

SOUTH ARM HIGHWAY EXTENSION/ ROKEBY MAIN ROAD

Upgrade from Oceana Drive to Buckingham Drive

Submission to the Parliamentary Standing Committee on Public Works

August 2014

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	Name	Signature	Date
Authorised by:	Adrian Paine		

1. Introduction

The Department of State Growth is undertaking detailed project planning for the upgrade of Rokeby Main Road from Oceana Drive to Buckingham Drive. The planned works are Stage 2 in the upgrade of Rokeby Main Road to four lanes from Oceana Drive to Diosma Street. Funding of \$13.1 million has been allocated to this project.

The purpose of this report is to provide evidence to the Parliamentary Standing Committee on Public Works in support of the proposed Stage 2 upgrade of Rokeby Main Road to four lanes.

1.1 Background

Rokeby Main Road and South Arm Secondary Road from the Shoreline roundabout to Acton Road is a major urban arterial road providing access to residential areas at Howrah, Tranmere, Rokeby, Clarendon Vale, Oakdowns, Lauderdale, Acton, Sanford and South Arm.

Over the last decade there have been numerous approvals for the rezoning of land for residential use and the development of residential subdivisions on land that had been rural land in Rokeby, Droughty Point, Clarendon Vale and Oakdowns. Also urban development has been continuing in Lauderdale, Acton, Sanford, Cremorne and South Arm. The approved rezoning and residential subdivisions has been increasing, and is expected to continue to increase, traffic on the South Arm corridor. This increase in traffic has resulted in a decrease in the level of service and other operational parameters for both the South Arm corridor and the council road intersections. In 2012 the Annual Average Daily Traffic (AADT) on the section of road corridor between Pass Road and the Shoreline roundabout was approximately 17,070 vehicles per day and will continue to increase as approved residential subdivisions are developed.

Rokeby Main Road between Oceana Drive and Buckingham Drive is a two-lane two-way road. This section of the road corridor currently has one local road access at Buckingham Drive which is a no through road serving approximately 130 residential properties and four private accesses. This section does not meet contemporary design standards for the volume of traffic.

The upgrade of Rokeby Main Road from Oceana Drive to Buckingham Drive forms part of a staged approach to upgrading Rokeby Main Road and South Arm Secondary Road to four lanes from the Shoreline roundabout to the Rokeby. The project is the second stage of the upgrade of the road corridor to four lanes from Oceana Drive at Howrah to Diosma Street in Rokeby and is a continuation of the Shoreline to Oceana Drive project.

The Stage 1 works commenced in October 2013 and will be completed in early 2015. It involves upgrading Rokeby Main Road from Diosma Street to east of Buckingham Drive. The Stage 1 works will provide for dual carriageway road with a median barrier on an improved alignment, a signalised junction at Pass Road and connection to Tollard Drive, and a shared cycle / pedestrian pathway from Grange Road West to Buckingham Drive.

1.2 Project Objectives

The objectives of Rokeby Main Road from Oceana Drive to Diosma Street include:

- Providing a consistent traffic environment along the road corridor from the Tasman Highway at Mornington to Diosma Street at Rokeby.
- Improve transport efficiency.
- Improve safety outcomes
- Improve access to resident areas.

1.3 Project Location

The project is located at Howrah, east of the Shoreline roundabout and incorporates the section of Rokeby Main Road from the signalized intersection at Oceana Drive to east of the intersection with Buckingham Drive and includes the construction of a service road linking Buckingham Drive and the Howrah Garden Centre to Tollard Drive as shown Figure 1.

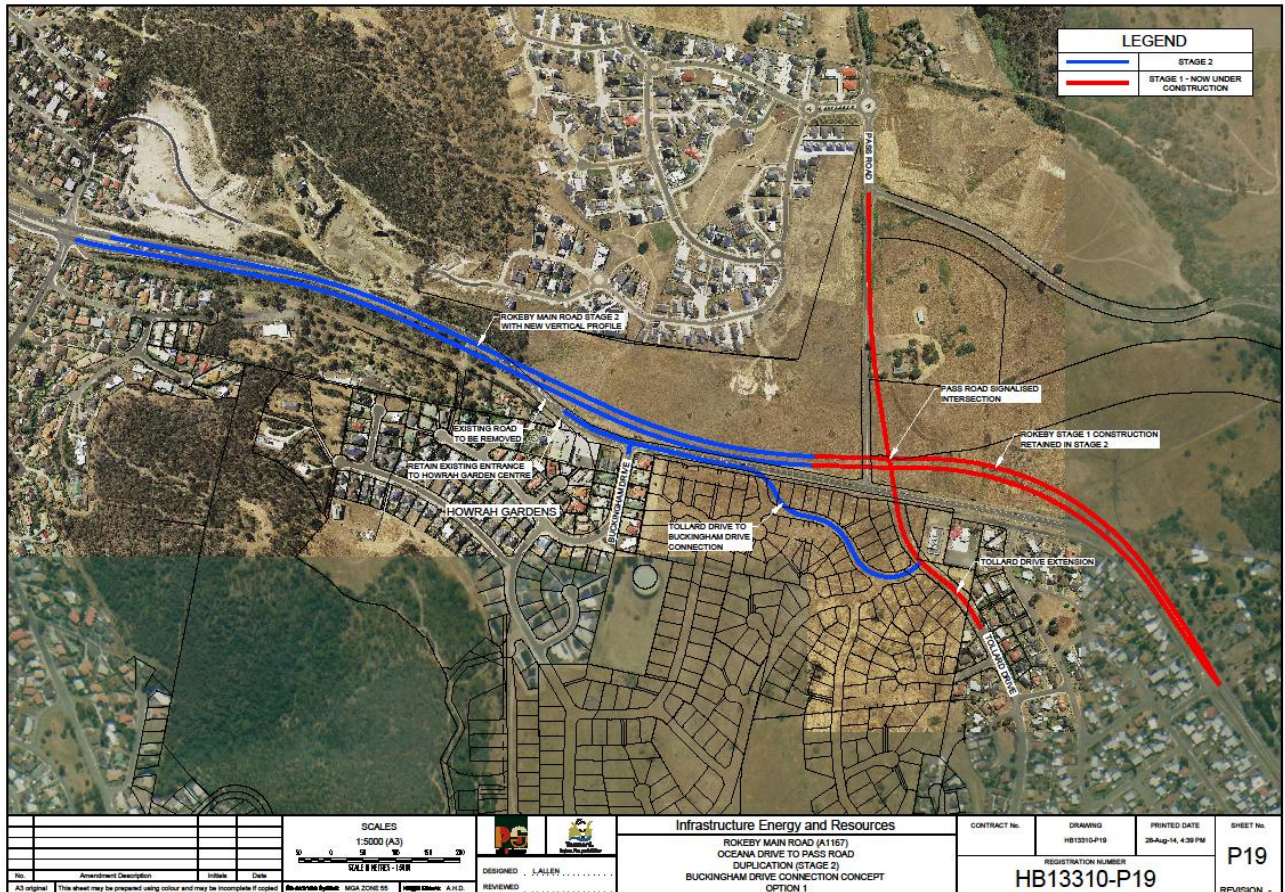


Figure 1 Locality Plan Base image by TASMAP www.tasmap.tas.gov.au © State of Tasmania

1.4. Strategic Context of the Project

1.4.1 Alignment with Approved Strategies

Clarence Plains Outline Development Plan

The project aligns with the key recommendation in the *Clarence Plains Outline Development Plan 2007* (CPODP) of upgrading Rokeby Main Road to four lanes on the existing alignment.

Southern Integrated Transport Plan

The project is consistent with the key strategies in the *Southern Integrated Transport Plan 2010* including targeting infrastructure improvements that enhance the broader network function and meet demonstrated future demand and undertake long term planning for the existing and new strategic transport corridors.

Tasmanian Road Safety Strategy

A key objective of the project is improving safety. This will be achieved with the provision of dual carriageway with a median barrier, eliminating intersections and uncontrolled accesses, improvements to the road alignment and sight distance and the construction of a shared cycle / pedestrian facility. These features will improve safety outcomes and align with the aims of the Road Safety Strategy.

1.4.2 Alignment with Planning Policies and Themes

The project is consistent with the coordinated infrastructure planning policy theme within the Tasmanian Infrastructure Strategy as the project will improve accessibility to approved residential subdivisions at Howrah Gardens, the west side of Droughty Point and Pass Road. The upgrade will also provide additional capacity for existing and future traffic volumes.

2. Project Details

2.1 Proposed Works

The proposed works for the project include:

- Upgrading of the 1.04km Rokeby Main Road between Oceana Drive to east of Buckingham Drive to four lanes with a median barrier and includes improvements to the road geometry.
- Construction of a shared concrete cycle / pedestrian path from Oceana Drive to Buckingham Drive.
- Construction of the Tollard Drive connection to the signalised intersection at Pass Road
- Construction of a service road linking Tollard Drive to Buckingham Drive.

2.2 Design Speed

The design speed for the upgraded road corridor is 80km/h. The design speed is appropriate for the road environment in proximity to residential areas.

The proposed works are shown on the drawings included as Appendix A.

2.3 Road Cross Section

The cross section adopted for this project is as follows:

- | | |
|-------------------|--------|
| • Traffic lanes | 3.0m |
| • Median | Varies |
| • Sealed shoulder | 2.0m |
| • Verge | 1.0m |

2.4 Safety Benefits

The Stage 2 Upgrade of Rokeby Main Road will provide the following safety improvements for the road corridor:

- Providing a limited access four lane road with a median barrier and signalised intersection at Tollard Drive to provide access to Rokeby, Droughty Point and Howrah Gardens that will reduce the number and severity of crashes.
- Eliminating intersections and uncontrolled accesses and thereby reduce the number and severity of crashes.
- A signalised intersection at Pass Road / Tollard Drive will enable vehicles from Rokeby, Droughty Point and Howrah Gardens to make a safe right turn movement from Tollard Drive.

2.5 Provision for Cyclists

The Rokeby Main Road corridor is used by cyclists for training, commuting and recreation. These three groups have different desires in terms of the type of infrastructure for their activity. The three groups use the road corridor as below:

- Training cyclists – use the road.

- Commuter cyclists – may also use the road or a separate path.
- Recreational cyclists – usually use a separate path if possible.

The Austroads Guide to Traffic Management Part 4 recommends that for a traffic speed of 70 km/h and traffic volumes in excess of approximately 3,000 vpd cyclists should be provided with separate paths and not be required to ride on the road.

Consequently a commuter standard 3.0 metre wide shared pedestrian / cycle path from Oceana Drive to Buckingham Drive is included in the project. The new path will be constructed adjacent to the road where there is passive surveillance. Additionally, the project will extend the shared path, constructed under Stage 1, from the Pass Road intersection 250m east connecting with Grange Road West.

Although a separate path is being provided, training and some commuter cyclists will ride on the road. The road cross section includes a 2.0 m wide shoulder that complies with the *Austroads Guidelines* and meets the bicycle communities' requirements.

2.5 Drainage

The Stage 2 upgrade of Rokeby Road will include the provision of kerb and gutter to provide for stormwater drainage. Stormwater from the Tollard Drive connection will be drained to a swale drain on the north side of Rokeby Road, which was constructed under Stage 1 as well as connecting into the existing stormwater network at Tollard Drive.

Stormwater from Rokeby Main Road west of Buckingham Drive will drain to the existing Clarence City Council stormwater pipe at Oceana Drive. Currently the existing watercourse located within the road reservation on the south side of Rokeby Main Road that drains west from Howrah Gardens to Oceana Drive is subject to periodic flooding as a result of the Oceana Drive stormwater pipe not having sufficient capacity. The Stage 2 works therefore will include the construction of a detention basin under the road to ensure the upgraded road does not increase the peak stormwater flows. In discussions with Clarence Council, the Council officers have indicated that the proposed detention basin design will meet with Council's approval however the detailed drainage design will be submitted for Council's approval prior to finalising.

2.6 Utilities

The road reservation between Oceana Drive and Buckingham Drive contains a number of utilities including:

- Trunk and reticulation water mains owned by TasWater
- Sewer owned by TasWater
- Overhead and Underground electrical mains owned TasNetworks
- Underground telecommunications cables owned by Telstra Corporation

The Stage 2 upgrade of Rokeby Main Road does not require the relocation of any services.

3. Social, Environmental Impacts and Stakeholder Engagement

A key consideration during the planning and detailed design for the upgrade of Rokeby Main Road from Oceana Drive to Diosma Street has been development of an economically, environmentally and socially sustainable design.

3.1 Property Acquisition

The construction of the service road from Tollard Drive to Buckingham Drive will require the acquisition of land from one property:

- Title Reference CT159613/3 at 525 Rokeby Road, currently owned by Tranmere Point Pty Ltd (1.1 ha).

The land to be acquired is land identified by the Owner's as road in the approved Development Application for the property and is therefore consistent with the proposed future development of the property.

3.2 Property Access

3.2.1 Rokeby Main Road

Currently four properties have access licenses to Rokeby Main Road between Oceana Drive and Buckingham Drive. These accesses are:

- "Nicholls Quarry" (450 Rokeby Main Road) – owned by Elizabeth Nicholls. The quarry currently is being rehabilitated and the property contains a residence which is accessed from Vienne Drive.
- Residential property owned by Nigel Innes at 427 Rokeby Main Road.
- Residential property owner by Nick and Zach Lambrakis at 457 Rokeby Main Road.
- Howrah Fruit Market owned by Lambrakis Enterprises at 469 Rokeby Main Road.

The Nicholls Quarry site currently has a licence for the rehabilitation of the quarry site, which involves clean fill being placed in the quarry area. The upgrade of the road corridor to four lanes will restrict vehicle access to the site to left in / left out movements. When the site has been rehabilitated the Rokeby Main Road access will be closed and all access will be via Vienne Drive or the Glebe Hill residential subdivision.

A new access for the residential property at 427 Rokeby Main Road will be established from the cul-de-sac within the Howrah Gardens subdivision at Buckingham Drive.

The access to the properties at 457 and 469 Rokeby Main Road will remain however the Stage 2 upgrade of Rokeby Main Road will bypass this section of Rokeby Main Road which will be connected to the new service road linking Tollard Drive to Buckingham Drive.

All property owners have been consulted on the new access arrangements for their properties.

3.2.2 Grange Road West

The Rokeby Tasmanian Fire Service station and Rokeby TasNetworks substation are currently accessed from the western end of Grange Road West.

With the Tollard Drive connection to be completed under the Stage1 upgrade of Rokeby Main Road, it has been agreed with the Fire Service and TasNetworks that the Stage 2 works will include the provision of a single shared access to Tollard Drive.

3.3 Noise

Noise analysis and modelling of the noise likely to be generated from traffic using the upgraded road corridor has been undertaken for Stage 1 and 2. The analysis indicates sound attenuation will be required for the vacant land east of Buckingham Drive when it is subdivided for residential use in order to comply with Department of State Growth Guidelines.

The sound attenuation will be provided by the developer when the land is subdivided into residential lots.

Minor alterations associated with the connection to the intersection at Oceana Drive will require the relocation of existing noise attenuation walls.

3.4 Flora

A vegetation survey and fauna habitat assessment has been undertaken for Stage 1 and Stage 2 of the project. The survey has identified that the works for the project will impact on six species which are listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA). These species are:

- *Arthropodium strictum* (chocolate lily)
- *Austrodanthonia induta* (tall wallabygrass)
- *Juncus amabilis* (gentle rush)
- *Senecio squarrosus* (leafy fireweed)
- *Lepidium pseudotasmanicum* (shade peppergrass)

Removal of these threatened species cannot proceed without a "Permit to Take" under the TSPA and the required permits have been issued by the Policy and Conservation Assessment Branch (PCAB) of the Department of Primary Industry Parks Water and Environment.

The project was referred to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPC, now Department of the Environment) under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Referral addressed the potential impact on the feeding habit of the endangered swift parrot (*Lathamus discolor*) arising from the proposed removal of 86 black gums (*Eucalyptus ovate*) and 1 blue gum (*Eucalyptus globulus*).

DSEWPC approved the proposed works as a "controlled action" under approval EPBC 2011/6061 on 19th August 2013.

3.5 Fauna

The vegetation survey and fauna habitat assessment identified the 87 eucalypts located in the drainage line that runs west from the Howrah Garden Centre to Oceana Drive and the lower slopes of Glebe Hill to provide potential foraging habitat for swift parrots during spring and summer months. These trees have now been removed in accordance with approval EPBC 2011/6061.

There is no other threat to fauna identified.

3.6 Environmental Safeguards

Due to the environmental sensitivity of the site, a number of environmental safeguards have been implemented where impacts could be avoided or minimised. These have included the installation of access exclusion zones to reduce impacts on threatened plant species and to reduce the spread of weeds throughout the site.

Where impacts to threatened plants and vegetation could not be avoided, it has been necessary to seek approval under the EPBC Act and establish offset sites to compensate for the loss of these species. Under the EPBC Act approval, the establishment of an offset for the eucalypt species is required prior to August 2016. A number of options for securing the required offset are currently being explored and this process will not impact on construction timelines.

3.7 Aboriginal Heritage

An Aboriginal cultural heritage survey was undertaken for the project area along Rokeby Main Road from Oceana Drive to Diosma Street and included the section of Pass Road from Rokeby Main Road to north of Goodwins Road. No Aboriginal artefacts or sites were found within the project area for the Stage 2 upgrade of Rokeby Main Road.

3.8 Historic Heritage Assessment

A heritage assessment has been undertaken of the Rokeby Main Road corridor and adjacent areas. No heritage listed properties will be impacted by the proposed road improvements.

3.9 Development Approvals

The project is located within the City of Clarence and is subject to the provisions of the *Clarence Planning Scheme 2007* under the *Land Use Planning and Approvals Act*. Following a recent amendment to the Planning Scheme, Council has advised that the proposed works for the Stage 2 upgrade of Rokeby Main Road are exempt and therefore submission of a Planning Permit is not required.

3.10 Stakeholder Engagement

The upgrade of Rokeby Main Road from Oceana Drive to Diosma Street has involved extensive consultation with stakeholders. Key stakeholders include:

- Clarence City Council
- Landowners and residents at Howrah Gardens, Glebe Hill, Rokeby and Clarendon Vale
- General road users
- Cycling South
- Commonwealth Department of Sustainability, Environment, Water, Population and Communities
- The Policy Conservation Assessment Branch of the (State) Department of Primary Industries, Parks, Water and Environment
- Public utility authorities
- Metro Tasmania

Stakeholder activities commenced in early 2011 and have included:

- Briefing with Clarence Council General Manager and Manager Asset Management.
- Workshop with the Clarence City Council Mayor, Councillors and Managers.

- Briefing with the Clarence Plains Community Group.
- Briefing Clarendon Vale Neighbourhood Centre
- Two Community Information Days to engage with the broader community were held at the Rokeby Hall and Rokeby Community Centre.
- Ongoing discussions with the owners of the Howrah Garden Centre.
- Discussions with leases of Howrah Gardens Centre on request.
- Discussions with Bicycling Tasmania, Cycling South and Clarence City Council Recreational Planning Officer.
- Discussions with Metro Tasmania.
- Discussions and correspondence with residents of Howrah Gardens.
- Discussions with Tasmania Fire Service.
- Discussions with TasNetworks.
- Meetings and discussions with land developers including Robert Howie, Rob Lynch (Glebe Hill Developments), and representatives from Tranmere Point Pty Ltd, Malwood Pty Ltd and Catholic Church.
- Meetings and discussions with landowners with existing accesses to Rokeby Main Road including Elizabeth Nicholls (450 Rokeby Main Road), Nigel Innes (427 Rokeby Main Road) and Nick and Zac Lambrakis (457 and 469 Rokeby Main Road).

3.10.1 Community information Days Feedback

The Community Information Days held on the 4 and 6 May 2011 provided an opportunity for members of the community to ask questions about the project and provide feedback on the concept design.

The feedback from the information days showed there was broad support for Stage 1 and Stage 2 upgrades of Rokeby Main Road from the Rokeby, Clarendon Vale and Glebe Hill community. The owners of the Howrah Garden Centre and the residents of the Howrah Gardens subdivision however, strongly objected to their access being via a service road connecting Rokeby Main Road to Tollard Drive. The objection was based on the perceived detrimental impact on property values due to Howrah Gardens being linked to Rokeby and the impact on the Howrah Gardens business not having direct access to the upgraded road corridor.

Following the Community Information Days four options were investigated for providing direct access for Howrah Gardens to the new alignment of Rokeby Main Road, including a signalised junction west of the Howrah Gardens Centre access. This option would have required the demolition of the house at 457 Rokeby Main Road and resulted in three signalised intersections between Shoreline and Rokeby.

The residents of Howrah Gardens, Howrah Garden Centre owners and lessees were consulted on the proposed new access in June 2013. The option received broad support from residents but owners and lessees of the Howrah Gardens Centre expressed their opposition to the location of the access on the basis that it would lead to a loss of business from passing traffic. The owners and lessees expressed their preference for the access to Howrah Gardens to remain at the current location.

The final design announced on 17 July 2014 provides access from Buckingham Drive via a service road connecting to Tollard Drive and to the new Rokeby Main Road at the Pass/Tollard Road signalised intersection. A letter drop to the residents of Howrah Gardens provided information and a map of the final design and the Howrah Gardens Centre business were written to and provided with the same information and map distributed to the residents. Information was also placed on the Projects' web site and further public displays are scheduled. A 1800 number and the info@stategrowth.tas.gov.au email has also been widely promoted for the community to direct further enquiries regarding the project.

A summary of frequently asked questions (FAQ) are provided in Appendix C – Questions have predominantly come from Howrah Gardens subdivision area residents. The answers to the FAQ also address the benefits and impacts of the project on the broader community.

4. Project Program and Costs

4.1 Project Program

The original contract for the Stage 1 Rokeby Main Road Upgrade provided for the possible extension of the contract to include the Stage 2 Upgrade and negotiations with the current contractor are progressing with the expectations that works on the Stage 2 Upgrade will commence in October-November 2014.

Favourable weather conditions may allow the majority of the works to be completed over the 2014/15 construction season.

4.2 Costs

A Strategic Cost Estimate has been prepared for the project using the Department of Infrastructure and Regional Development's Best Practice Cost Estimation Standard for Publicly Funded Road and Rail Construction (see Appendix 2). The outputs of the Strategic Cost Estimate (including cost escalation of 5%) are:

- P50: \$ 13.1M
- P90: \$ 15.1M

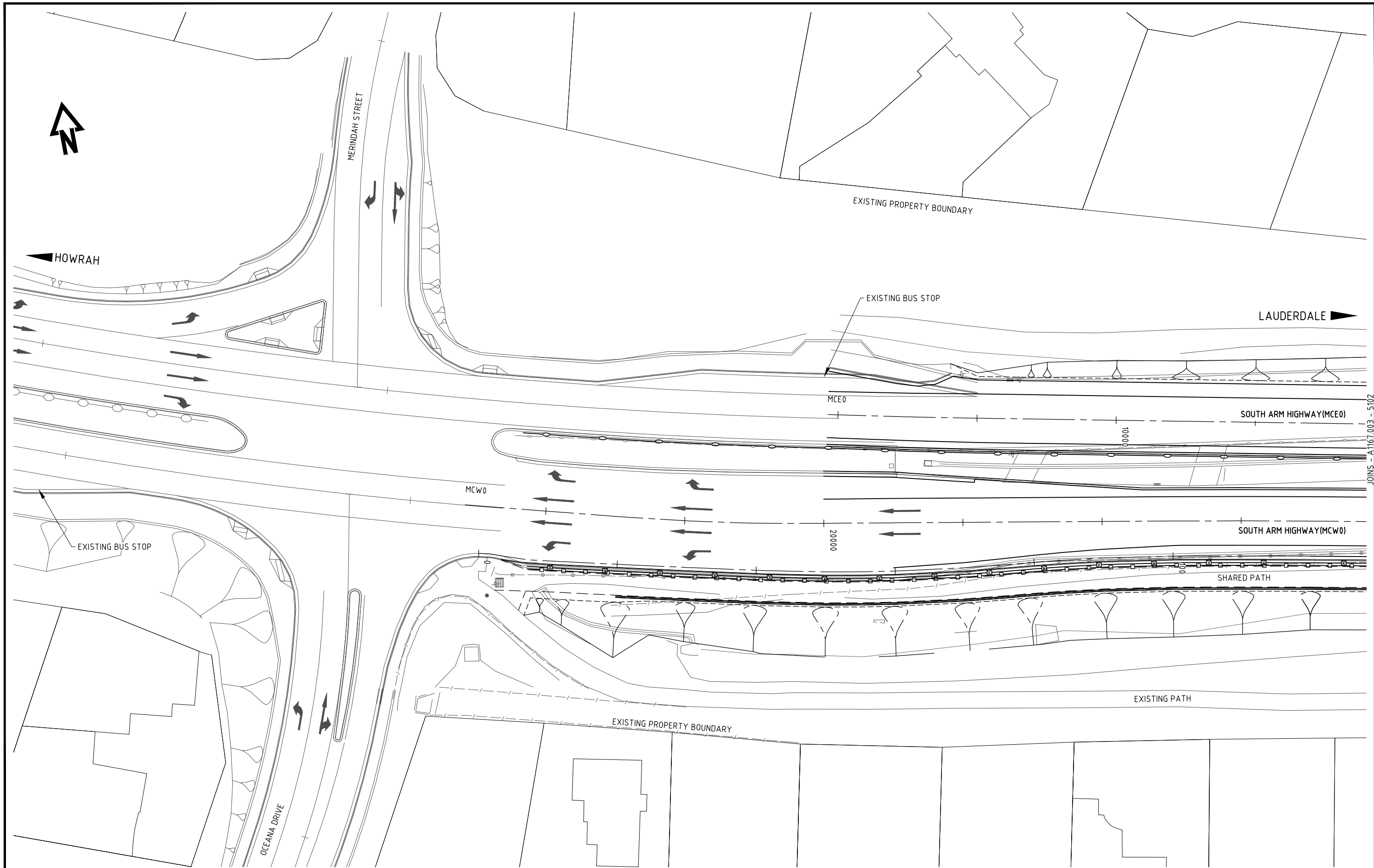
5. Conclusion

The design for the proposed upgrade of Rokeby Main Road Stage 2 has been carried out in accordance with the appropriate design standards and guidelines.

Extensive consultation has been undertaken with residents, business owners, land owners and the broader community over a period of 4 years and the final design reflects the original concept.

Once complete, the works will provide a safer and higher standard road corridor from Howrah to Rokeby allowing for the efficient movement of the expected increase in traffic generated by the expansion of Residential areas at Oakdowns, Pass Road and east side of Droughty Point.

Appendix A: Drawings



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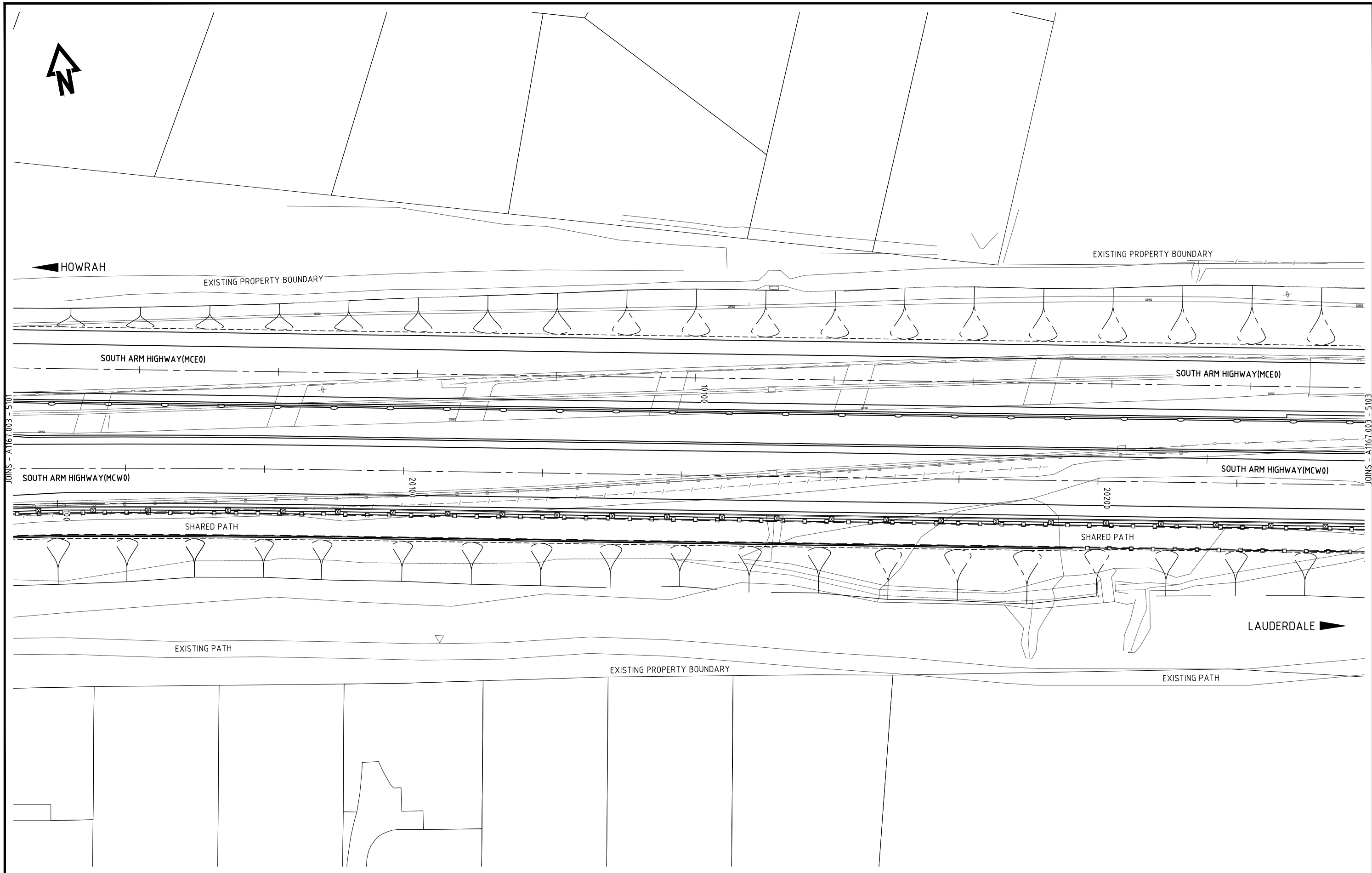
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Department of State Growth

SOUTH ARM HIGHWAY EXTENSION
OCEANA DRIVE TO PASS ROAD

GENERAL ARRANGEMENT - DRG 1 OF 11

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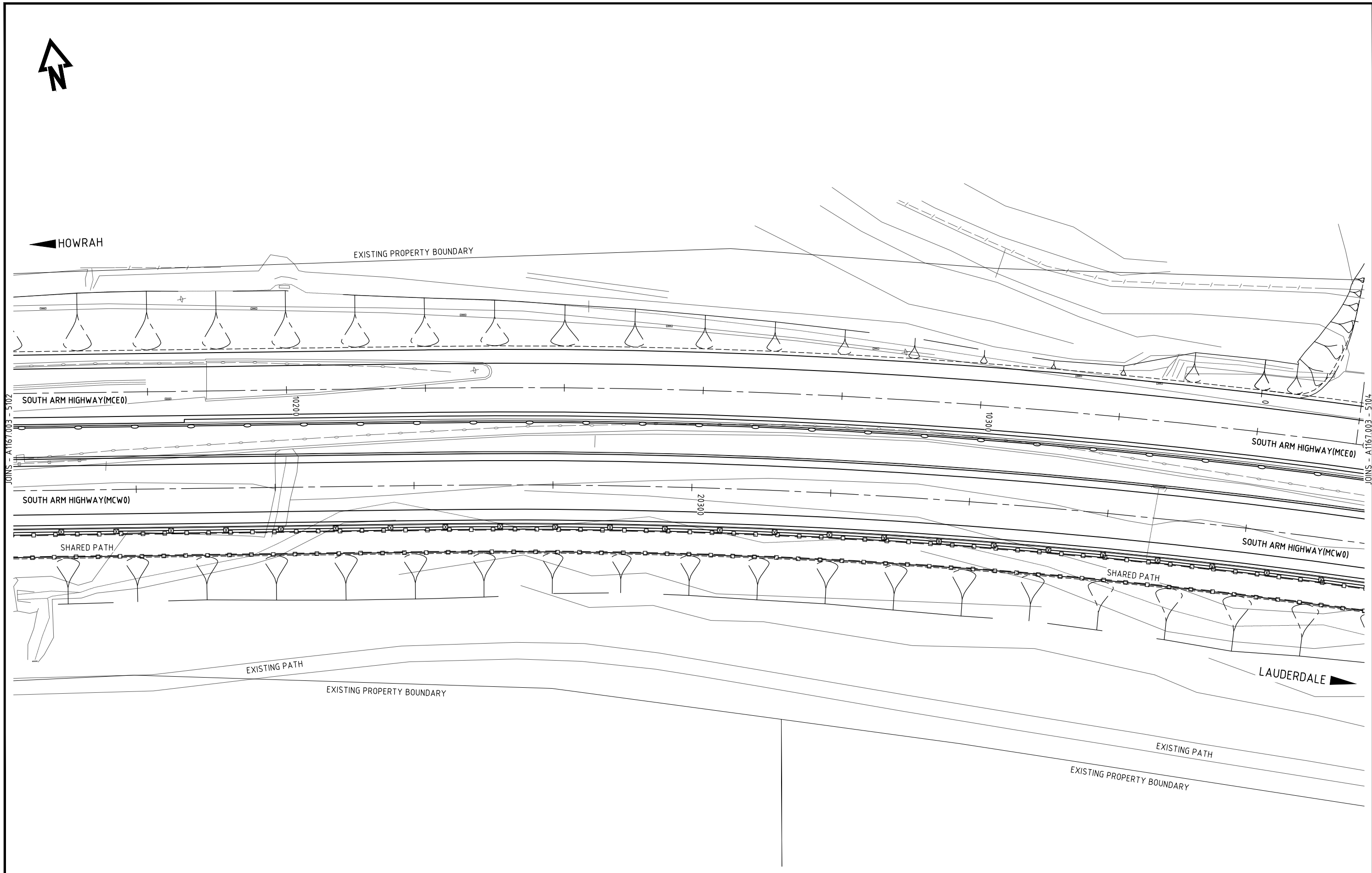
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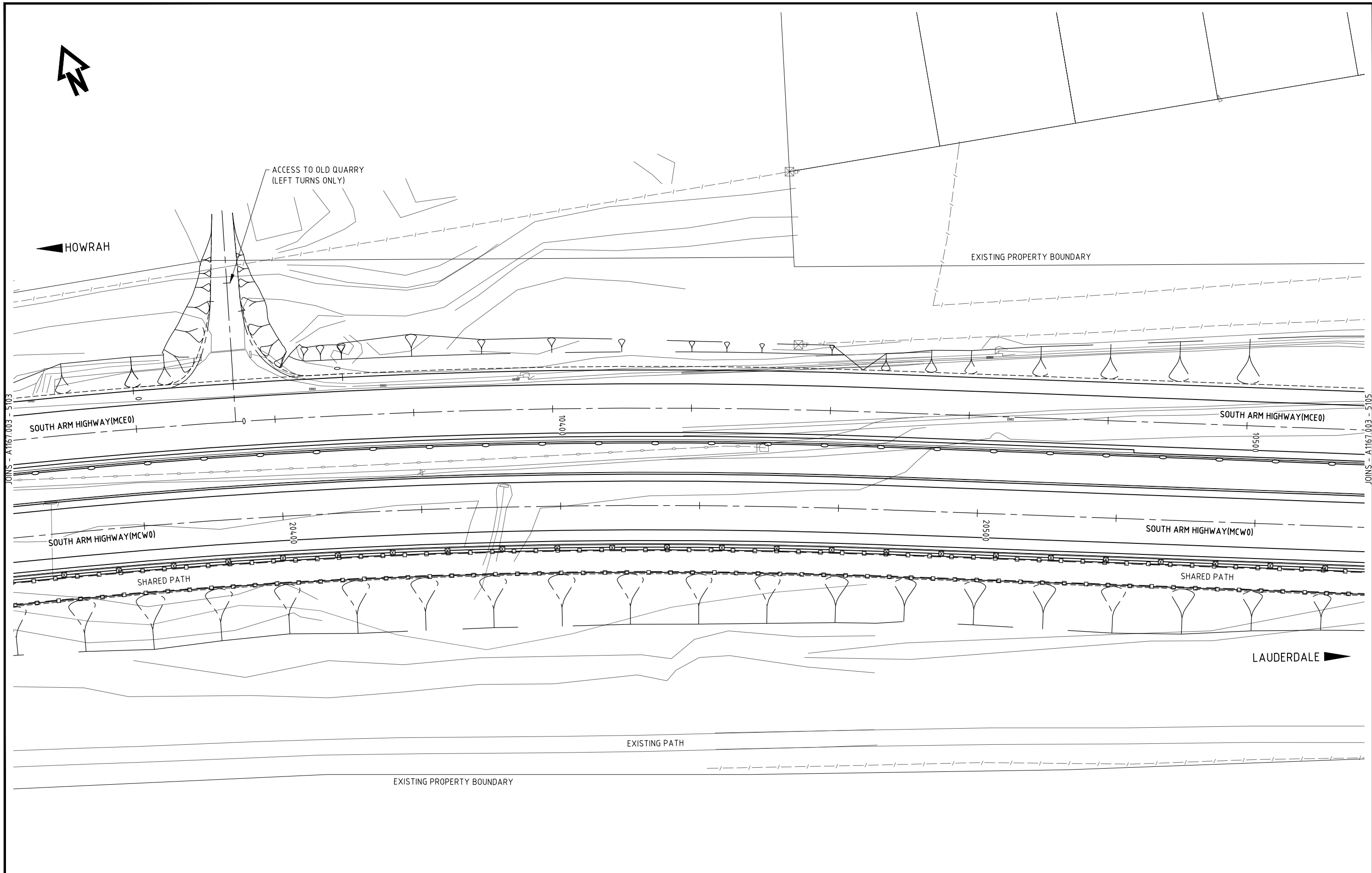
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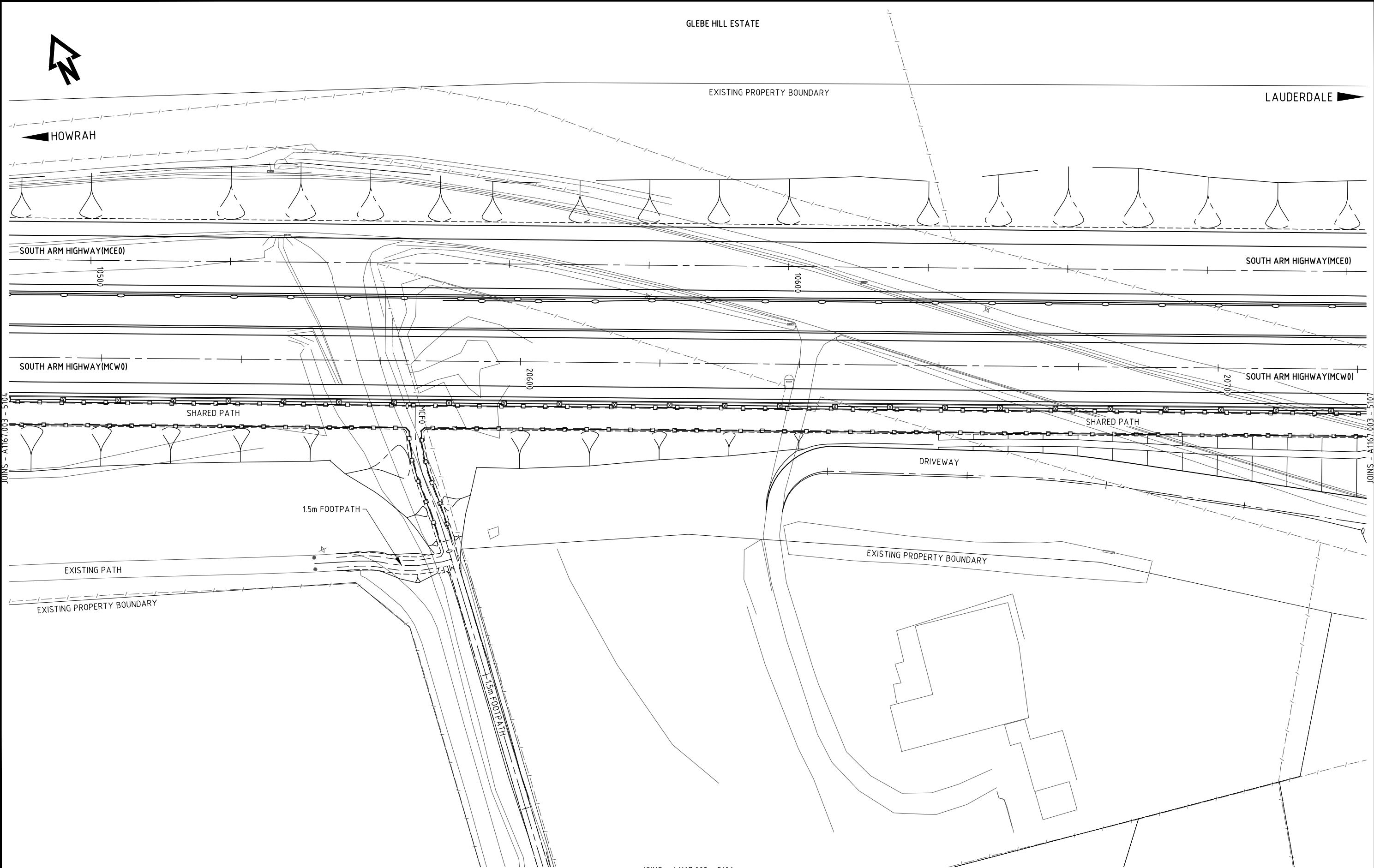
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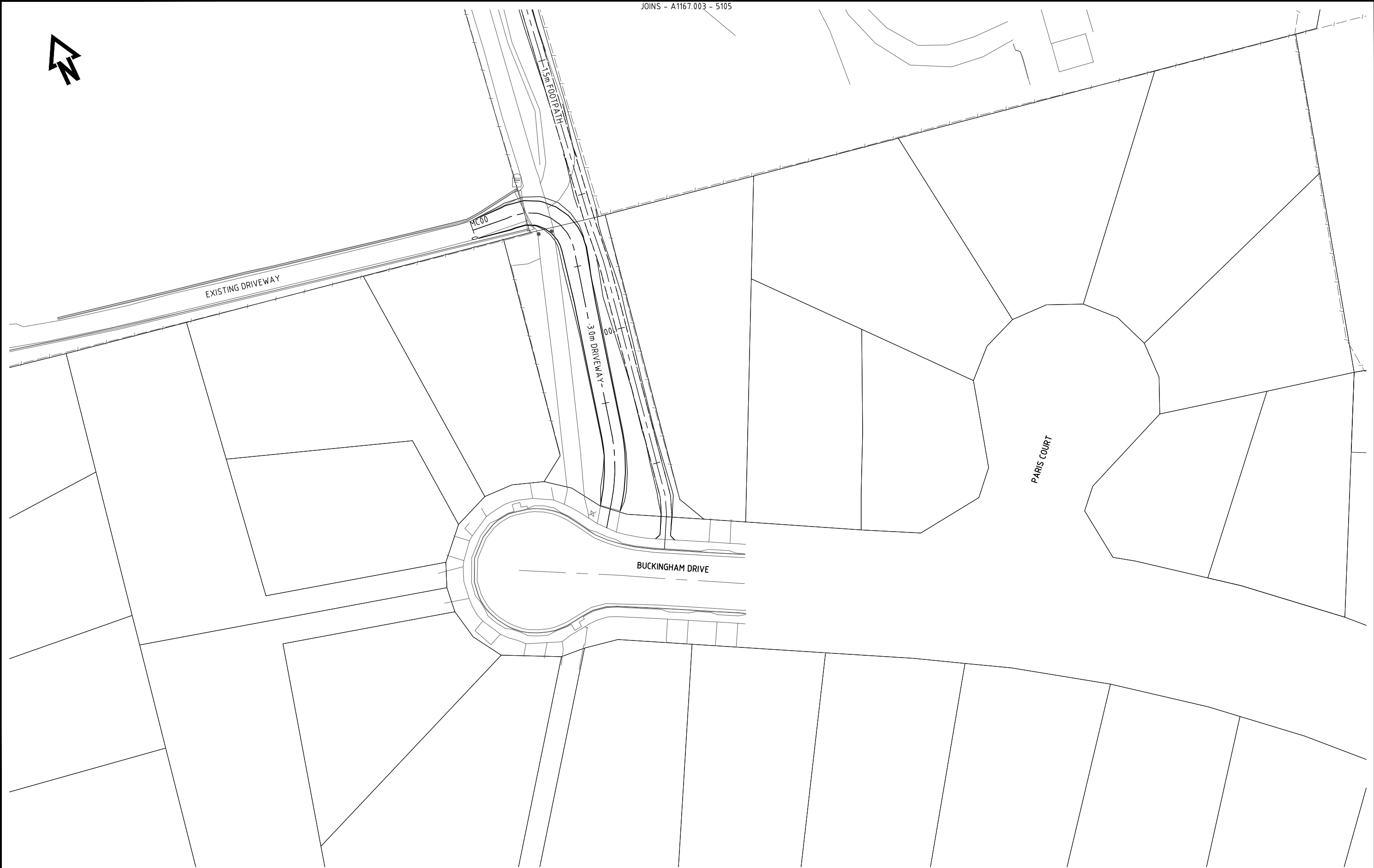
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Department of State Growth

SOUTH ARM HIGHWAY EXTENSION
OCEANA DRIVE TO PASS ROAD

GENERAL ARRANGEMENT - DRG 5 OF 11

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L. ALLEN

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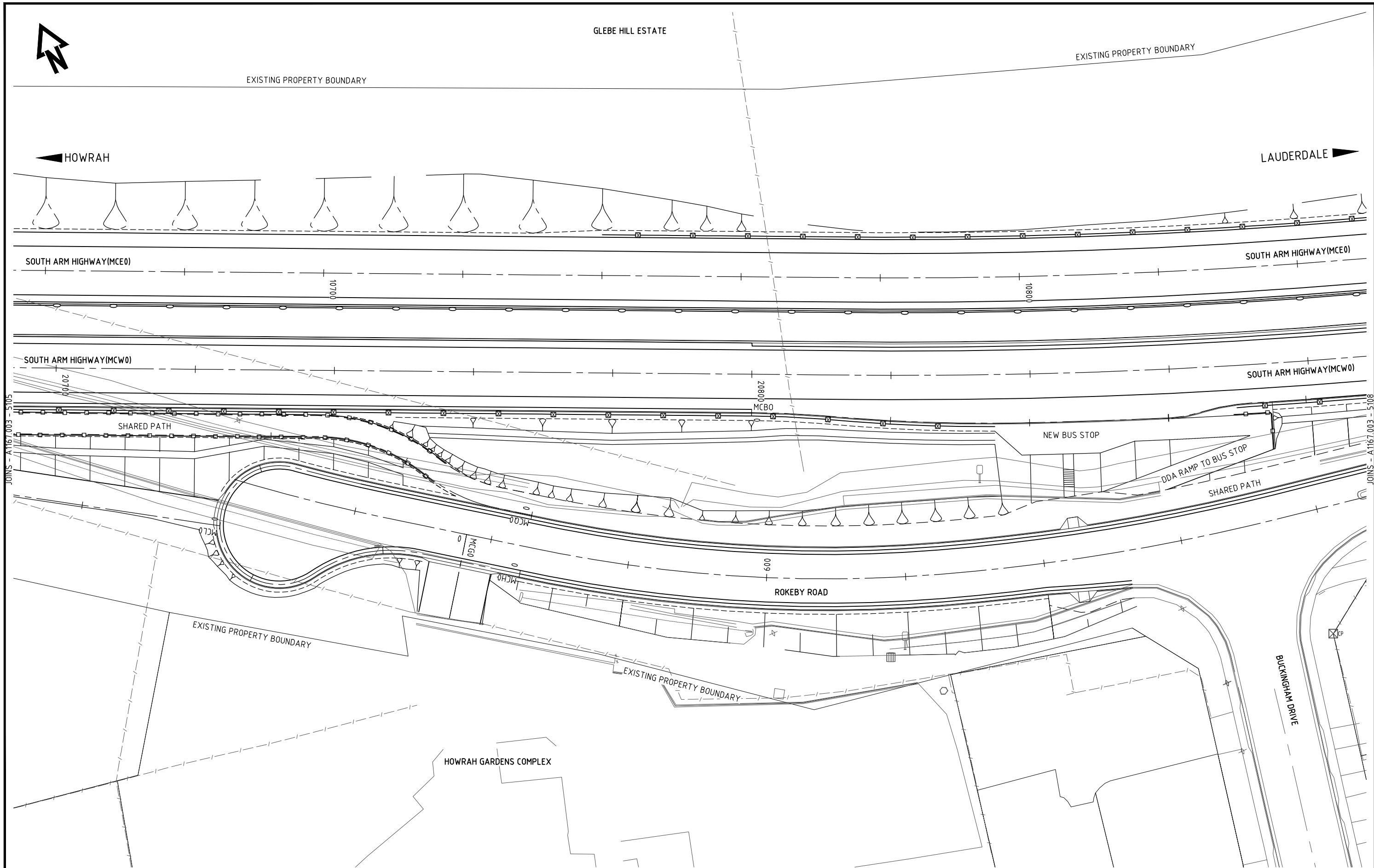
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SOUTH ARM HIGHWAY EXTENSION
OCEANA DRIVE TO PASS ROAD

GENERAL ARRANGEMENT - DRG 6 OF 11

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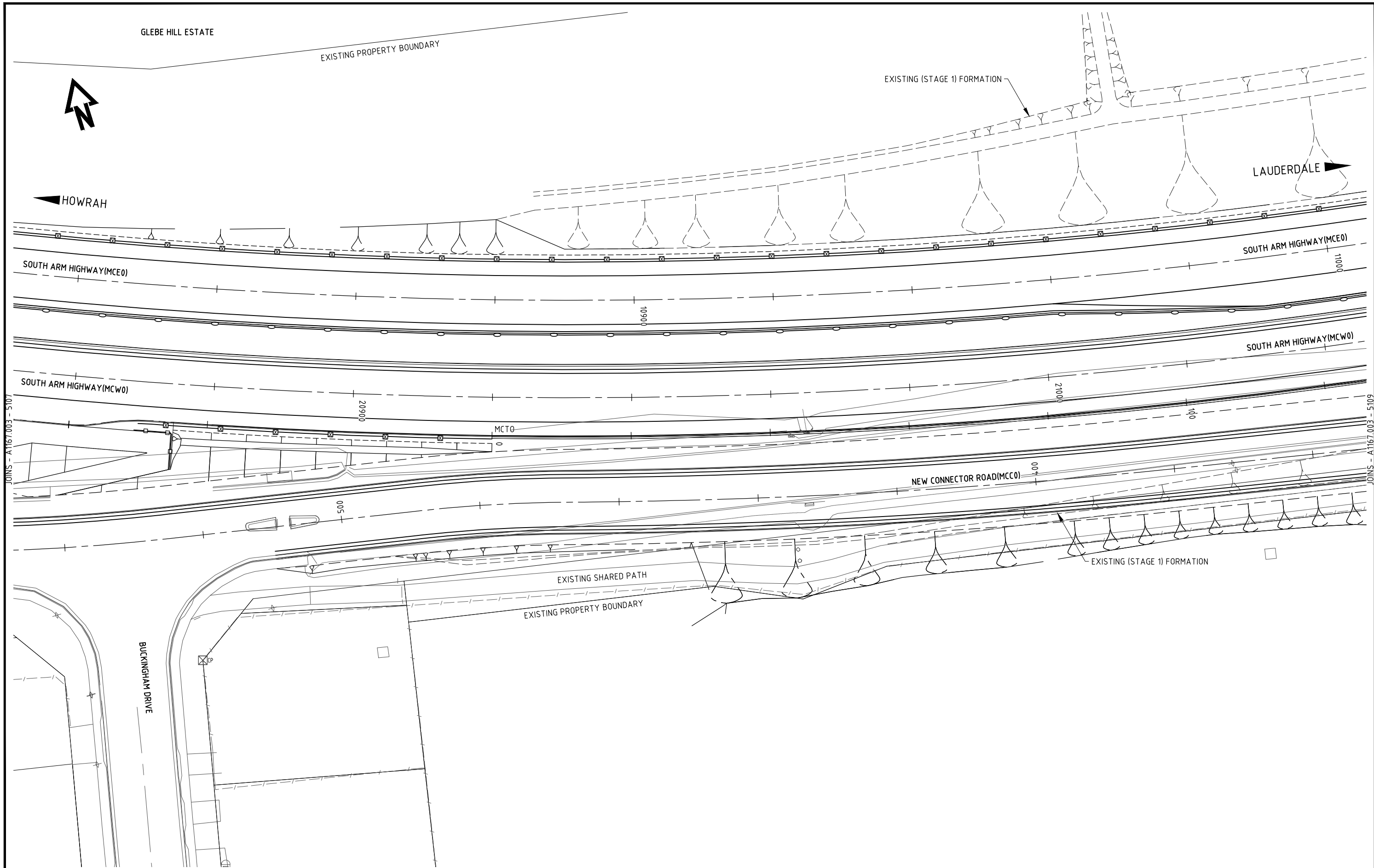
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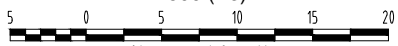
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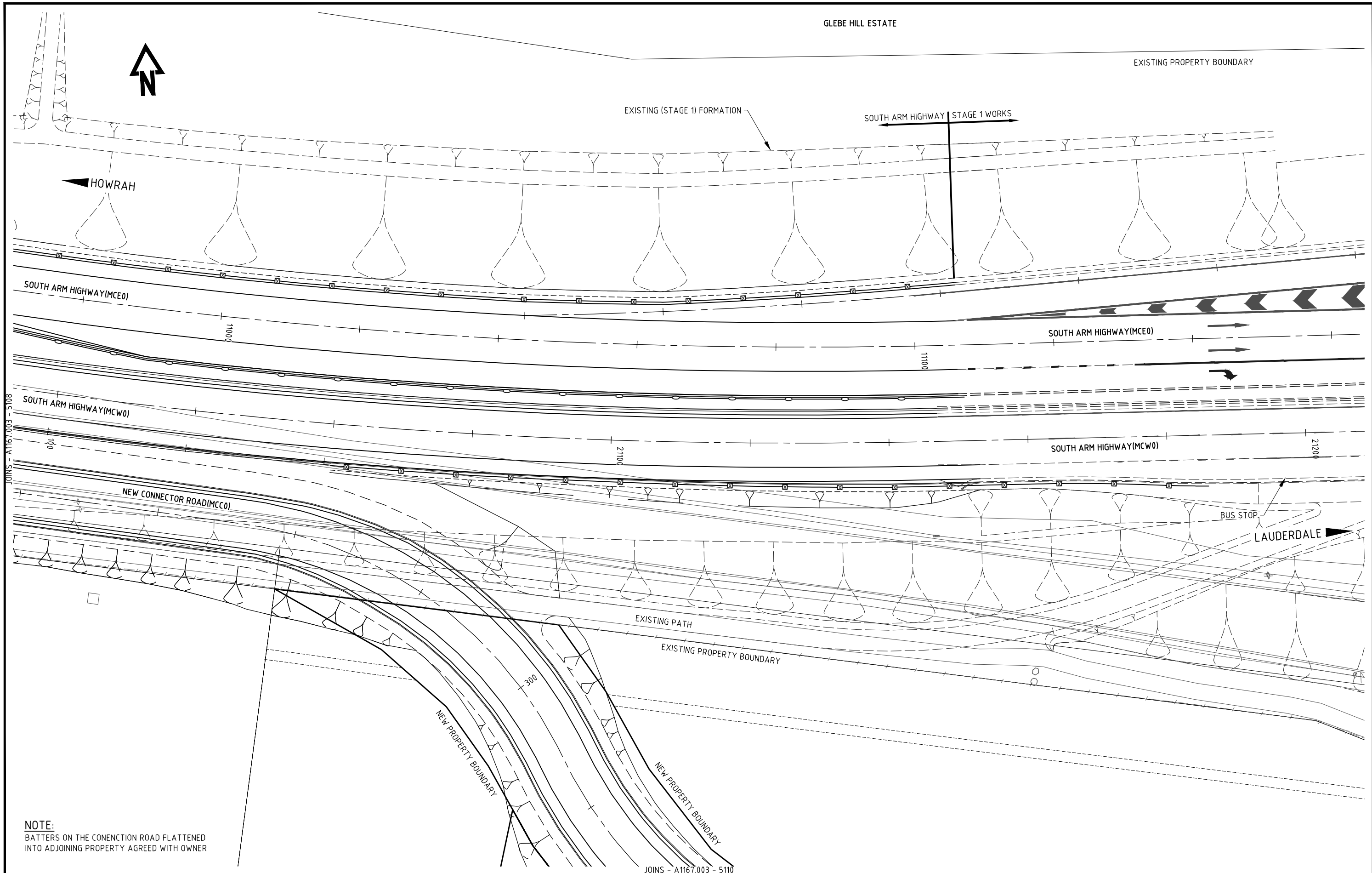
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SOUTH ARM HIGHWAY EXTENSION
OCEANA DRIVE TO PASS ROAD
GENERAL ARRANGEMENT - DRG 7 OF 11




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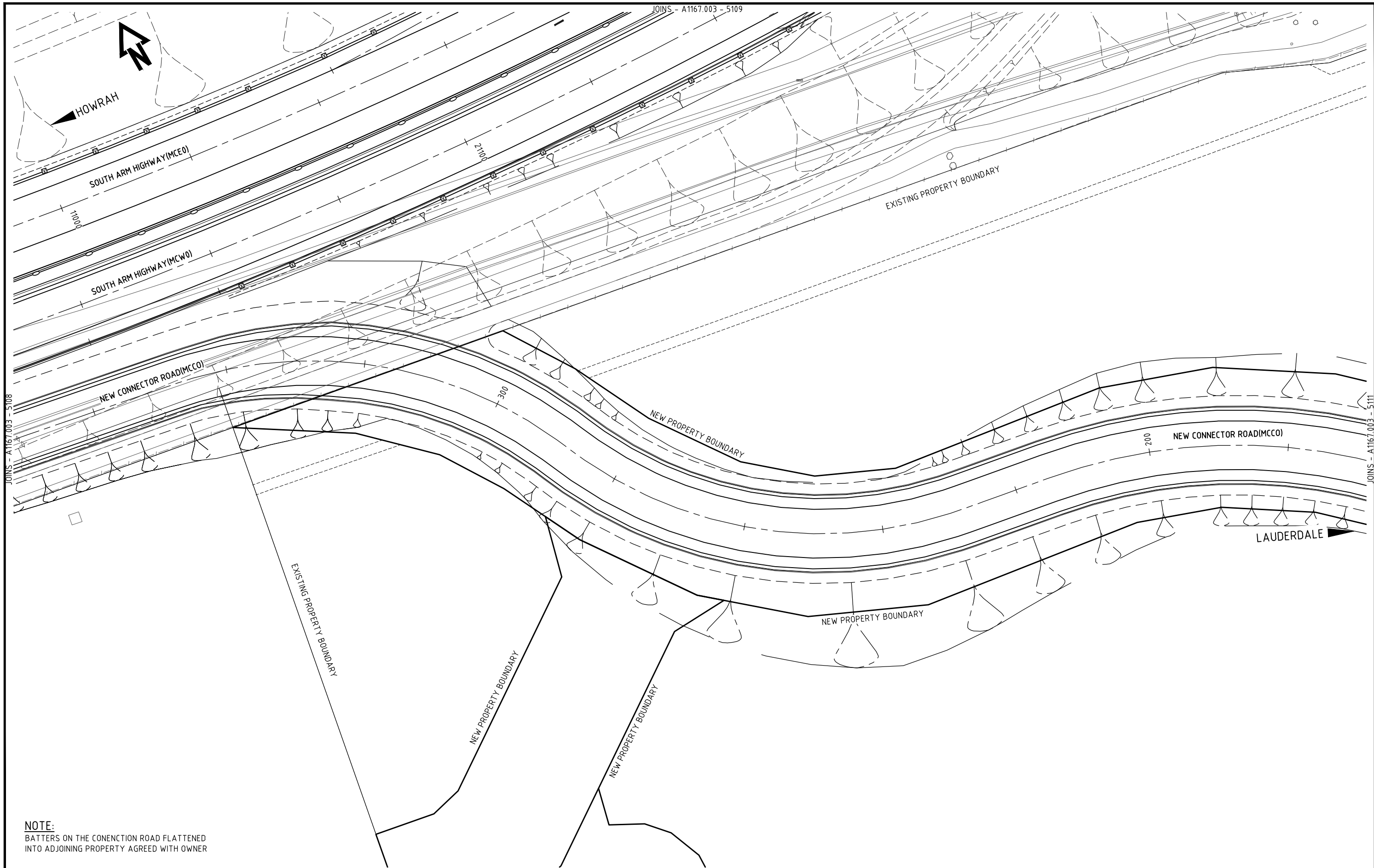


			SCALES				Department of State Growth		CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.
			1:500 (A3)				SOUTH ARM HIGHWAY EXTENSION OCEANA DRIVE TO PASS ROAD			HB13310-C5108	29-Aug-14, 3:05 PM	5108
					DESIGNED L. ALLEN		GENERAL ARRANGEMENT - DRG 8 OF 11		REGISTRATION NUMBER		A1167.003	
			SCALE IN METRES - 1:500		REVIEWED B.WILLIAMS				A1167.003			
			Co-ordinate System: MGA ZONE 55		Height Datum: A.H.D.							



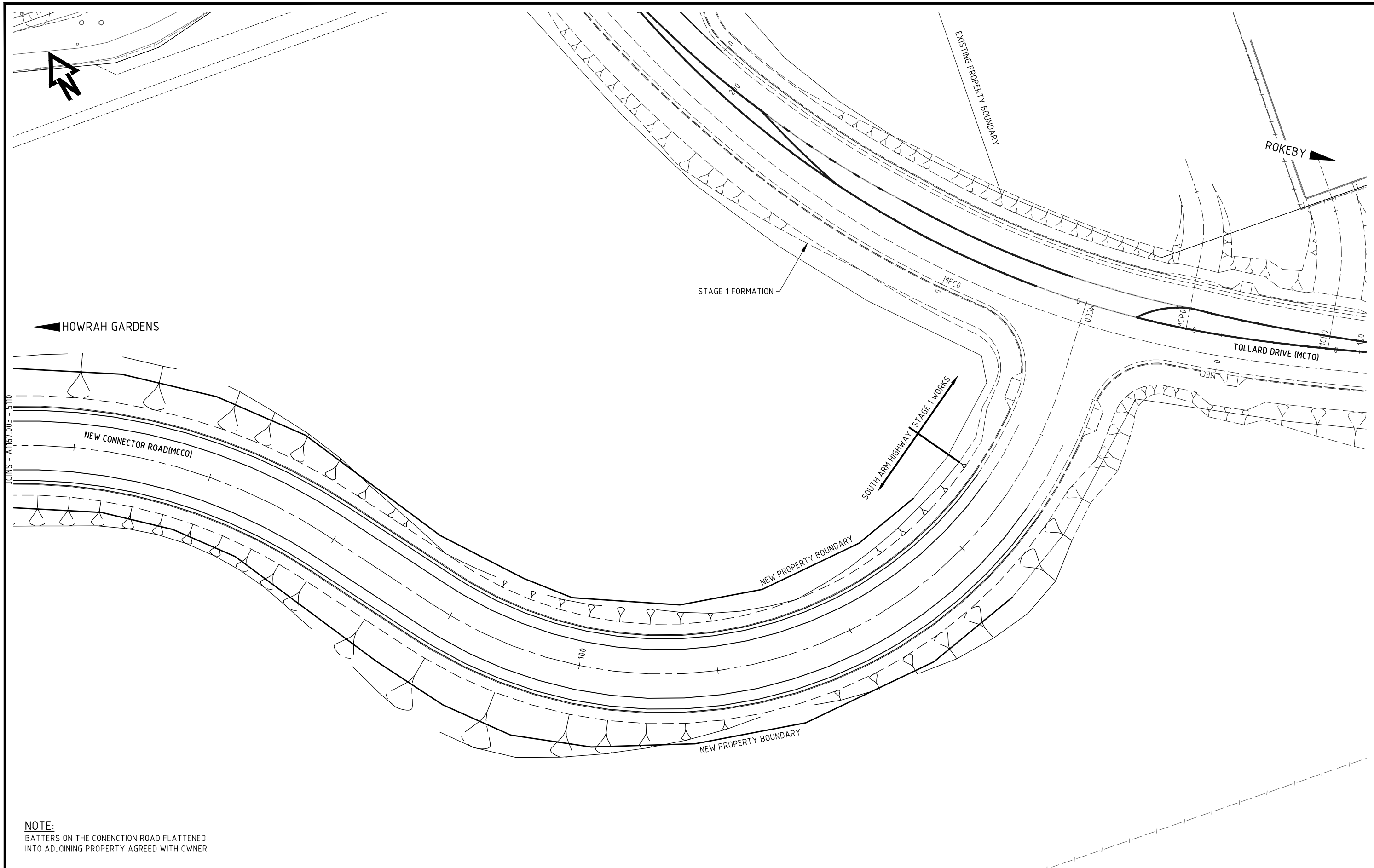
NOTE:
BATTERS ON THE CONENCTION ROAD FLATTENED
INTO ADJOINING PROPERTY AGREED WITH OWNER

			SCALES						Department of State Growth			CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.	
			1:500 (A3)						SOUTH ARM HIGHWAY EXTENSION OCEANA DRIVE TO PASS ROAD				HB13310-C5109	29-Aug-14, 3:05 PM	5109	
									GENERAL ARRANGEMENT - DRG 9 OF 11			REGISTRATION NUMBER A1167.003				REVISION A
			SCALE IN METRES - 1:500													
A	FOR PSCPW SUBMISSION		B.W.	29/08/14	DESIGNED		L. ALLEN									
No.	Amendment Description		Initials	Date	REVIEWED		B. WILLIAMS									
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A	FOR PSCPW SUBMISSION	B.W.	29/08/14	Co-ordinate System: MGA ZONE 55		Height Datum: A.H.D.		REGISTRATION NUMBER A1167.003					
No.	Amendment Description	Initials	Date										
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NOTE:
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Appendix B: P50/P90 Cost Estimate

Base Estimate Date: June 2014		Qty	Rate	Amount
1	Scoping Phase			
	Project Scoping		\$ -	\$ -
	Project Management		\$ -	\$ -
	Public Consultation		\$ -	\$ -
	<i>Subtotal: Scoping Phase</i>			\$ -
2	Development Phase			
A	DIER Project Management		\$ 90,000	\$ 90,000
B	Preliminary Design		\$ 120,000	\$ 120,000
C	Detailed Design		\$ 475,000	\$ 475,000
E	Public Consultation		\$ 10,000	\$ 10,000
	<i>Subtotal: Development Phase</i>			\$ 695,000
3	Property Acquisition			
A	Property Acquisition		\$ 1,600,000	\$ 1,600,000
	<i>Subtotal: Property Acquisition</i>			\$ 1,600,000
4	Delivery Phase			
A	DIER Project Management		\$ 80,600	\$ 81,000
B	Contract Administration		\$ 329,768	\$ 330,000
C	Client supplied Insurances, Fees, Levies		0.45%	\$ 37,000
D	Owner's Costs		\$ 16,500	\$ 17,000
	<i>Subtotal: Delivery Phase Client Costs</i>			\$ 465,000
5	<i>Total Client's Costs</i>			\$ 2,760,000
	Construction			
a	Project Specific		\$ 599,000	\$ 599,000
b	Earthworks		\$ 1,804,000	\$ 1,804,000
c	Drainage		\$ 1,973,000	\$ 1,973,000
d	Pavement		\$ 1,832,000	\$ 1,832,000
e	Bituminous Surfacing		\$ 458,000	\$ 458,000
f	Traffic Facilities		\$ 282,000	\$ 282,000
g	Landscaping		\$ 1,155,000	\$ 1,155,000
h	Miscellaneous		\$ 272,000	\$ 272,000
6	<i>Total Construction Costs</i>			\$ 8,375,000
	Electrical Relocation Direct payment to TasNetworks			\$ -
	Traffic Loop Replacement			\$ 5,000
7	<i>Total Client Supplied Material or Services</i>			\$ 5,000
8	<i>Total Construction Cost (TCC)</i>			\$ 8,380,000
9	<i>Total Construction + CA Cost</i>			\$ 8,710,000
10	<i>Base Estimate</i>			\$ 11,140,000
			P50	P90
	Contingency - inherent risks		\$1,036,000	\$1,922,000
	Contingency - contingent risks		\$337,000	\$1,320,000
11	<i>Total Contingency</i>		\$1,373,000	\$3,242,000
	<i>Total Contingency as percentage of Base Estimate</i>		13%	29%
12	<i>Project Estimate</i>		\$12,500,000	\$14,400,000
13	<i>Escalation (applied to Project Estimate)</i>		\$ 621,000	\$ 714,000
	<i>% escalation (compared to base estimate + contingency)</i>		5.0%	5.0%
14	<i>Total Outturn Cost</i>		\$13,100,000	\$15,100,000

Appendix C: Stakeholder Frequently Asked Questions

Question	Answer
What Will The Project Involve	<p>Stage Two of the Rokeby Main Road upgrade/ South Arm Highway extension will involve the construction of a new section of the South Arm Highway consisting of a four lane Highway from Oceana Drive to the Pass Road / Tollard Drive intersection. The increase to four-lanes and removal of any intersections in this section will ensure maximum efficiency and safety for the many thousands of users of the South Arm Highway.</p>
Has Consultation Occurred For The Project	<p>The Department has undertaken extensive consultation with residents, business owners, land owners and the broader community over a period of 4 years and the final design reflects the original concept, which was the subject of community consultation up to and throughout 2010 and 2011.</p> <p>This project will also be subject to review by the Parliamentary Standing Committee on Public Works and the Committee hearings and submissions to the committee are open to the public.</p>
Why Aren't There Traffic Signals at the Howrah Gardens Subdivision	<p>When building key infrastructure, the Department must always consider how to provide the greatest benefit to the broader community. Efficient traffic flows and safety are the key objectives of this project. Efficiency is achieved by minimising intersections along the highway that disrupt traffic flow and safety is achieved by eliminating uncontrolled access points. The final design which was announced on 17 July 2014 achieves these objectives.</p> <p>As part of a previous design, an alternative access to the highway via a signalised intersection west of Buckingham Drive was developed as a compromise to meet the needs of the owners of the Howrah Garden Centre. This is no longer supported by the owners and as a result the Department has reviewed the project plans and adopted the original design to maximise transport efficiency and safety.</p> <p>It is important to note that the original Howrah Gardens subdivision development was not opposed by the Department on the basis that in the longer term it would not have direct access to the South Arm Highway.</p>
Will the project increase or decrease property values	<p>The Department does not provide advice on property valuations. Buyers and sellers of property in the area should seek their own independent advice from a property professional.</p> <p>It is noted that a significant factor in the design has been to open up access to large areas of urban land to encourage development which will in turn have a positive economic impact on local residents and businesses, including the urban developments that are approved between Buckingham Drive and</p>

	<p>Tollard Drive.</p> <p>With regard to the Buckingham Drive and Howrah Gardens subdivision access, the final design ensures that access arrangements along the entirety of the highway are consistent. The access for Howrah Gardens residents now mirrors those provided for the high demand area of Glebe Hill Estate which will also gain access via the Pass Road / Tollard Drive signalised intersection.</p>
Will Suburb Boundaries Be Changed?	There will be no change to suburb boundaries as part of this project.
Will Traffic Queue At Tollard Drive.	<p>This project will achieve the objectives of maximising efficiency and safety of the South Arm Highway by minimising intersections and eliminating uncontrolled access points that disrupt traffic flow.</p> <p>This in turn will ensure the most efficient flow from local access points such as Tollard Drive and the various connecting roads such Buckingham Drive.</p> <p>At peak times there will always be some queuing at entry points to a busy highway but signalised intersections provide much greater certainty and more control of traffic priority. This means that possible time lost to queuing will be cancelled out by the more timely and efficient flow of traffic on the new section of the South Arm Highway.</p>
Where are the Bus Stops?	<p>The Department of State Growth is working with Metro Tasmania to ensure minimal passenger transport disruption during the work and also following completion, including the placement of bus stops.</p> <p>Stage 1 of the project provides both Eastbound and Westbound bus stops at the Pass Rd/Tollard Drive signalised intersection where a safe crossing opportunity exists. Access to these stops will be improved via the upgraded shared path between Oceana Drive and Tollard Drive.</p>
Will It Take More Time to Access Surrounding Suburbs?	<p>The upgrade to 4 lanes between Ocean Drive and Pass Rd/Tollard Drive will improve travel time for all road users through this section of the South Arm Highway.</p> <p>The new arrangements will also significantly improve the safety and ease of entry and exit to Glebe Hill Estate, Droughty Point and Howrah Gardens and avoid the current need to wait for a break in traffic to enter or cross the highway.</p> <p>With regard to the Buckingham Drive and Howrah Gardens subdivision access, the final design ensures that access arrangements along the entirety of the highway are consistent. The access for Howrah Gardens residents will mirror those provided for Glebe Hill Estate which will also gain access via the Pass Road / Tollard Drive signalised intersection.</p> <p>Access to the Howrah Gardens subdivision from the new section of the South Arm Hwy will take less than a minute from Tollard</p>

	Drive via the Buckingham Drive connector road (travelling 500m at 40kmh would take 45 seconds).
How Will This Project Affect Howrah Garden Complex access	Access to the Howrah Garden Complex will be via the new Buckingham Drive connector road which will connect to the Highway via the new signalised Pass/Tollard Drive intersection. This arrangement provides safe and efficient access to the complex.
What About Emergency Services	<p>The new 4 lane highway and signalised intersection at Pass/Tollard Road will improve access for emergency service to and from the broader area of Glebe Hill, Droughty Point and Rokeby.</p> <p>In addition, the fire service will have a new access via Tollard drive from the rear of the Rokeby Station.</p> <p>Despite the improved access for emergency services in the broader area, it is noted there will be a small increase in travel time (approximately 45 seconds each way) from Howrah Gardens subdivision area to the new Pass/Tollard intersection, this will be largely offset by the significantly improved Highway flow and safer and faster access/exit arrangements.</p>