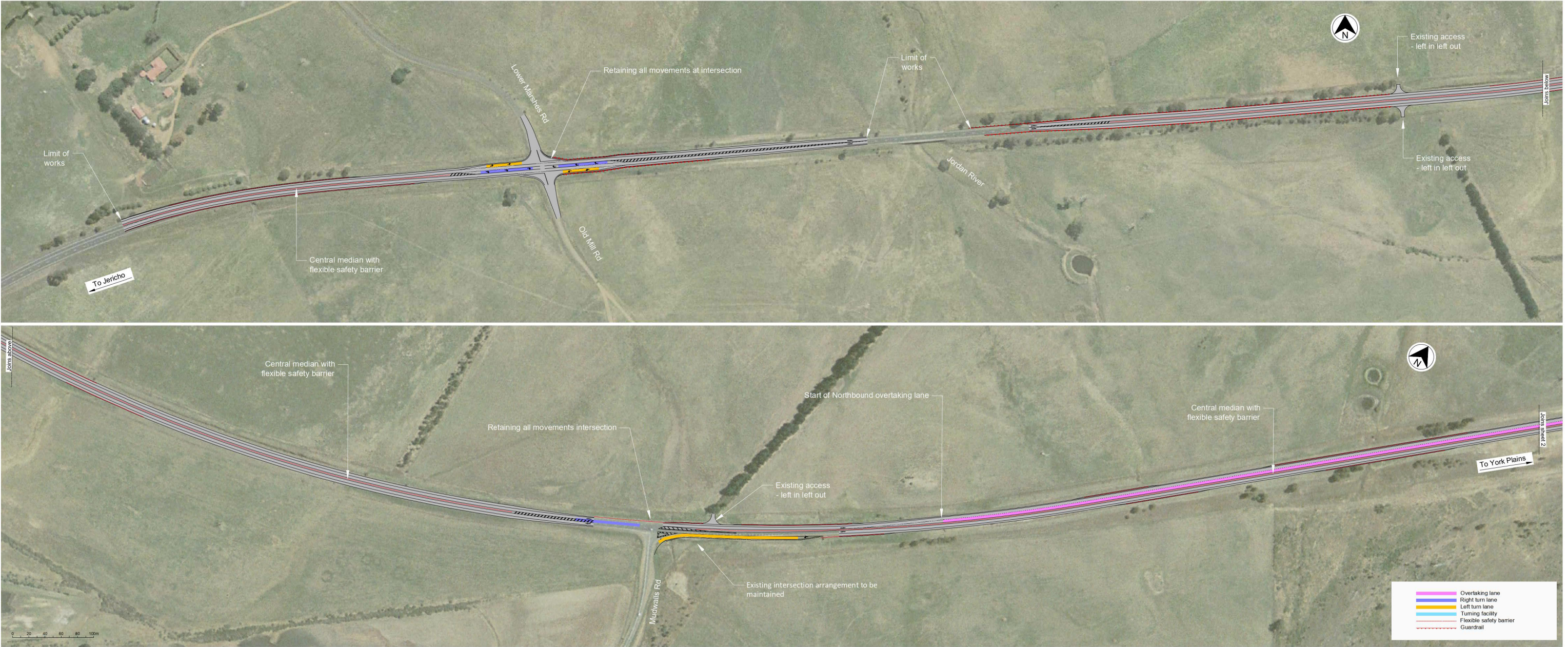
The Oatlands section is located within the Southern Midlands municipal area and subject to the controls of the *Southern Midlands Interim Planning Scheme 2015*. The majority of the project work is within the existing road reserve which is zoned 'Utilities'. Small areas of Rural Resource Zone and Community Purpose Zone may also be affected.

The Ross and Campbell Town sections of the project are located within the Northern Midlands municipal area and subject to the controls of the *Northern Midlands Interim Planning Scheme 2013*. The majority of the project is within the existing road reserve which is zoned 'Utilities'. Small areas of Rural Resource Zone adjacent to the road corridor may also be affected.

The project is currently expected to trigger Development Approval in accordance with the provisions of the relevant planning schemes. At this stage, separate development applications are expected to be lodged in April 2021 for consideration by the Southern Midlands Council and the Northern Midlands Council. The Development Applications are expected to be advertised by Council for 14 days for public comment.

Appendix A: Public Display Plans

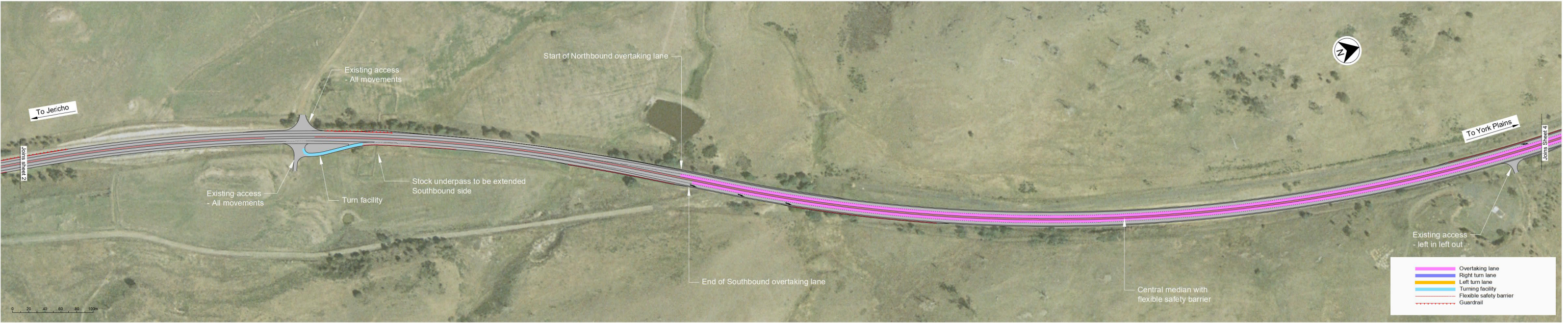
Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)



Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)



Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)



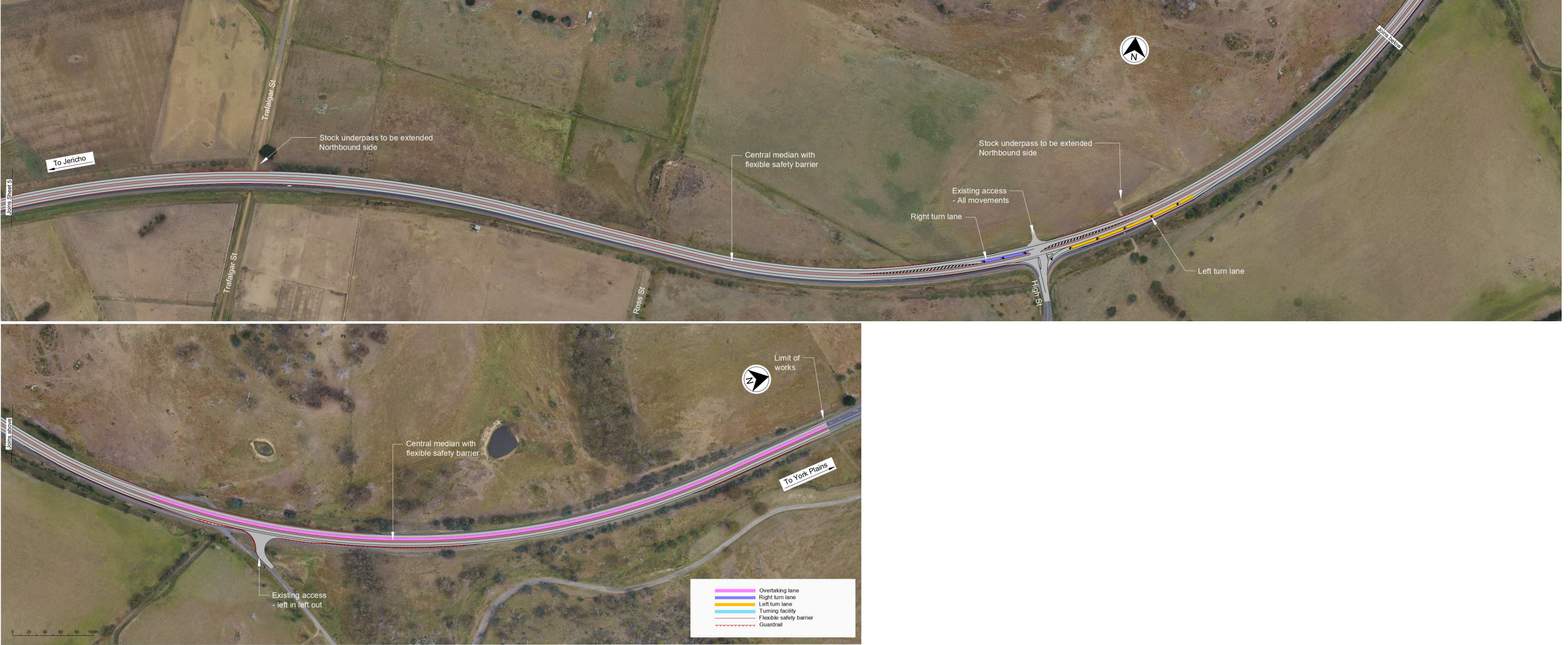
Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)



Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)

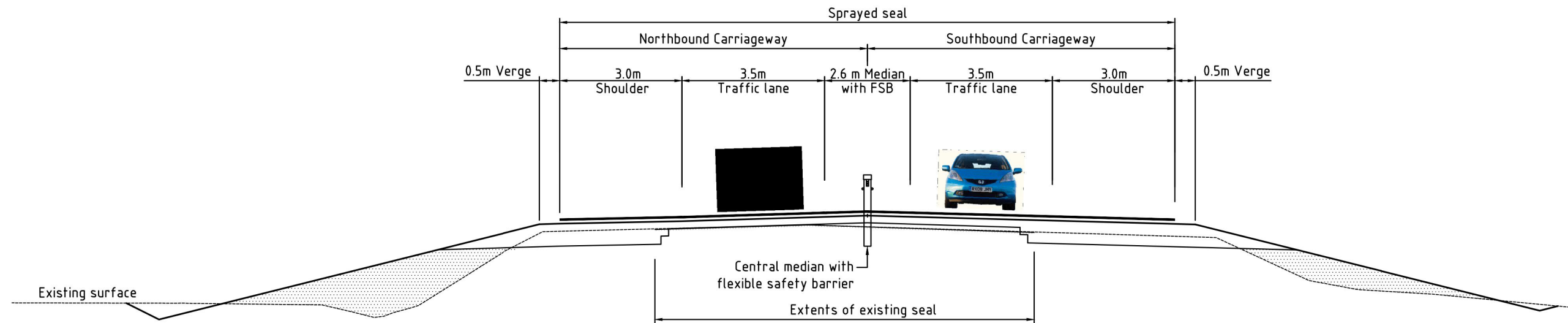


Midland Highway - 10 Year Action Plan
Oatlands (Jericho to York Plains)

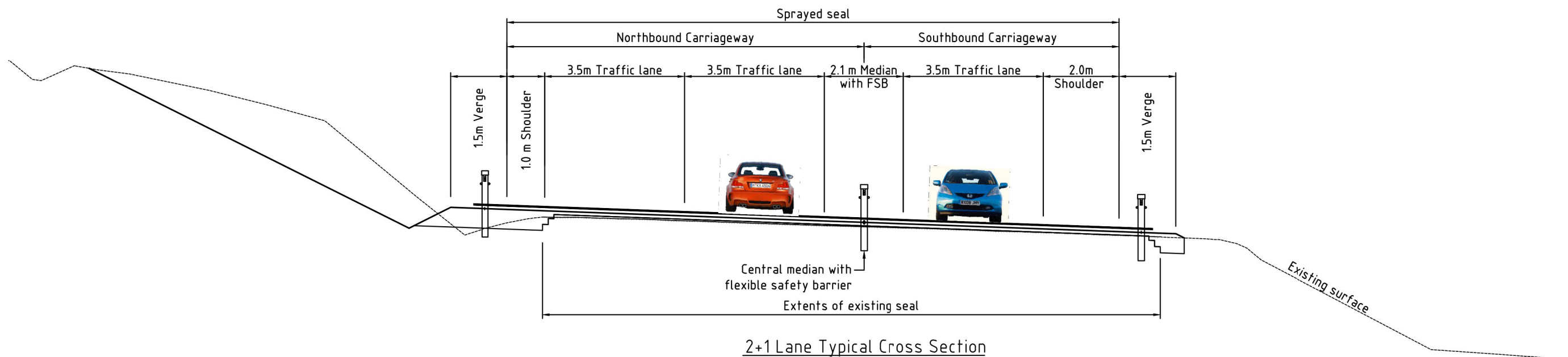


Midland Highway - 10 Year Action Plan

Oatlands (Jericho to York Plains)



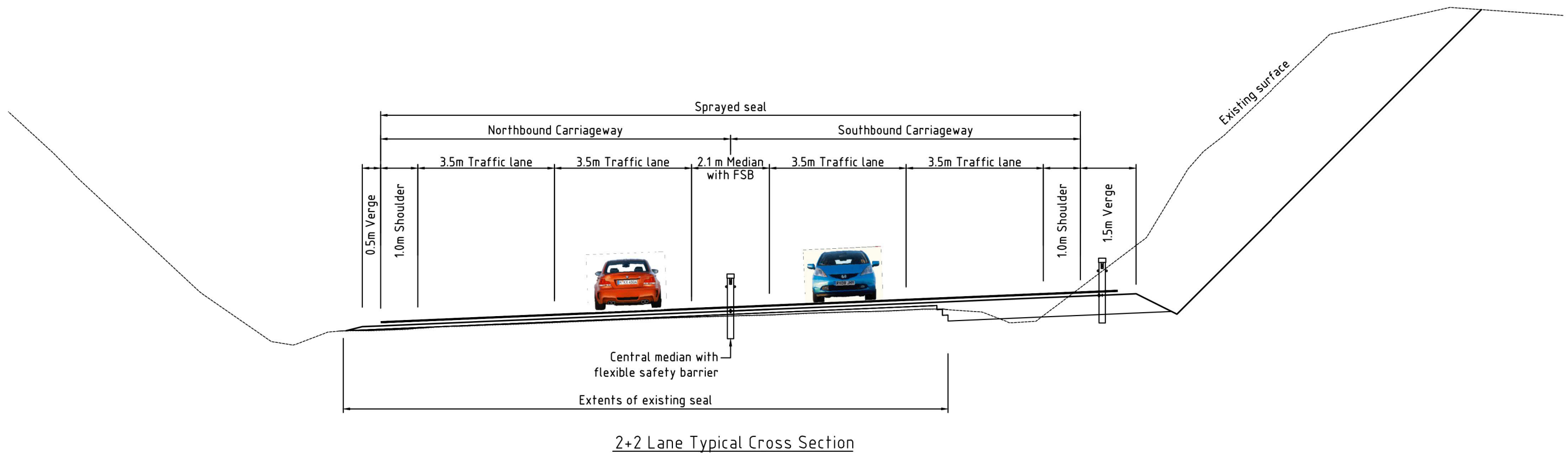
1+1 Lane Typical Cross Section



2+1 Lane Typical Cross Section

Midland Highway - 10 Year Action Plan

Oatlands (Jericho to York Plains)



Midland Highway - 10 Year Action Plan
Ross (Mona Vale to Campbell Town)



Midland Highway - 10 Year Action Plan
Ross (Mona Vale to Campbell Town)



Midland Highway - 10 Year Action Plan
Ross (Mona Vale to Campbell Town)



Midland Highway - 10 Year Action Plan
Ross (Mona Vale to Campbell Town)

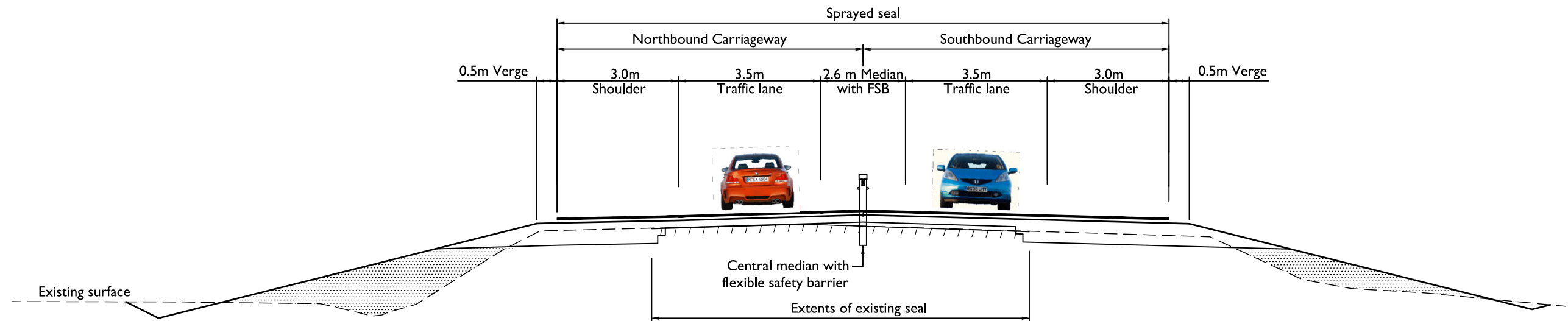


Midland Highway - 10 Year Action Plan
Ross (Mona Vale to Campbell Town)

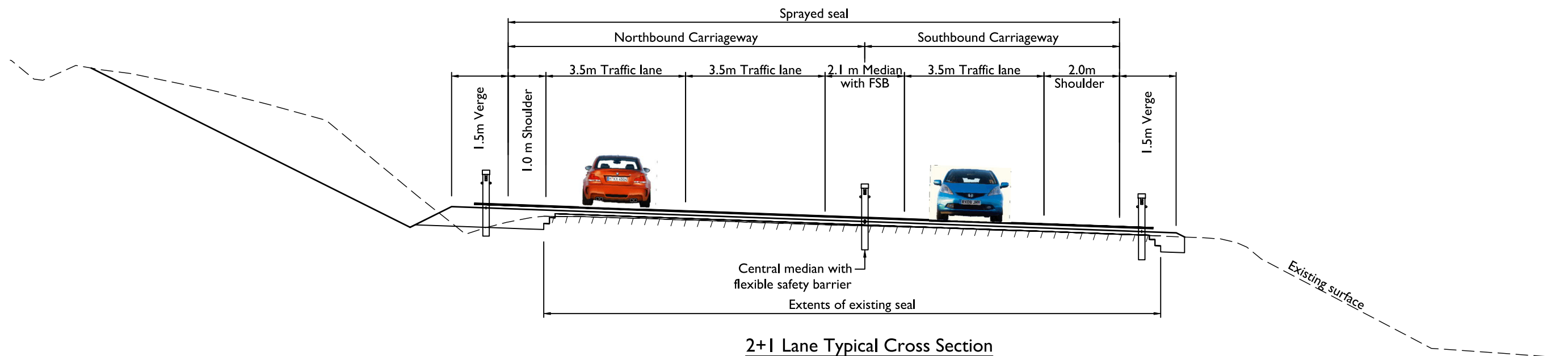


Midland Highway - 10 Year Action Plan

Ross (Mona Vale to Campbell Town)



1+1 Lane Typical Cross Section

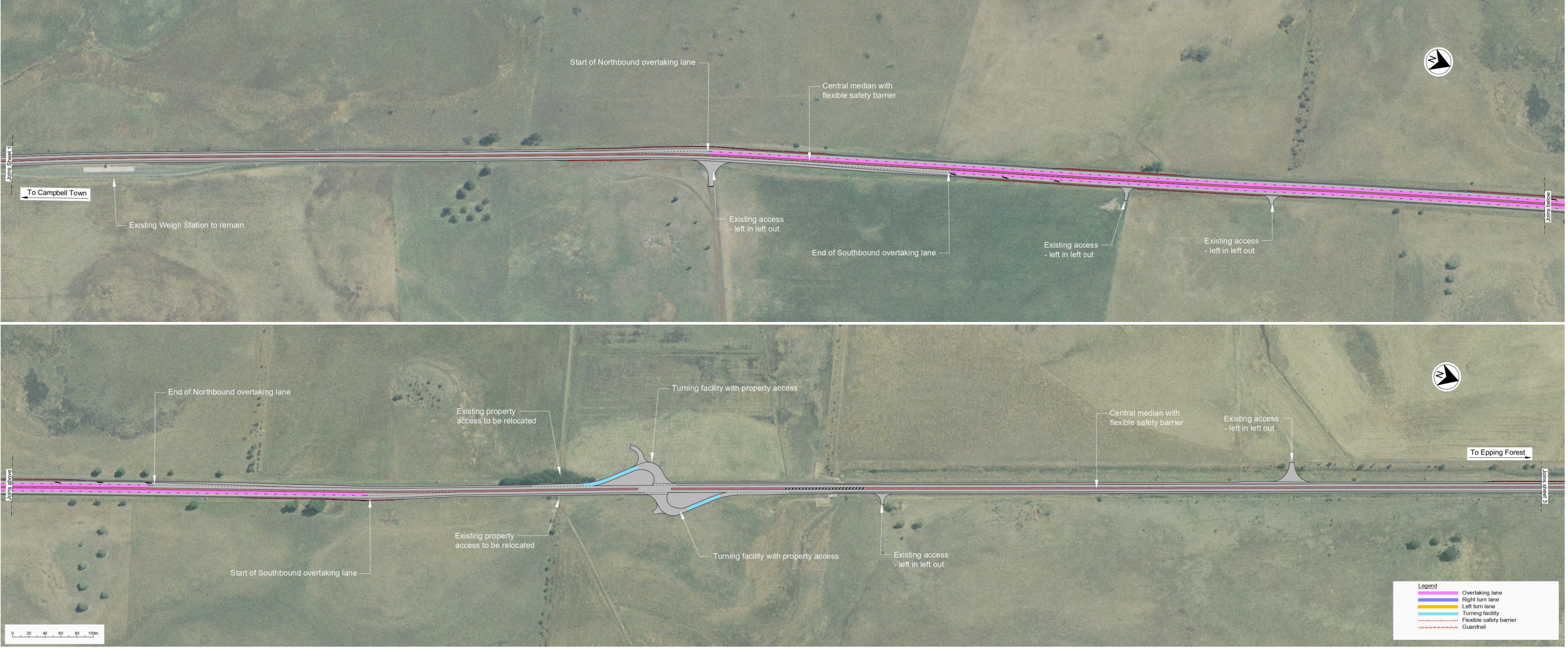


2+1 Lane Typical Cross Section

Midland Highway - 10 Year Action Plan North of Campbell Town (Campbell Town to Epping Forest)



Midland Highway - 10 Year Action Plan
North of Campbell Town (Campbell Town to Epping Forest)



Midland Highway - 10 Year Action Plan North of Campbell Town (Campbell Town to Epping Forest)



Midland Highway - 10 Year Action Plan North of Campbell Town (Campbell Town to Epping Forest)



Midland Highway - 10 Year Action Plan

North of Campbell Town (Campbell Town to Epping Forest)

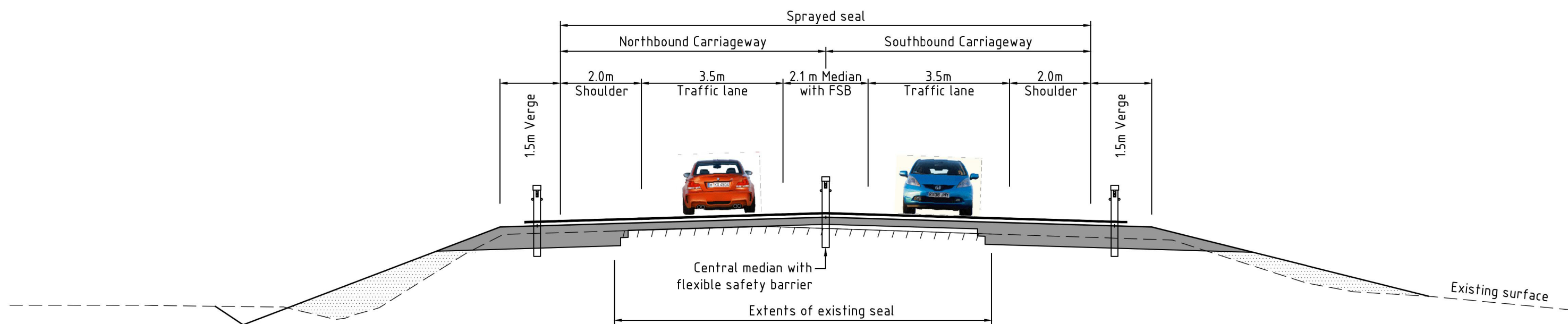


Midland Highway - 10 Year Action Plan North of Campbell Town (Campbell Town to Epping Forest)

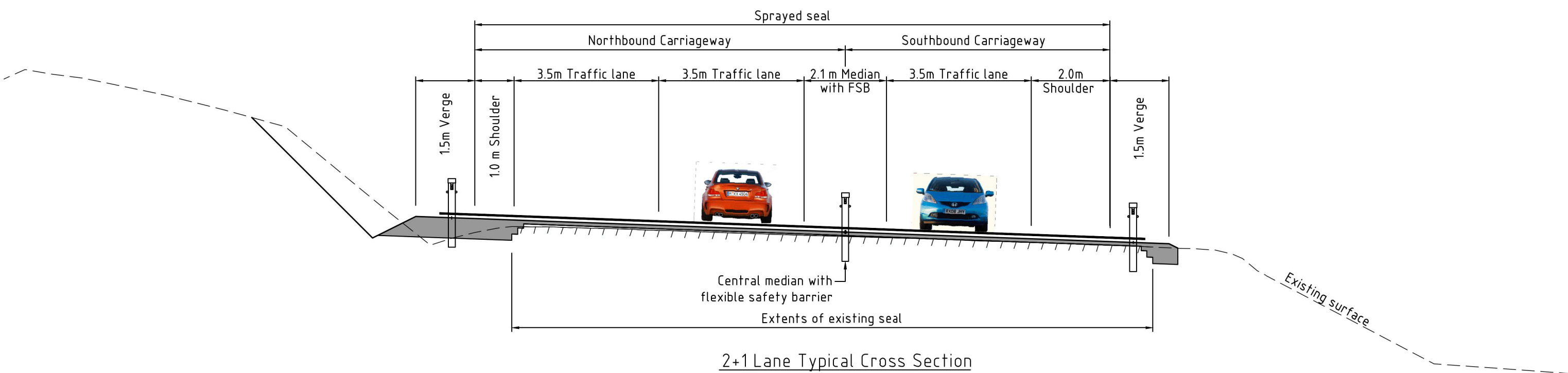


Midland Highway - 10 Year Action Plan

North of Campbell Town (Campbell Town to Epping Forest)



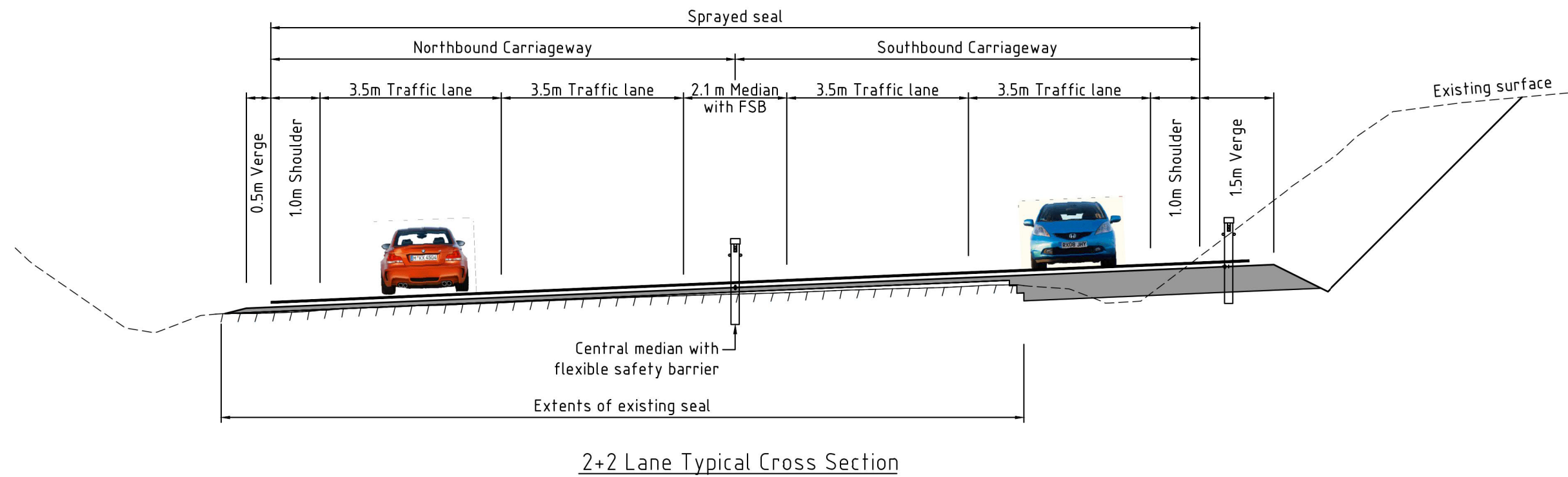
1+1 Lane Typical Cross Section



2+1 Lane Typical Cross Section

Midland Highway - 10 Year Action Plan

North of Campbell Town (Campbell Town to Epping Forest)

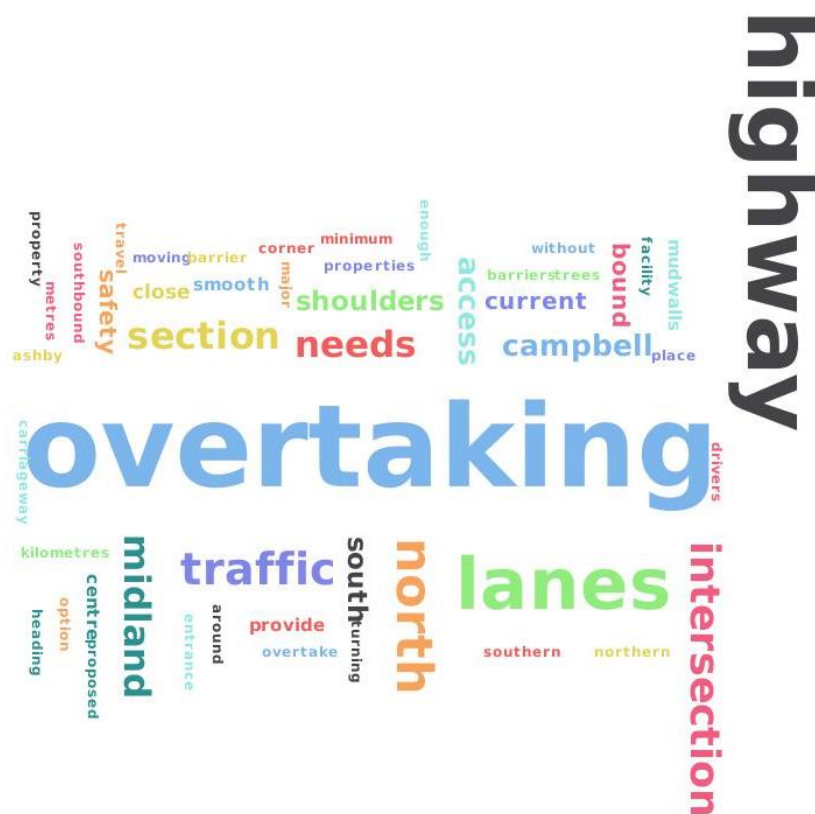


Appendix B: Community Consultation & Feedback Report

Midland Highway Safety Upgrade

Consultation & Feedback Summary Report

September 2020



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Midland Highway Safety Upgrade

Consultation & Feedback Summary Report - July 2020

About the Midland Highway Safety Upgrade

The Australian and Tasmanian Government committed \$500 million in funding over 10 years to the Midland Highway Action Plan to upgrade the highway to a minimum AusRAP three-star safety rating.

To date, sixteen projects have been completed or are currently under construction. The Midland Highway Final Stage objective is to deliver safety upgrades on the remaining sections of the Midland Highway program, within the funding that has been committed.

The main aim of this project is to improve road safety, minimise the risk of head-on crashes and to bring the design of this stretch of the highway in line with the objectives of the Midland Highway 10 Year Action Plan. The Plan includes a minimum 3-star AusRAP rating for the entire length of Midland Highway, and achieving this rating is one of the main objectives of the project.

This report summarises community and stakeholder engagement undertaken to date on the following projects:

Project	Section		Length
Midland Highway Safety Upgrade Final Stage	South	Oatlands – Jericho to York Plains	16.3km
	North	Campbell Town North - Campbell Town to Epping Forest	21.4km
		Ross - Mona Vale Road to Campbell Town	14.3km
Tunbridge	South of the Blackman River to north of Tunbridge Tier Road		1.6km
Powranna	Powranna Road to Symmons Plains		1.7km
Total			55.3km

Engagement Process

The community and key stakeholders have been engaged in the following formats:

1. Ongoing engagement with adjacent property owners and occupiers, including door-knocking in October-November 2019 and again in February-March 2020, to understand how properties are used and accessed, and to discuss potential impacts
2. Engagement with key stakeholders including the Southern and Northern Midlands Councils and utility companies to consider planning and service requirements and seek input from key organisations
3. Public consultation was undertaken from 1-12 June 2020 via the Department of State Growth's website at <http://midlandhighway.tas.gov.au>, as well as Social Pinpoint, Facebook, Email and Phone. Due to some people finding the online consultation difficult to navigate, the consultation was reopened from 26 June – 4 July for further comment.

Midland Highway Safety Upgrade

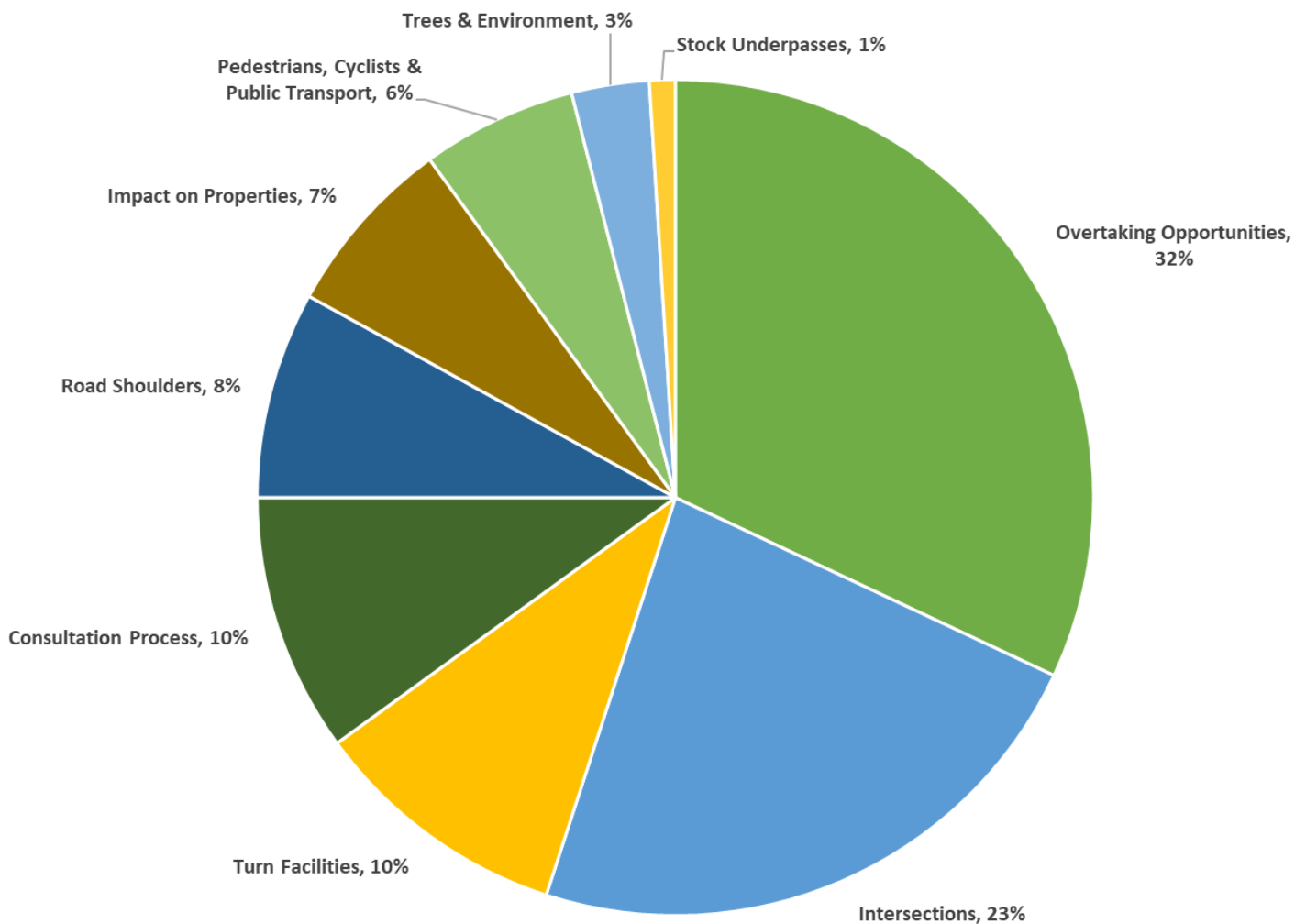
Consultation & Feedback Summary Report - July 2020

Public Consultation Feedback

The number of comments received during public consultation are summarised below.

Source	No. of Comments	No. of Respondents
Emails	11	11
Phone Calls	5	5
Social Pinpoint	43	16
Facebook	70	51
Totals	129	83

Consultation Feedback - Key Themes & Issues



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Midland Highway Safety Upgrade

Consultation & Feedback Summary Report - July 2020

Key Themes in Public Consultation

The key themes and issues below are summarised from those raised in the public consultation. They do not include feedback from direct engagement with affected property owners, which is subject to ongoing discussions.

Key Themes and Issues	Response
<p>Overtaking Opportunities (32% of comments)</p> <p>The installation of median safety barrier reduces overtaking opportunities. This doesn't deliver the long term plan to have 4 lanes from Hobart to Launceston. Some of the newer overtaking lanes aren't long enough. The distance between overtaking lanes is too long. Reducing G-Turns, which don't get much traffic, would free up some funding for overtaking lanes, which get a lot of traffic. There should be dedicated overtaking lanes in the following locations (listed by order of number of comments from high to low):</p> <ul style="list-style-type: none">• Northbound, between Mud Walls Road, Jericho (where a high volume of traffic enters the highway) and Lemon Hill, south of Oatlands• Between Mona Vale Road and Chiswick Road, Ross• Between Conara and Epping Forest• Between Campbell Town and Conara	<p>The main objective of the Midland Highway Safety Upgrade is to make the Highway safer for road users. 60% of fatalities on the Midland Highway are the result of a head-on crash. The installation of median safety barrier and roadside barrier is expected to significantly reduce the serious trauma caused by head-on and run-off road crashes.</p> <p>The project team is giving careful consideration to the locations of existing and proposed overtaking opportunities, to ensure that they are appropriately spaced, to help minimise driver frustration and make the Highway safer.</p> <p>Where new overtaking lanes are warranted, one of the priorities is for climbing lanes on hills that significantly slow trucks and heavy vehicles, as this is the source of more driver frustration than on level sections of the highway where most heavy vehicles are able to maintain speeds close to the speed limit.</p>
<p>Intersections (23% of comments)</p> <p>Major intersections (eg. Northern and southern accesses to Ross and Oatlands) should not have median safety barrier</p> <p>Concerns that the median safety barrier will block the view of oncoming traffic at major intersections, including Chiswick Rd (northern access to Ross) and the accesses to Oatlands</p>	<p>The proposals include breaks in the barrier at major intersections, including the northern and southern accesses to Ross and Oatlands, to maintain all turn movements for all types and sizes of vehicles that currently use these intersections. These breaks in the barrier at key intersections were marked on the proposals.</p>



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<p>Specific Intersections:</p> <p><u>Ashby Road, Ross</u>: Ashby Rd is not at right angle to the highway. This intersection is on a bend in the highway which makes it unsafe. It would benefit from a dedicated right turn lane on the highway and a merge lane turning north out of Ashby Rd.</p> <p><u>Esk Main Road, Conara</u>: this intersection should be upgraded, eg. With an over/underpass to help heavy vehicles entering and exiting the highway</p> <p><u>Mud Walls Road, Jericho</u>: this intersection is busy and can be dangerous, particularly when turning north onto the highway. A northbound merge lane would help here.</p> <p><u>Roseneath Road, southern entrance to Ross</u>: I heard on the grapevine that it was intended to close this entrance to Ross, but the proposals show a break in the barrier. Does this mean this entrance will remain open?</p> <p><u>Chiswick Road, northern entrance to Ross</u>: This intersection is dangerous. It needs redesigning and Chiswick Road needs straightening. The poplar trees south of this intersection should be removed as they block the view</p>	<p>In most situations, median safety barrier does not block visibility of oncoming cars. However, the project team are mindful of certain circumstances that result in the median barrier hindering clear visibility of oncoming cars. The design team will undertake sight distance checks using 3D modelling to identify and address the problem at these locations .</p> <p>Specific Intersections:</p> <p>The project team is considering the feedback for specific intersections which people have suggested are dangerous and will explore the issues, including a review of available traffic data, accident history, and sight line checks.</p> <p>There will be a break in the barrier at the Roseneath Rd Intersection to maintain the southern entrance to Ross.</p>
<p>Turn Facilities (10% of comments)</p> <p>There aren't enough turn facilities. The extra distance we have to drive to turn around is too far. Can you inform us how the distances between turn facilities is decided? Our business is busy with vehicles coming and going, so can we have a G-Turn at our access? G-Turns don't get much use - deleting one or more of these would free up funds for additional overtaking lanes, which would get a lot more use</p>	<p>G-Turns or P-Turns are turn facilities that provide opportunities for highway traffic to do a U-Turn, including access to smaller side roads and properties where the median safety barrier has restricted their access to left-in, left-out only.</p> <p>We space turn facilities at roughly regular intervals, aiming for approximately 5-7 minute drive time intervals between turn facilities.</p> <p>Some turn facilities are on the side of the Highway ('on-network') so that they are single-direction turns (northbound to southbound, OR southbound to northbound).</p>



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	<p>Other turn facilities are located in side roads, with a break in the barrier at the intersection and a dedicated right turn lane into the side road. These 'off-network' turn facilities create the opportunity to turn in any direction.</p> <p>In some cases, where a planned on-network turn facility falls close to the main access of a major property, it may be possible to align the two, so that the property access can be created directly off the back of the turn facility. This has the benefit of maintaining all turn movements (left-in, left-out, right-in, right-out) for properties. These are prioritised for the larger commercial farming operations with a high volume of heavy vehicle movements. However, this is not always possible, and the majority of property accesses and smaller side roads will become left-in, left-out only.</p>
<p>Consultation Process (10% of comments)</p> <p>Requests for copies of the proposals or support to locate/navigate the online consultation</p>	<p>Support was provided upon request to navigate to the proposals and understand how to leave feedback. The website and Social Pinpoint were updated to make them easier to navigate. The consultation period was reopened to allow additional time for comments.</p>
<p>Road Shoulders (8% of comments)</p> <p>The Highway should have wide, smooth shoulders for cyclists and slow-moving vehicles</p>	<p>The width of sealed shoulders is being considered during the design.</p>
<p>Impact on Properties (7% of comments)</p> <p>I'd like more detailed information about how the proposals will affect my property entrances, trees, and how much land you will acquire</p> <p>I'm concerned about property acquisition reducing my land area and affecting the viability of my farm</p> <p>Request for an additional access gate</p> <p>Will access to properties be impeded by the median safety barrier?</p>	<p>The concept proposals consulted on are quite high level, focused on the locations of overtaking lanes, breaks in the barrier, and turn facilities.</p> <p>We are currently giving careful consideration to the feedback from the public consultation as well as from property owners and other key stakeholders, prior to firming up the proposals. Then the proposals will progress to the next stage of design, during which impacts on properties will become more clearly defined and we will discuss these with property owners.</p>



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	<p>Access to private properties from the Midland Highway requires a license under the <i>Tasmanian Roads and Jetties Act 1935</i>. Licensed accesses that are used by property owners will be kept open. Unlicensed accesses will be closed as part of this project.</p> <p>Where median safety barrier is installed past a property access, vehicle access will become left-in, left-out only. Vehicles will need to use the nearest turn facility or suitable side road or township to turn around for right-in or right-out access.</p> <p>Specific property impacts will be discussed in more detail with the affected property owners prior to final decisions being made.</p>
<p>Pedestrians, Cyclists and Public Transport (6% of comments)</p> <p>We need a pedestrian footpath and cycle path between Ross and Campbell Town, on the eastern side, crossing Tacky Bridge, and north of Campbell Town, on the western side</p>	<p>The current project does not include provision for pedestrian footpaths or cycle paths, as this is outside the scope, but interest in this issue has been noted. There would be additional considerations in the provision of cycling and pedestrian paths, including such things as impact on trees, utilities and the acquisition of additional land from adjacent properties. Consideration of alignment with any Council strategies would also need to be factored into any such pathway proposals, which may then be the subject of further studies and consultation.</p>
<p>Trees & Environment (3% of comments)</p> <p>I'm concerned about removal of mature trees that are a habitat for wildlife</p> <p>Trees that block the view of oncoming traffic at intersections should be removed</p>	<p>The approach being taken on this project is to do everything we can to minimise the need to remove mature trees, including natives and Pioneer Avenue trees. In some cases, it may be unavoidable, or necessary for safety so as to not block views of oncoming cars, or because older trees create a safety hazard.</p> <p>We have had field surveys done by qualified ecologists who have recorded all of the significant trees, other flora and fauna in or adjacent to the sections of highway subject to planned upgrade. They have made</p>



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	<p>recommendations about the management of the local flora and fauna.</p> <p>We are also in discussions with Councils about the preparation of a Landscape Plan which would be submitted as part of the planning applications. That plan would map the areas where trees are required to be removed, and the measures we will take to maintain the landscape, which may include planting new trees and other vegetation.</p>
<p>Stock Underpasses (1% of comments)</p> <p>I would like a stock underpass to cross stock from one side of the highway to the other without taking them across the highway</p>	<p>The Tasmanian Government Stock Underpass Program supports farmers to apply for funding to subsidise the cost of stock underpasses up to one third (33%) of the cost of construction, up to a maximum of \$80,000. The remainder of the cost must be borne by the property owner. New stock underpasses are not funded by the Department of State Growth. Further information on the Stock Underpass Program, including guidelines and the application form, and contact details for further discussion, can be found on the DPIPWE website.</p>

Next Steps

Concept Design	Completed
Public Consultation on the Concept Design	Completed
Preliminary Design	Underway
Public Consultation on the Preliminary Design	Late 2020
Final Design	Early 2021
Construction	To be undertaken in a phased program from 2021-2024



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