

Brooker Highway / Elwick Road Upgrades

Submission to the Parliamentary Standing Committee on Public Works

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| | | | | |

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Table of Contents

| | |
|--|-----------|
| 1 Introduction..... | 6 |
| 1.1 Background..... | 6 |
| 1.2 Project Location | 6 |
| 1.3 Project Objectives | 7 |
| 1.4 Strategic Context of the Project..... | 7 |
| 1.4.1 Alignment with Approved Road and Transport Strategies | 8 |
| 1.4.2 Alignment with Planning Policies and Themes | 8 |
| 1.5 Potential Traffic Delays during Construction..... | 8 |
| 2 Project Details..... | 9 |
| 2.1 Proposed Works | 9 |
| 2.2 Design Speed | 9 |
| 2.3 Road Cross Section | 9 |
| 2.4 Safety Benefits..... | 9 |
| 2.5 Provision for Pedestrians and Cyclists | 11 |
| 2.6 Drainage | 11 |
| 2.7 Utilities | 11 |
| 2.8 Traffic Management during Construction | 12 |
| 2.9 Transport Performance Indicators..... | 12 |
| 3 Social, Environmental Impacts and Stakeholder Engagement..... | 15 |
| 3.1 Property Acquisition | 15 |
| 3.2 Property Access..... | 15 |
| 3.3 Noise | 16 |
| 3.4 Flora | 16 |
| 3.5 Fauna | 16 |
| 3.6 Environmental Safeguards..... | 16 |
| 3.7 Aboriginal Heritage | 16 |
| 3.8 Historic Heritage Assessment | 17 |
| 3.9 Development Approvals | 17 |
| 3.10 Stakeholder Engagement Design Phase..... | 17 |
| 3.11 Stakeholder Engagement Construction Phase..... | 19 |
| 4 Project Program and Costs..... | 21 |
| 4.1 Project Program | 21 |
| 4.2 Costs | 21 |

| | |
|--|-----------|
| 5 Conclusion | 22 |
| Appendix A: Design Drawings | 23 |
| Appendix B: P50 / P90 Estimate | 25 |
| Appendix C: Acquisition Plans | 26 |
| Appendix D: Program | 27 |
| Appendix E: Stakeholder Information | 28 |
| Appendix F: Public Display Plans..... | 29 |

1 Introduction

The Department of State Growth (State Growth) is undertaking detailed project planning for the upgrade of the Brooker Highway between Howard Road Roundabout and Elwick Road including the intersection with Goodwood Road. Funding of \$32 million has been allocated to this project.

This report provides evidence to the Parliamentary Standing Committee on Public Works in support of the project outcomes.

1.1 Background

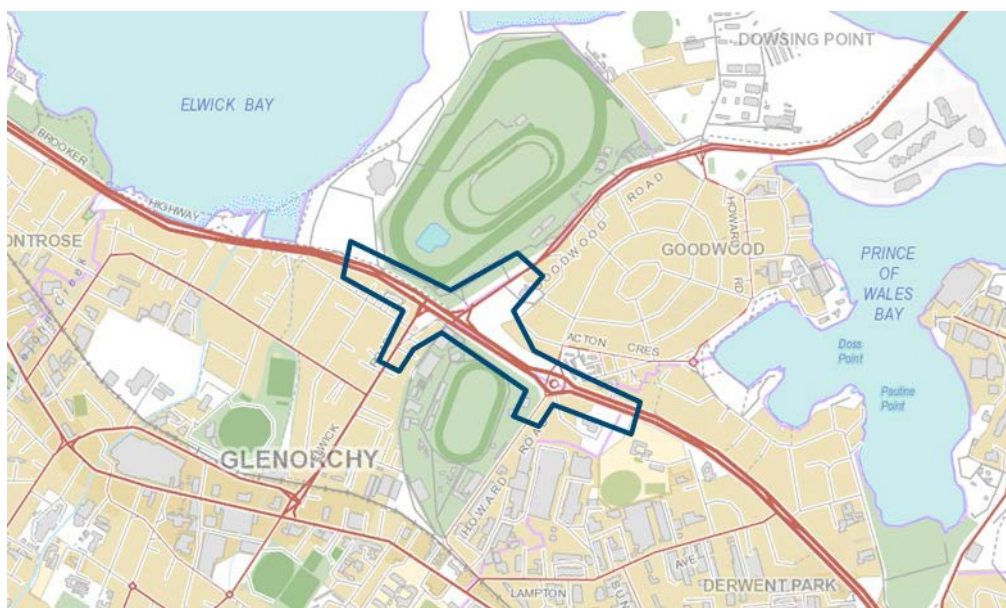
In May 2014 the Australian Government announced \$25.6m to fund a joint Federal and State project to upgrade the Brooker Highway junctions at Howard, Goodwood and Elwick Roads. The Tasmanian Government will provide the balance of the project funding (\$6.8M).

The Brooker Highway is a critical element in Tasmania's transport network. It provides a link between the city; major industrial producers and the national land transport network. The corridor provides logical connectivity to northern Tasmania, including major Port access.

1.2 Project Location

The project location is the Brooker Highway, Glenorchy, with construction works extending into Elwick Road, Goodwood Road, Renfrew Circle and Howard Road.

The intersections of the Brooker Highway with Elwick Road, Goodwood Road and Howard Road are located at Glenorchy, some 7km north of the Hobart CBD. Elwick Road and Goodwood Road meet the Brooker Highway at signalised T-junctions, separated by a distance of approximately 100m. Howard Road meets the Brooker Highway at a roundabout, located 370m south-east of the Goodwood Road intersection. A further signalised T-junction is located at the entrance to the Derwent Entertainment Centre, 400 m north-west of the Elwick Road intersection.



Project location

1.3 Project Objectives

The primary objectives of the project are to improve the operational efficiency of this section of the Brooker Highway, through:

- Reduced traffic delays
- Increased travel time reliability; and
- Consistent daily travel times for commuters.

The key outcomes from this project will be:

- Maintain capacity and travel time reliability for the efficient movement of freight and passengers, as demand increases;
- Improve local connectivity between residential areas and activity centres, for both vehicles and pedestrians, including connections to key local roads (e.g. Main Road); and
- Manage infrastructure assets to deliver an appropriate level of service and visual amenity.

The operational outcome is to reduce traffic delays during construction.

1.4 Strategic Context of the Project

This project proposal covers a section of the highway which is currently subject to heavy congestion at peak times. This congestion is exacerbated due to the short distance (and lack of queuing space) between intersections, particularly the Brooker Highway junction with Elwick Road.

Optimal traffic flow on the highway, through the use of synchronised traffic signals, is hampered by the roundabout at the Howard Road intersection. The operation of the roundabout results in regular queuing along the highway, and a subsequent high crash incidence due to the stop-start conditions that are created.

General growth in Hobart's northern suburbs, and specific high-traffic generating developments in the immediate vicinity of the subject intersections, is placing increasing pressure on the operation of the existing infrastructure. Traffic modelling suggests that delays will increase significantly in the future. Delays affect the movement of freight and other traffic along the highway. The situation is also placing pressure on accessing the industrial precincts and residential areas adjacent to the Highway.

The Bowen Bridge, accessed via Goodwood Road, is one of only two road crossings of the River Derwent available south of Bridgewater. In the event that the Tasman Bridge is closed to traffic, such as through an emergency situation, the Bowen Bridge will increase in significance as a traffic route. A high standard intersection is required to cater for fluctuating traffic demand that may result in such a circumstance.

The conversion of these junctions to signalised intersections will deliver greater efficiency and travel time reliability on the highway, particularly in the direction of peak traffic flows.

1.4.1 Alignment with Approved Road and Transport Strategies

This project is a key component of several Tasmanian Government Strategies, as outlined below.

Brooker Highway Transport Plan

The Brooker Highway Transport Plan sets a shared vision for the future of the Brooker Highway. The Plan delineates objectives and principles for future investment in the highway for the short, medium and long term, to enable the highway to cater for current demand and future transport needs. The initiatives of this project contribute to the short and medium term investment highlighted in the Plan.

Southern Integrated Transport Plan

This upgrade project furthers the principles of the Southern Integrated Transport Plan 2010 in the areas of infrastructure, planning, freight and safety. It improves the broader transport network functioning by improving the operation of strategic transport corridors.

Tasmanian Road Safety Strategy

The triple carriageway, the elimination of uncontrolled intersections and improved pedestrian and cyclist facilities will improve the safety outcomes and contribute to the Road Safety Strategy targets and outcomes.

1.4.2 Alignment with Planning Policies and Themes

The project is approved as an investment project under the *National Land Transport Act 2014*. It is also consistent with the principles espoused in the Tasmanian Infrastructure Strategy of viable and sustainable infrastructure. It also furthers the principles of the Southern Tasmania Regional Land Use Strategy which identifies the Brooker Highway as a transit corridor and major arterial route.

1.5 Potential Traffic Delays during Construction

The construction of this project requires careful planning and traffic management to ensure that the through traffic is not significantly delayed during construction activity. Acceptable levels of service during construction have been defined, and a staged construction plan has been developed to achieve these. In addition, Tenderers will be encouraged to submit alternative traffic management schemes. This staged construction plan is outlined in Section 2.8 and Section 3.11 clarifies how Departmental and Contractor actions will be co-ordinated to ensure that traffic delays are minimised.

2 Project Details

2.1 Proposed Works

The project will improve the efficiency of the Brooker Highway as a key strategic and freight corridor between Hobart and the rest of Tasmania. The junction upgrade works will include the:

- Replacement of the Howard Road roundabout with a new signalised intersection.
- Realignment of Elwick Road and Goodwood Road to form one signalised intersection.
- Coordination of the signals at both intersections for maximum traffic flow efficiency, especially at peak travel times.
- Installation of signalised pedestrian crossings at all intersections.
- Installation of a new access to Timsbury Road from Howard Road.

At end March 2015, the project is in the detailed design phase.

Design plans are attached as Appendix A.

2.2 Design Speed

The design speed of the Brooker Highway is to be 80km/h. Adjacent local roads and the western end of Goodwood Road are designed for 60km/h.

2.3 Road Cross Section

The cross sections adopted for this project is outlined below.

- Traffic lanes 3.5 m
- Median Variable
- Sealed Shoulders Variable
- Verge 0.5m (where applicable)

2.4 Safety Benefits

State Growth's crash data provides useful information that can assist in determining the road safety performance of the road network, as well as determining whether any road safety deficiencies currently exist.

Data was analysed for all reported crashes within a five-year period from October 2006 to October 2011 for the Brooker Highway from Loyd Lane (Derwent Entertainment Centre) to Lampton Avenue. Over 300 crashes (an average over 60 per year) were recorded in the study area, including 110 crashes at the Howard Road roundabout.

Key information is provided in Tables 1 & 2 below:

Table 1 shows the severity of crashes in the project area.`

Table 1 Severity of Crashes (2006 – 2011)

| Crash Severity | Number of Crashes | Percentage |
|----------------------------------|-------------------|------------|
| Not known | 5 | 1.6% |
| Property Damage Only | 237 | 77.9% |
| First Aid | 19 | 5.8% |
| Minor | 40 | 6.3% |
| Serious | 4 | 1.4% |
| Fatal | 0 | 0.0% |
| Total Number of recorded crashes | 305 | 100% |

Table 2 shows the types of crashes recorded in the project area, based on the Definitions for Classifying Accidents (DCA) codes assigned to each crash record.

Table 2 Crash Types in Study Area (2006 – 2011)

| Crash Type | Number of Crashes | Percentage |
|---|-------------------|------------|
| Pedestrian on foot in toy/pram | 3 | 0.9% |
| Vehicles from adjacent directions (intersections only) | 16 | 5.2% |
| Vehicles from opposing directions | 28 | 9.2% |
| Vehicles from same direction | 225 | 73.8% |
| Manoeuvring | 3 | 0.9% |
| Overtaking | 2 | 0.9% |
| On path | 4 | 1.3% |
| Off path on straight | 19 | 6.2% |
| Off path on curve | 5 | 1.6% |
| Passenger and miscellaneous | 0 | 0.0% |
| Total | 305 | 100% |

2.5 Provision for Pedestrians and Cyclists

The Brooker Highway itself is not an attractive environment for cycling due to the high vehicle volume and relatively high speed limit. However, cyclists use Goodwood / Elwick Road and the Howard Road to access the Intercity Cycleway. To cater for this fully signalised at-grade cyclist (and pedestrian) crossings have been integrated into the design. Bicycle storage boxes¹ and approach lanes on the approaches to the Brooker Highway will be installed, as will a shared path along the northern side of the highway to connect to Montrose Bay bike path and Glenorchy Art and Sculpture Park (GASP).

2.6 Drainage

The configuration of both intersections, including the removal of the roundabout at Howard Road will impact on the immediate and surrounding drainage reticulation.

At the southern (Howard Road / Renfrew Circle) end of the upgrade, stormwater will be collected and directed to the existing network draining into Prince of Wales Bay. Stormwater drainage collection for the northern end of the upgrade will be by two catchments:

- Western carriageway – to be collected and drained to the existing outlet at Humphreys Rivulet leading to Elwick Bay.
- Eastern Carriageway / Goodwood Road – the bulk of road run-off will be diverted to the Tasmanian Racing Club (TRC) on-course dam for re-use.

2.7 Utilities

The road reservation in this section of the Highway contains a number of utilities including

- Overhead and underground electrical mains owned by TasNetworks
- Underground telecommunications and fibre optic cables owned by Telstra Corporation
- Sewer owned by TasWater
- Trunk reticulation water mains owned by TasWater
- Gas pipeline owned by TasGas

The services which will be impacted by the project will be relocated to zones clear of the roadway. Consultation with utility providers has occurred and designs are progressing.

1. _____

¹ Bicycle storage boxes allow cyclists to stop safely in dedicated locations at intersections. The boxes are not physical boxes, but are part of the line markings on the road.

2.8 Traffic Management during Construction

State Growth has identified that maintaining traffic flows and pedestrian access during construction is a key issue for the project. Minimum acceptable levels of services for the construction period include:

- at least two sealed lanes available in each direction throughout;
- maintaining pedestrian access and connectivity throughout, including footpaths on both sides of the Brooker Highway and on approach roads where currently provided plus pedestrian crossings at temporary traffic signals;
- street lighting at intersections; and
- traffic signals to be controlled by State Growth, at its Traffic Control Centre, rather than by the Contractor.

A project construction methodology has been developed to deliver this level of service.

The initial construction work required for the alignment of Elwick and Goodwood Roads will take place off line with no traffic management required.

Stages will progress to the final stage of the project – the Howard Road / Brooker Highway / Renfrew Circle intersection under traffic lights.

The tender documents will encourage Tenderers to submit alternative staging proposals, which will be closely assessed by State Growth to ensure that any proposed alternatives balance the impact on road users against construction efficiency (i.e. duration of works).

The final methodology will be tested with the appointed Contractor to ensure the safe and efficient movement of the travelling public.

2.9 Transport Performance Indicators

The main benefit of the project will be an improvement in travel times, both for movements along the Brooker Highway, and for turns onto and off the highway. To test the impact on Brooker Highway travel times under the base case and upgrade scenarios, peak hour travel time data was extracted from the microsimulation model for travel between Berriedale Road and Derwent Park Road. These values are shown in Table 3 and Table 4.

In the AM peak, travel times would be expected to increase by almost five minutes in the peak direction by 2034 if no modifications were made to the intersections at Elwick Road/Goodwood Road and Howard Road/Renfrew Circle (i.e. if the project did not proceed). Implementing this project provides 20 years of improved travel times (i.e. 2034 travel times match 2014 levels in spite of the increased traffic).

Table 1 AM Peak Hour Travel Times between Berriedale Road and Derwent Park Road (mm:ss)

| Route | Existing Conditions (2014) | Existing Intersection Configuration (2034) | With Intersection Upgrades (2034) |
|-------------|----------------------------|--|-----------------------------------|
| South-bound | 9:32 | 14:27 | 9:34 |
| | Time Difference | +4:55 | +0:02 |
| North-bound | 5:05 | 5:20 | 4:49 |
| | Time Difference | +0:15 | -0:16 |

As shown in Table 4 below, PM peak direction travel times in 2034 are substantially improved relative to the 2014 travel times – i.e. the north-bound trip is some 4 minutes faster, in 20 years' time.

Table 2 PM Peak Hour Travel Times between Berriedale Road and Derwent Park Road (mm:ss)

| Route | Existing Conditions (2014) | Existing Intersection Configuration (2034) | With Intersection Upgrades (2034) |
|-------------|----------------------------|--|-----------------------------------|
| South-bound | 5:20 | 5:50 | 5:39 |
| | Time Difference | +0:30 | +0:19 |
| North-bound | 10:11 | 11:50 | 6:00 |
| | Time Difference | +1:33 | -4:17 |

Local Access Travel Times

In addition to modelling travel times along the Brooker Highway, results were extracted from the model which demonstrated changes in travel times for other movements, including turns onto and off the highway, and across the highway.

Table 5 shows the changes in travel times that are would result for 2014 traffic flows with the introduction of the intersection upgrades, compared to the current (2014) operation. Changes over one minute are highlighted, with the 14 movements showing time savings in green and the two movements with increased travel times in red.

Table 3 Peak Hour Travel Time Changes for 2014 traffic with At-Grade Intersection Treatments compared to 2014 Existing Conditions (m:ss)

| | | Berriedale Rd | Elwick Rd | Goodwood Rd | Howard Rd | Renfrew Circle | Derwent Park Rd |
|-----------------|----|---------------|-----------|-------------|-----------|----------------|-----------------|
| Berriedale Road | AM | N/A | -2:18 | -3:07 | -3:41 | -4:03 | -3:27 |
| | PM | N/A | +0:13 | -0:19 | +1:43 | +0:08 | +0:05 |
| Elwick Rd | AM | +0:05 | N/A | -1:22 | * | * | -1:50 |
| | PM | +0:11 | N/A | +0:19 | * | * | +0:22 |
| Goodwood Rd | AM | -0:60 | -0:49 | N/A | * | * | -1:09 |
| | PM | -0:47 | -0:05 | N/A. | * | * | +0:02 |
| Howard Rd | AM | -0:08 | * | * | N/A. | +0:43 | +0:52 |
| | PM | -0:53 | * | * | N/A | -0:24 | -0:23 |
| Renfrew Circle | AM | * | * | * | -1:20 | N/A | * |
| | PM | * | * | * | +1:03 | N/A. | * |
| Derwent Park Rd | AM | -0:23 | -0:15 | +0:08 | -0:15 | +0:21 | N/A. |
| | PM | -4:46 | -4:55 | -3:19 | -4:48 | -4:05 | N/A. |

* Results not reported due to small numbers of vehicles making these movements.

Weighted Average Travel Time Savings

An assessment of the weighted average change in travel time as a result of the project, taking into account the relative traffic volumes making each movement, has been undertaken and is detailed in Table 6. These figures take into account travel times in both the AM and PM peak times, and all movements travelling through the study area during those times. This includes those travelling along the Brooker Highway, and those turning on or off the highway.

Table 4 Peak Period Travel Time Saving Compared to Base Case

| Scenario | 2014 | 2034 |
|--|-------|-------|
| Proposed Intersection Upgrade Treatments | -1:55 | -2:56 |

It can be seen that with 2014 volumes, on average, peak period users of the upgraded intersections will experience a travel time almost two minutes faster than they would otherwise experience if the project did not proceed. By 2034 this saving would increase to almost three minutes.

3 Social, Environmental Impacts and Stakeholder Engagement

3.1 Property Acquisition

Property acquisition will be required to upgrade the Brooker Highway. The impacted landowners are:

- Tasmanian Racing Club (with TasRacing as a key lessee)
- Housing Tasmania
- Glenorchy City Council
- DPIPWE (with Royal Agricultural Society of Tasmania as a key lessee)

State Growth has had conversations with affected property owners, and acquisitions are progressing. As at March 2015, the acquisition of part of Elwick Racecourse is proceeding on a negotiated basis, however a compulsory acquisition is possible if negotiations are not able to be completed in a timely manner.

Acquisition plans are attached as Appendix C.

3.2 Property Access

A number of property accesses will need to be modified to accommodate project changes. The following table summarises the number of changes by area. The access modification are generally minor and do not impact significantly on the operation of personal accesses.

All landowners impacted by access changes have been consulted.

Table 7 Property Access

| Location | Access Changes |
|-------------------------|----------------|
| Elwick Road | 5 |
| Little Elwick Road | 5 |
| Brooker Highway (South) | 4 |
| Brooker Highway (North) | 3 |
| Goodwood Road | 6 |
| DEC Exit | 1 |

3.3 Noise

A baseline noise monitoring and modelling assessment has been undertaken to determine the existing and projected noise levels associated with the current road and proposed upgrades.

This assessment identified there are no properties that have been modelled as experiencing a noticeable increase in noise at 2026 as a result of the road upgrade [i.e. 3 dB (A) or greater] when comparing 2026 'no build' (no upgrade) and 2026 'build' (with upgrade) scenarios. Accordingly, no noise mitigation measures are proposed as part of the works at this time.

Construction for the project is intended to be undertaken during normal construction hours. The need to ensure the availability of two (2) sealed lanes for traffic traveling in each direction during construction may necessitate rare overnight works. If these works are required, they will generally consist of works necessary for transitional arrangement, or relocation of traffic flows or services that are unable to be undertaken during daylight hours and during busier traffic times. All practical steps will be undertaken to minimise impacts of noise and disturbance on surrounding residents.

3.4 Flora

An assessment of the area has been undertaken for the project. The assessment identified that the works for the project could potentially disturb State-listed threatened native flora species, and a permit to take will be sought under the Threatened Species Protection Act 1995.

3.5 Fauna

Given the nature of the area (highway) the works have been assessed as having no impact on native fauna species.

3.6 Environmental Safeguards

Given the highly disturbed nature of the site environmental impacts will be kept to a minimum.

The environmental impacts associated with construction will be managed in accordance with a construction management plan developed by the successful contractor to the State Growth's specifications. The construction management plan will include measures to address environmental impacts including dust, noise, light, soil and water management and machinery hygiene to reduce the spread of weeds throughout the site.

3.7 Aboriginal Heritage

Advice received from Aboriginal Heritage Tasmania confirmed that given the area is highly disturbed and an existing highway, no further Aboriginal cultural heritage investigations are required for the project to proceed. Standard practices relating to the unanticipated discovery of Aboriginal artefacts apply.

3.8 Historic Heritage Assessment

The Elwick Racecourse is listed on the Tasmania Heritage Register, and in the Glenorchy Planning Scheme. Approval from the Tasmanian Heritage Council (THC) and Glenorchy City Council (GCC) as part of a Development Application is required for the works on the Racecourse land.

A heritage assessment specific to the approved design was undertaken to determine the impact on the heritage values on properties affected by the scope of works. The heritage assessment identified another site (the former Timsbury Estate) as having archaeological potential.

The former Timsbury Estate site located at the Howard Road roundabout is not listed in the Tasmanian Heritage Register or the Glenorchy Planning Scheme Heritage Schedule. While Heritage Tasmania has confirmed that it does not have an interest in this site, Glenorchy City Council required an assessment as part of Development Application requirements.

State Growth commissioned an archaeological investigation including a targeted salvage program for the site. This investigation determined that no archaeological deposits will be directly impacted by the road works and that no further archaeological investigations are warranted for the area. No archaeological monitoring work is required and an Unanticipated Discovery Plan will outline procedures in the unlikely event that historical items or features are unearthed during construction.

3.9 Development Approvals

The project is located in the City of Glenorchy and is subject to the provisions of the Glenorchy Planning Scheme 1992 under the *Land Use Planning Approvals Act 1993*. Early engagement with Elected Members and Council Officers from Glenorchy City Council was undertaken regarding the requirements of the Development Application. A Development Application for the works was lodged with Council on 19th February 2015.

3.10 Stakeholder Engagement Design Phase

Overall the feedback from consultation has been overwhelmingly positive with particular support for the alignment of Elwick and Goodwood Roads and improvement of the flow of the Brooker Highway. Some specific local and individual issues have been raised and the project team has worked co-operatively and constructively with stakeholders to mitigate impacts.

Planning for stakeholder engagement began during the concept phase of this project with the development of a strategic Stakeholder Engagement Plan (SEP). Stakeholders were identified through a rigorous analysis process and Action Plans were developed for each key stakeholder - identifying at which stage of the project to contact the stakeholders and the best means of engagement.

To assist with communication, key messages and display material have been developed. This information has been uploaded to a project specific website at <http://www.transport.tas.gov.au/road/projects/brooker-highway>. A link has been set up to the website from the Council website. The website address is included on all promotional material and on correspondence with stakeholders. The website is regularly updated and will be an important site for information about the construction programming and traffic management.

The project also has a 1800 enquiry number which has also been included on project material and correspondence with stakeholders enabling ongoing contact with project staff as issues arise.

The project has been discussed with key stakeholders including:

- Glenorchy City Council elected members, executive, planning, traffic engineering and community inclusion staff.
- Royal Agricultural Society of Tasmania
- Tasmania Racing Club and TasRacing
- Goodwood Community
- Residents in Timsbury Road, McGough Street, sections of Elwick Road and Acton Crescent
- Metro Tasmania
- Fire and ambulance services
- Utilities
- Bunnings; and
- Identified landowners (acquisition and access changes).

The consultation to date with key stakeholders, their main issues raised and actions taken have been summarised in a table at Appendix E.

Public Events and Feedback

During the project design phase three main public events have been held:

The aim of these events was to: inform stakeholders of the project aims and progress; improve the quality of decisions made by gaining local knowledge and/or greater understanding of stakeholder views; and gain support for the project through a greater acceptance and increased stakeholder ownership of the decisions made.

Staffed Public Display Northgate Shopping Centre

The project design plans, photo realistic images and drive-through video of the proposed changes at the two junctions were put on display at Northgate shopping centre on Friday 6th February from 2.30pm to 7pm and again on Saturday 7th February from 9.30am to 1pm, attended by 3 to 4 staff. The display was advertised in the Mercury and Glenorchy Gazette and on a variable message board near the project area.

There was a steady stream of interested stakeholders over the time period, with an estimated 200 people having viewed and discussed the project information. All stakeholders expressed frustration with banked up traffic along the Brooker Highway and on Elwick Road and were eager to see improvements completed. The large majority of stakeholders were congratulatory about the project design once they had confirmed that the current two junctions at Elwick and Goodwood Road were to be reduced to one 4 way intersection. This was the most popular part of the design with removal of the roundabout a close second. Two main design issues were highlighted; the desire to have the left merge lanes as long as possible and a desire for a U turn facility at the Howard Road intersection.

Glenorchy City Council Foyer Display of Development Application

The project design plans, photo realistic images and drive through video of the proposed changes were put on display at the Glenorchy City Council on 10th February until this was replaced by the statutory public display of the Development Application.

Goodwood Information Session

This was held at Goodwood Community Centre on 9th December 2014 from 4.30 to 7.30pm.

Around 600 invitations were sent out to residents of the Goodwood community, McGough Street, Little Elwick, the houses next to the proposed Elwick Road Clearway and to Timsbury Road residents inviting them to attend an open session at the Goodwood Community Centre. Around 50 people attended to view the preliminary design and discuss the design and presentation with staff members.

The majority of attendees were from the streets listed above and Acton Crescent in Goodwood. The majority of people who lived in Goodwood expressed their support for the project and wanted it completed as soon as possible. Some of the residents from the streets listed had specific questions about the project's impact on their street. Further details are provided in Appendix E.

Staff discussed the project with attendees to confirm their views and any concerns. The attendees were encouraged and sometimes assisted to fill out comments forms. At 6pm the project team staged a presentation introducing the design and public consultation process allowing the attendees to ask questions. The large design posters were placed on the Community Centre notice board and left for an extended period, along with comments forms.

3.11 Stakeholder Engagement Construction Phase

Future events and activities are planned to prepare stakeholders for the effects of construction and to support them during construction.

Ahead of the start of works, a detailed traffic management plan will be prepared and tailored to the interests of stakeholder groups. This information will be widely circulated on the web page, through public notices and media. These activities will ensure that road users can make informed decisions about the best route for their journey during construction phases.

The impact of construction will be limited through the management of the construction contract. The successful road Contractor will be required to:

- nominate a Stakeholder Manager and provide a Stakeholder Engagement Plan;
- provide a dedicated project phone to the public;
- maintain a public contact register;
- schedule works so as not to disrupt the business of the racecourse;
- cease work on Hobart Cup days;
- start work after Show Day 2015 and cease work during the week of Show Day in subsequent years;
- provide notice of planned changes to traffic management; and
- use variable message boards to give drivers advanced warning of expected delays.

Once the construction contract has been awarded and a Contract Management Plan completed by the Contractor, either State Growth or the Contractor will be in contact with impacted stakeholders to discuss and provide the program of works. These impacted stakeholder include:

- Glenorchy City Council elected members, executive, planning, traffic engineering and community inclusion staff
- Royal Agricultural Society of Tasmania
- Tasmania Racing Club and TasRacing
- Residents in Timsbury Road, McGough Street, sections of Elwick Road and Acton Crescent
- Metro Tasmania;
- Fire and ambulance services
- Utilities
- Bunnings
- Identified landowners (acquisition and access changes)
- Balmoral Motel

Future planned consultation by stakeholder group is summarised in a table at Appendix E

5 Conclusion

The project need is clear: without upgrades, congestion on the Brooker Highway would continue to increase.

This project targets the key bottleneck on the Brooker Highway caused by the close proximity of three junctions; Elwick Road, Goodwood Main Road and Howard Road. Congestion on the Brooker Highway will reach critical levels unless these junction arrangements are re-configured.

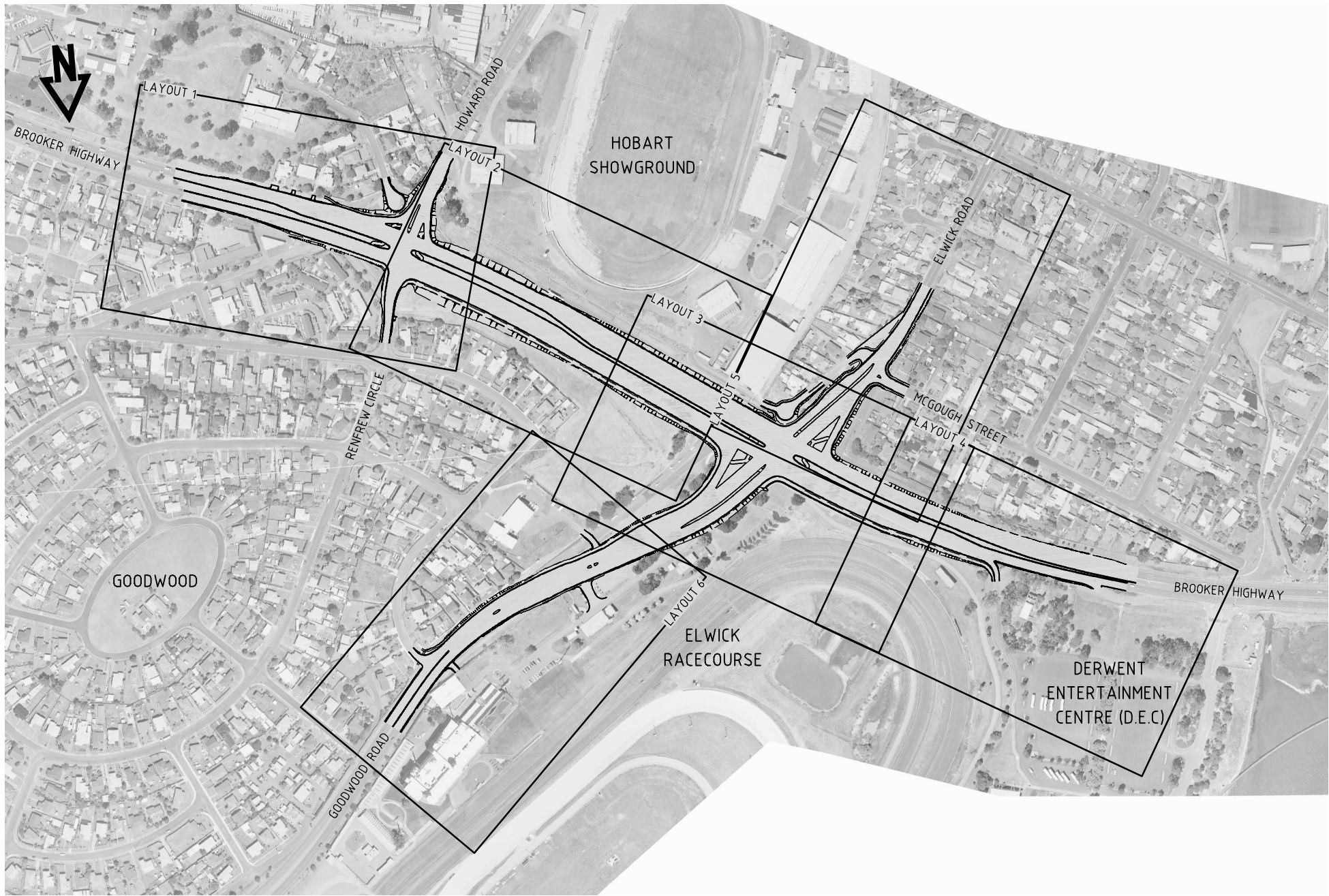
A range of alternate designs have been considered in consultation with the Glenorchy City Council, adjacent property owners and the travelling public. The recommended project has been designed using appropriate design standards and guidelines and impacts on adjacent properties have been reasonably mitigated.

The traffic modelling of the performance of these proposed re-configured intersections provides for an average of 2 minute time savings per trip for each of the 35,000 road users per day (AADT). The resultant travel cost saving over 30 years is four times the anticipated \$30M cost of the project.

When this project is complete, the Brooker Highway will continue to be a critical element in Tasmania's transport network, providing a more efficient link between the city, major industrial producers and the national land transport network.

Appendix A: Design Drawings

Drawings included are Preliminary Design stage, as (at early May 2015) Detailed Design drawings are still subject to review by State Growth and are not yet ready for public release.



KEY PLAN

SCALE 1:5000

| | |
|-------------------------------|------------|
| KEY LAYOUT 1 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0120 |
| GENERAL ARRANGEMENT: | SHEET 0130 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0200 |
| POWER AND COMMUNICATIONS: | SHEET 0206 |
| SIGNS AND LINE MARKING: | SHEET 0300 |

| | |
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| KEY LAYOUT 2 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0121 |
| GENERAL ARRANGEMENT: | SHEET 0131 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0201 |
| POWER AND COMMUNICATIONS: | SHEET 0207 |
| SIGNS AND LINE MARKING: | SHEET 0301 |

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| KEY LAYOUT 3 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0122 |
| GENERAL ARRANGEMENT: | SHEET 0132 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0202 |
| POWER AND COMMUNICATIONS: | SHEET 0208 |
| SIGNS AND LINE MARKING: | SHEET 0302 |

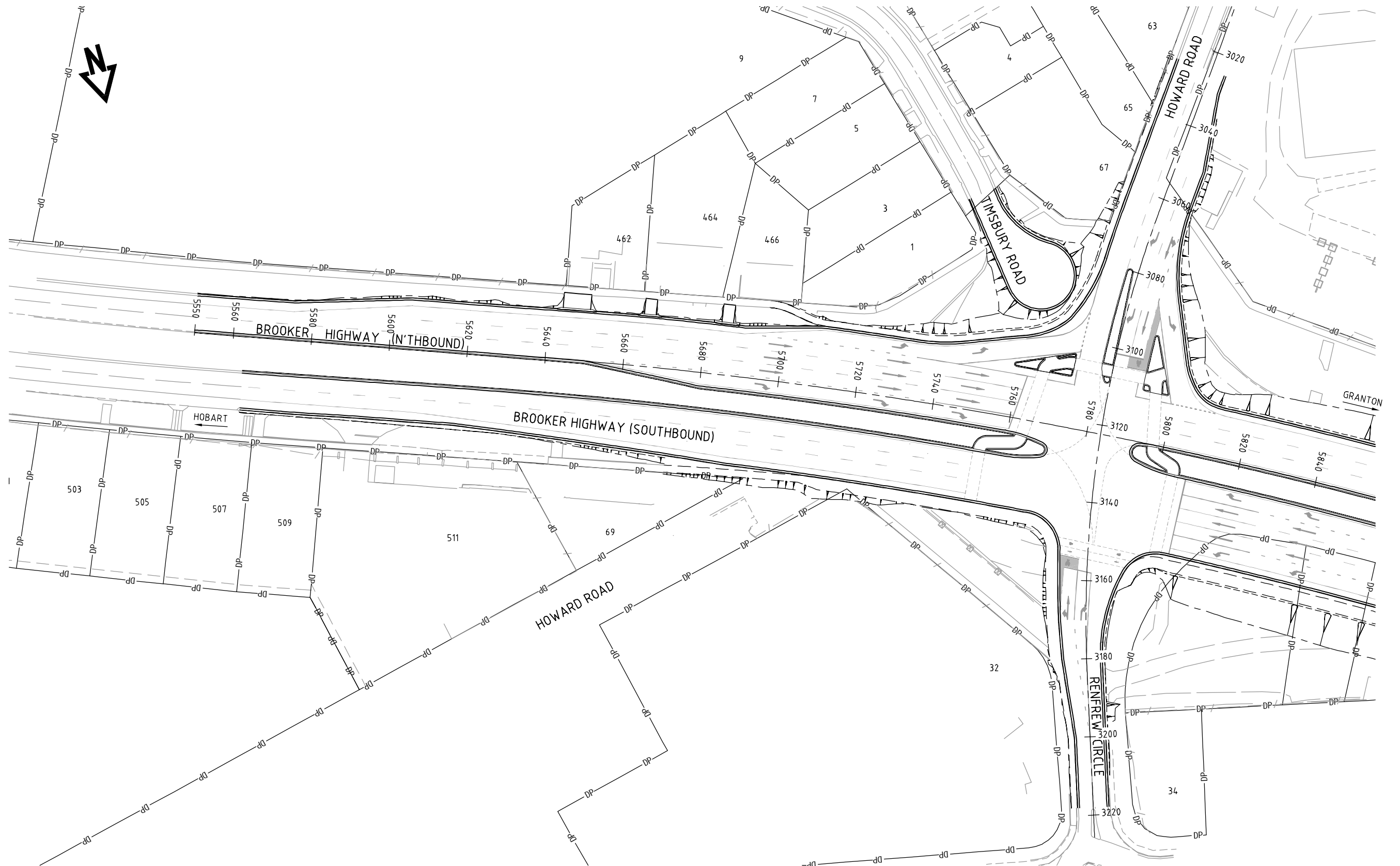
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| KEY LAYOUT 4 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0123 |
| GENERAL ARRANGEMENT: | SHEET 0133 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0203 |
| POWER AND COMMUNICATIONS: | SHEET 0209 |
| SIGNS AND LINE MARKING: | SHEET 0303 |

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| KEY LAYOUT 5 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0124 |
| GENERAL ARRANGEMENT: | SHEET 0134 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0204 |
| POWER AND COMMUNICATIONS: | SHEET 0210 |
| SIGNS AND LINE MARKING: | SHEET 0304 |

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| KEY LAYOUT 6 | |
| SURVEY AND ALIGNMENT CONTROL: | SHEET 0125 |
| GENERAL ARRANGEMENT: | SHEET 0135 |
| DRAINAGE: | SHEET |
| GAS, WATER & SEWERAGE: | SHEET 0205 |
| POWER AND COMMUNICATIONS: | SHEET 0211 |
| SIGNS AND LINE MARKING: | SHEET 0305 |

- NOTES:
- LAYOUT NUMBERING SHOWN IN THE VICINITY OF THE TOP LEFT CORNER OF THE SHEET LAYOUT.
 - LAYOUTS 1 TO 4 ORIENTED IN DIRECTION OF THE BROOKER HIGHWAY LINK CHAINAGE.
 - LAYOUT 6 ORIENTED IN DIRECTION OF THE GOODWOOD ROAD LINK CHAINAGE.

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| | | | | | | <div>SCALES</div> 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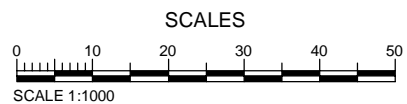
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WARNING
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BASE SURVEY SUPPLIED BY
NOEL LEARY AND ASSOCIATES
SURVEYED ON 03/2014
HORIZONTAL DATUM: GDA94
GRID: MGA94, ZONE 55
LEVEL DATUM: AHD



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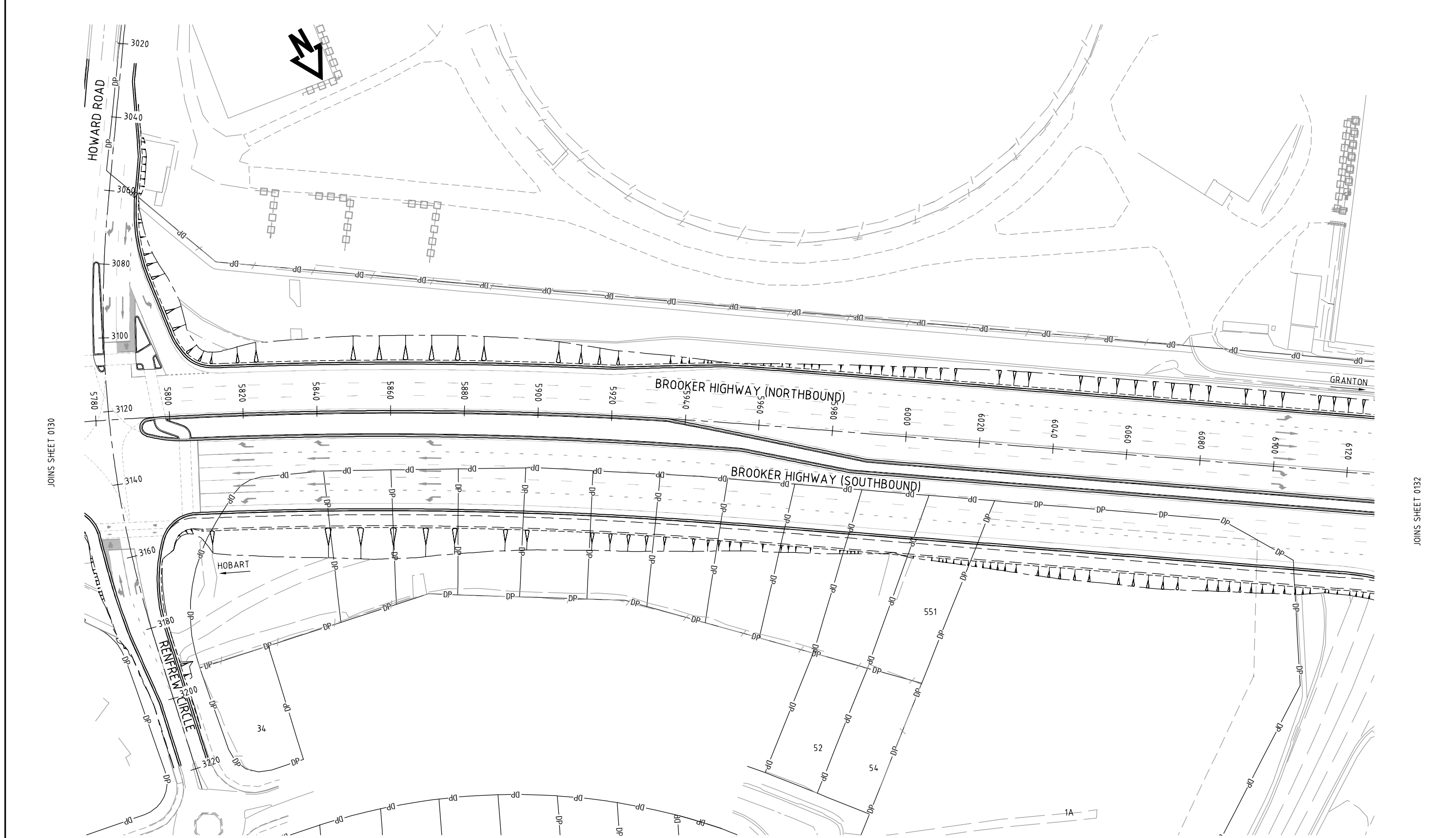


Co-ordinate System: MGA Zone 55 Height Datum: A.H.D.

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| DESIGNED | G R STEWART |
| REVIEWED | |

Department of State Growth
BROOKER HIGHWAY (A0090)
SOUTH OF HOWARD ROAD TO DERWENT ENTERTAINMENT CENTRE
INTERSECTION UPGRADES
GENERAL ARRANGEMENT PLAN - SHEET 1 OF 6

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| CONTRACT No. | DRAWING | PRINTED DATE | SHEET No. |
| | 32-17132-C130_C135.dwg | 07-Nov-14, 12:05 PM | 0130 |
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SCALES

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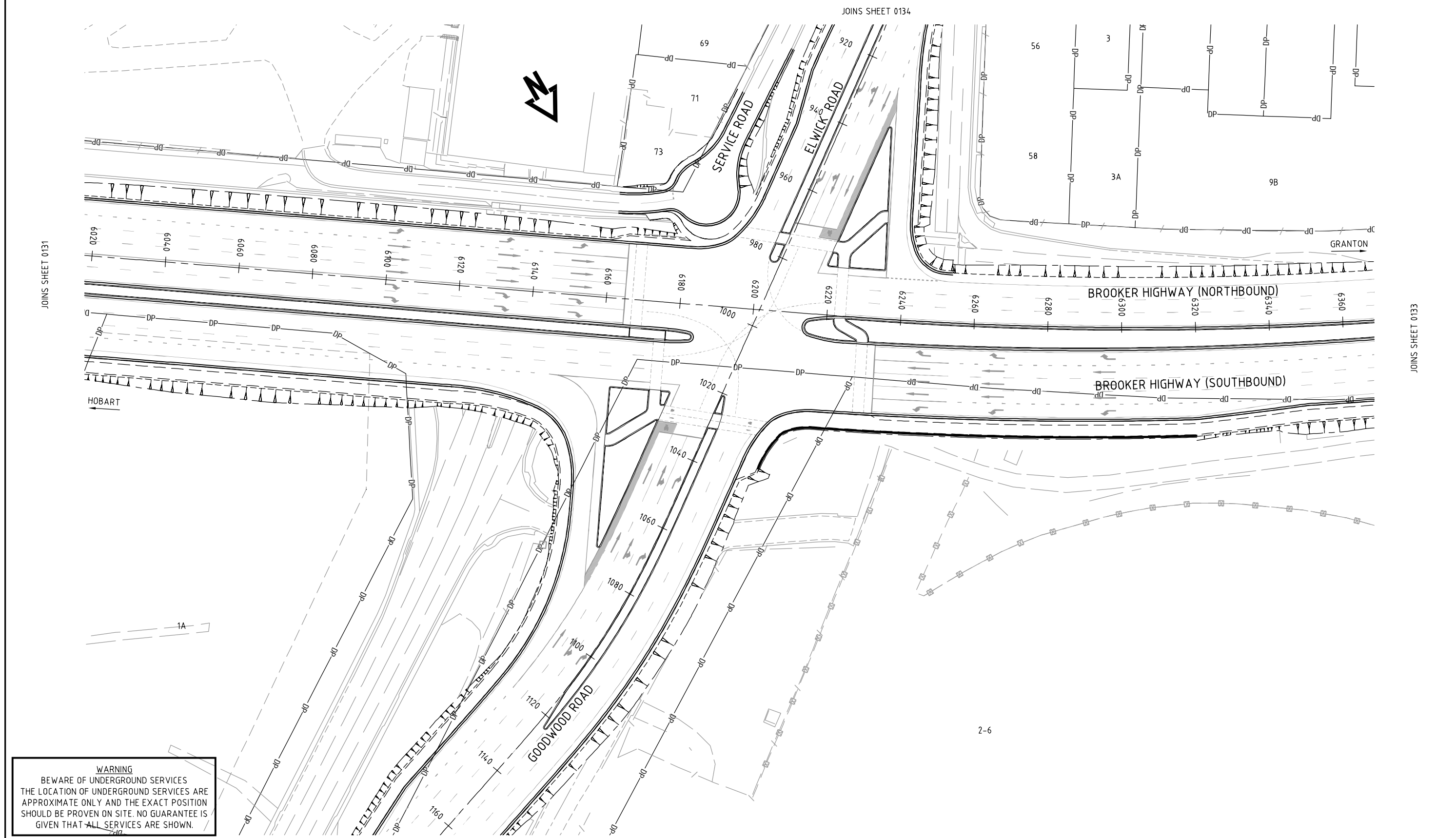
Department of State Growth

BROOKER HIGHWAY (A0090)

SOUTH OF HOWARD ROAD TO DERWENT ENTERTAINMENT CENTRE INTERSECTION UPGRADES

GENERAL ARRANGEMENT PLAN - SHEET 2 OF 6

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| CONTRACT No. | DRAWING | PRINTED DATE | SHEET No. |
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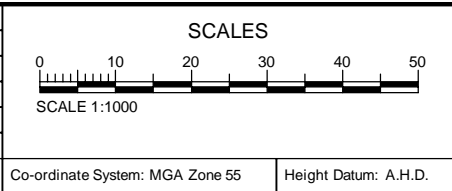
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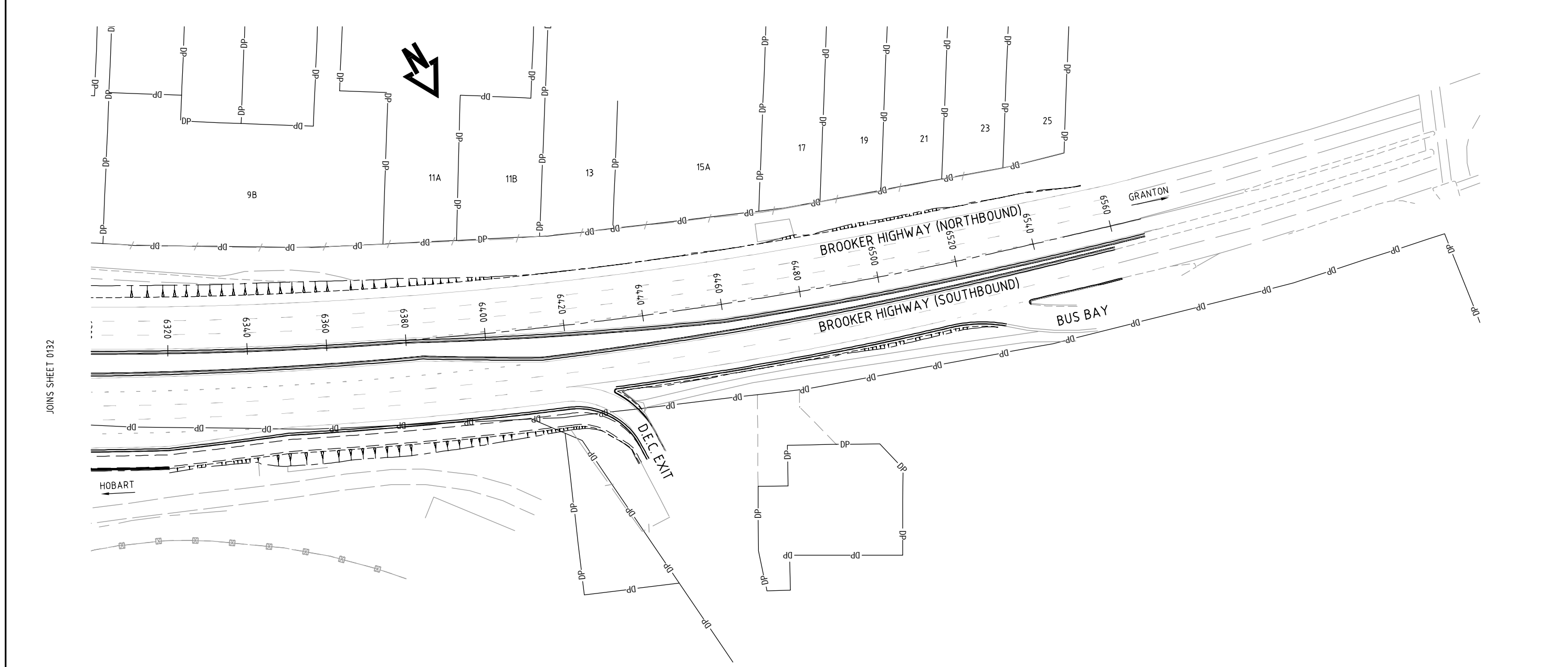
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Department of State Growth

BROOKER HIGHWAY (A0090)
SOUTH OF HOWARD ROAD TO DERWENT ENTERTAINMENT CENTRE
INTERSECTION UPGRADES

GENERAL ARRANGEMENT PLAN - SHEET 3 OF 6

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| REGISTRATION NUMBER A0090.??? | | | REVISION A |



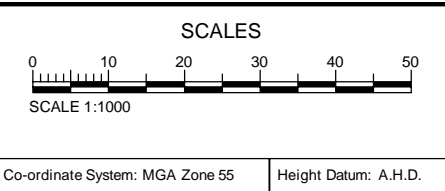
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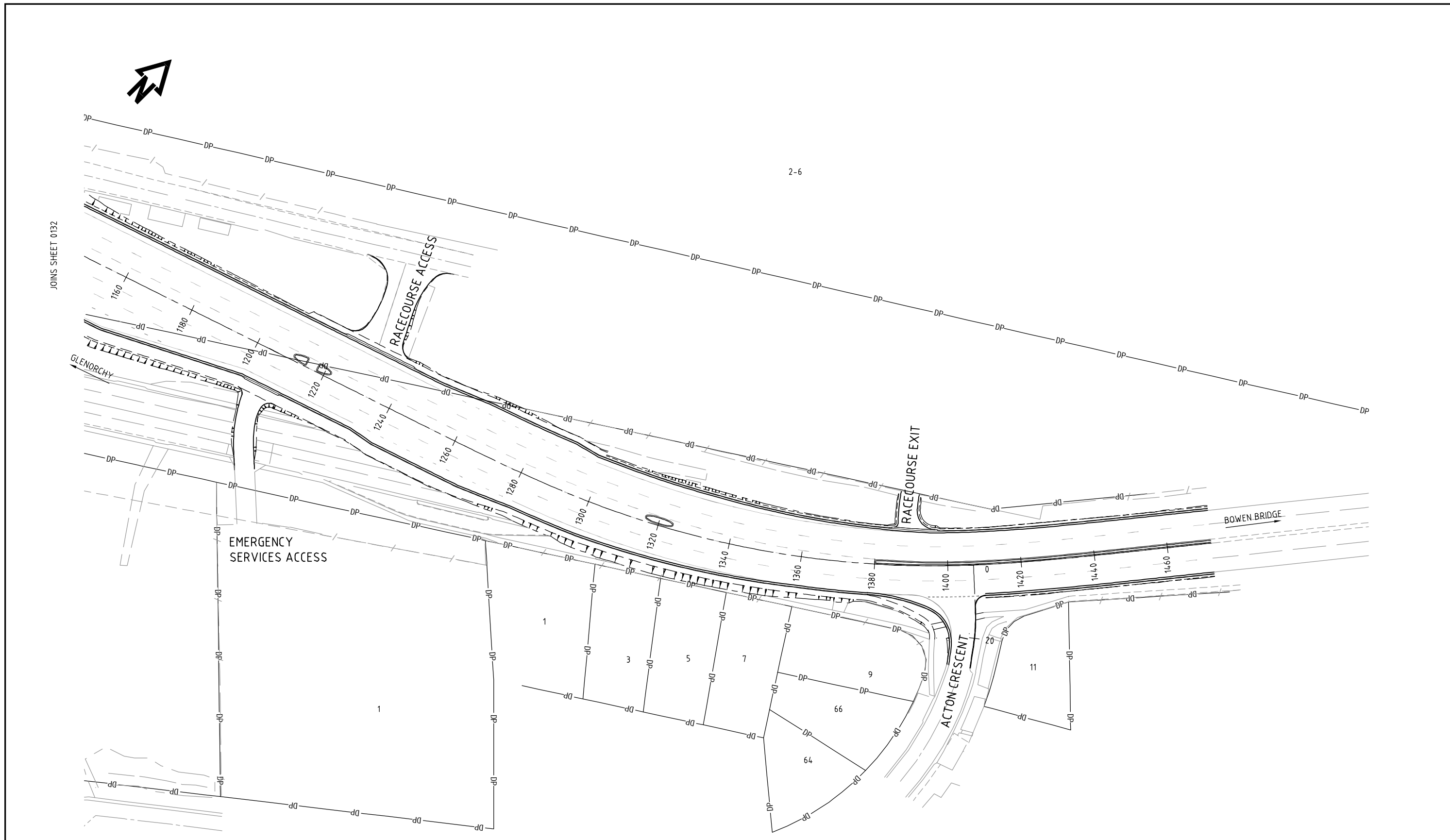
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| DESIGNED | G R STEWART |
| REVIEWED | |

Department of State Growth

BROOKER HIGHWAY (A0090)
SOUTH OF HOWARD ROAD TO DERWENT ENTERTAINMENT CENTRE
INTERSECTION UPGRADES

GENERAL ARRANGEMENT PLAN - SHEET 4 OF 6

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| CONTRACT No. | DRAWING 32-17132-C130_C135.dwg | PRINTED DATE 07-Nov-14, 12:05 PM | SHEET No. 0133 |
| REGISTRATION NUMBER A0090.??? | | | REVISION A |



TO PROTECT THE ENVIRONMENT, CLEARING SHALL BE IN ACCORDANCE WITH SPECIFICATION PART G2 AND CONFINED TO THAT REQUIRED FOR EARTHWORKS, DRAINAGE AND FENCING. EXISTING TREES, SHRUBS AND GRASSES NOT AFFECTED BY THE ABOVE WORKS SHALL BE RETAINED AND DISTURBED AS LITTLE AS POSSIBLE.

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

BASE SURVEY SUPPLIED BY
NOEL LEARY AND ASSOCIATES
SURVEYED ON 03/2014
HORIZONTAL DATUM: GDA94
GRID: MGA94, ZONE 55
LEVEL DATUM: AHD



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| A | INITIAL ISSUE | | |
| No. | Amendment Description | Initials | Date |
| A3 original | This sheet may be prepared using colour and may be incomplete if copied | | |

SCALES

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SCALE 1:1000

Co-ordinate System: MGA Zone 55 Height Datum: A.H.D.

GHD

Tasmanian Government

DESIGNED G.R STEWART

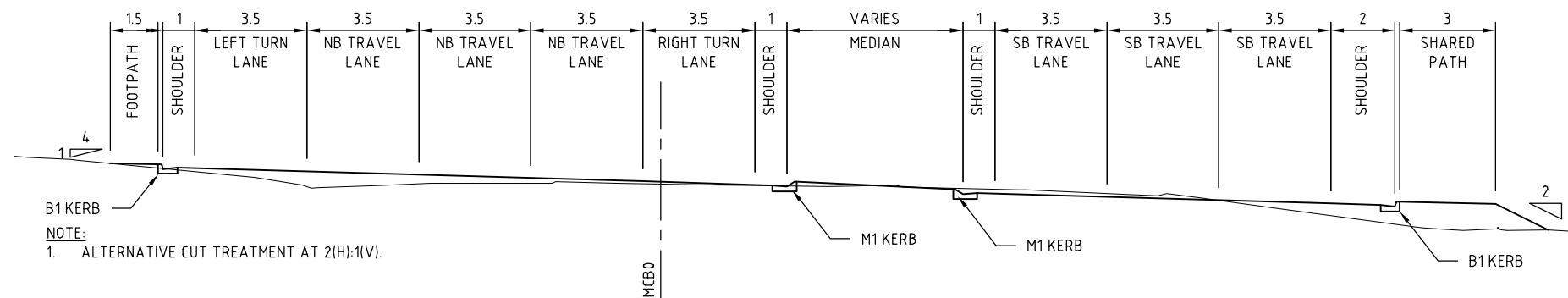
REVIEWED

Department of State Growth

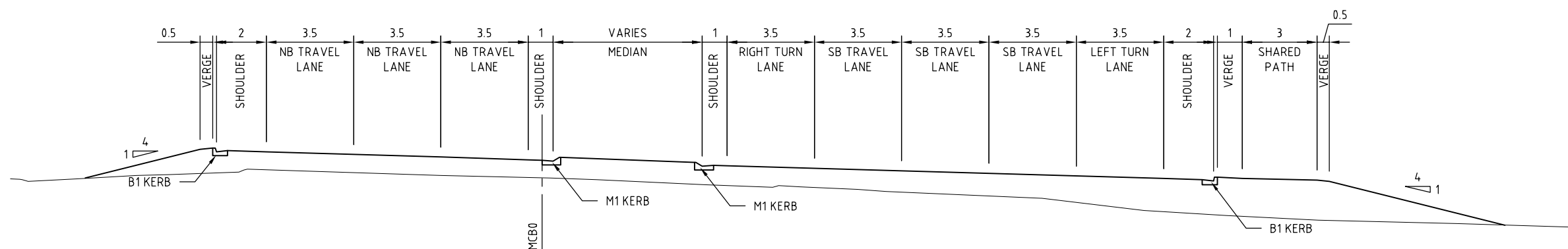
BROOKER HIGHWAY (A0090)
SOUTH OF HOWARD ROAD TO DERWENT ENTERTAINMENT CENTRE
INTERSECTION UPGRADES

GENERAL ARRANGEMENT PLAN - SHEET 6 OF 6

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| CONTRACT No. | DRAWING 32-17132-C130_C135.dwg | PRINTED DATE 07-Nov-14, 12:05 PM | SHEET No. 0135 |
| REGISTRATION NUMBER A0090.??? | | | REVISION A |



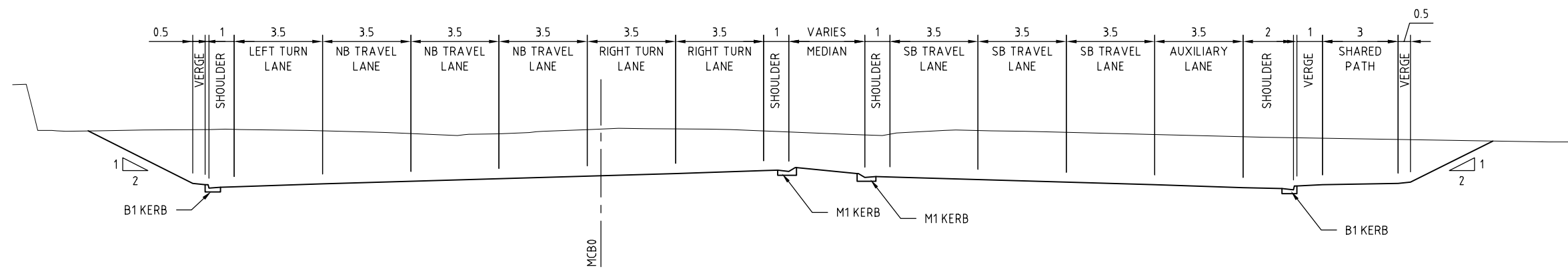
BROOKER HIGHWAY TYPICAL SECTION
SOUTH OF HOWARD ROAD
SCALE 1:200



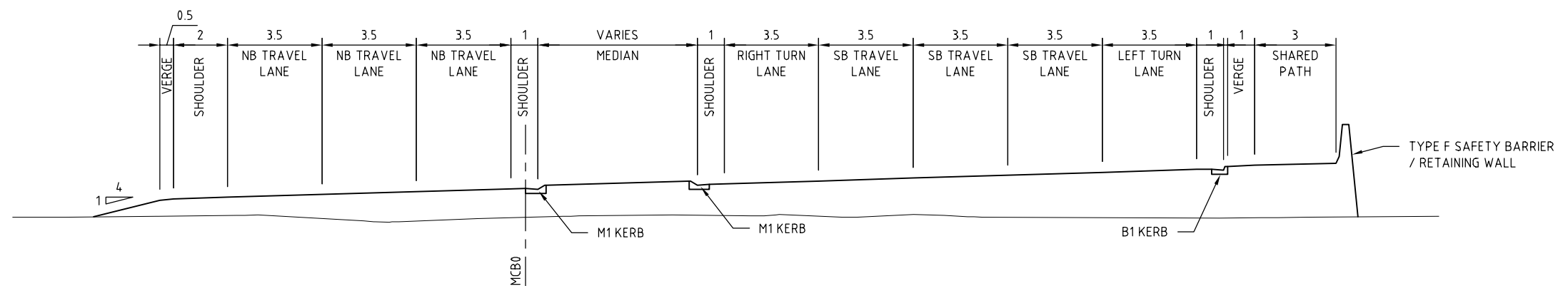
BROOKER HIGHWAY TYPICAL SECTION
NORTH OF HOWARD ROAD
SCALE 1:200

NOTES:
1. WHERE A KERB IS PRESENT, SHOULDER WIDTH IS MEASURED FROM EDGE OF LANE TO FACE OF KERB.

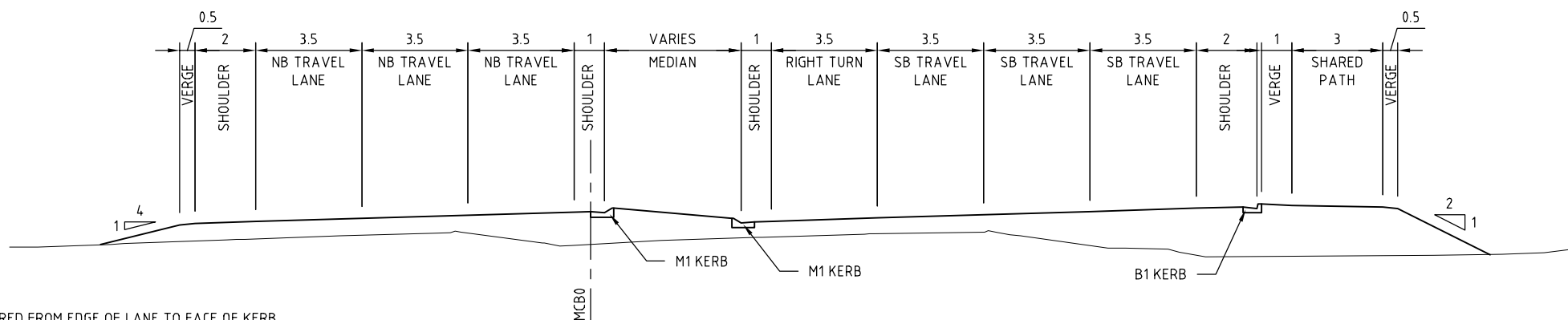
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BROOKER HIGHWAY TYPICAL SECTION
SOUTH OF ELWICK ROAD
 SCALE 1:200



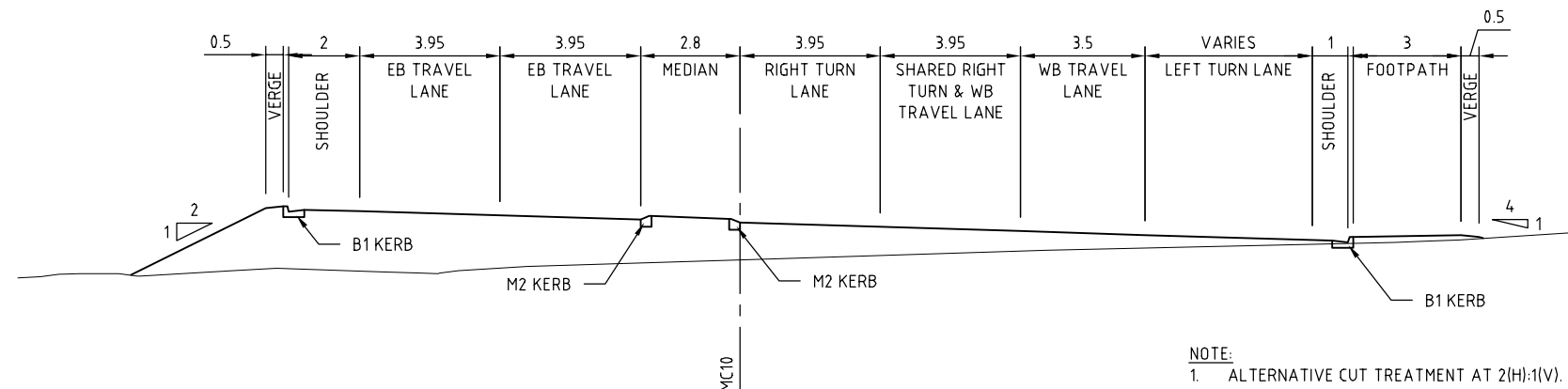
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NORTH OF ELWICK ROAD
 SCALE 1:200



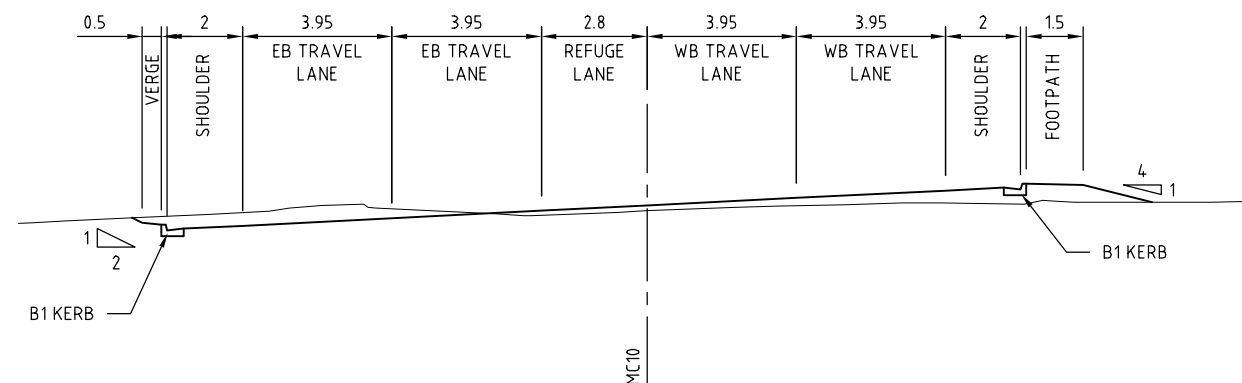
BROOKER HIGHWAY TYPICAL SECTION
SOUTH OF ENTERTAINMENT CENTRE
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NOTES:
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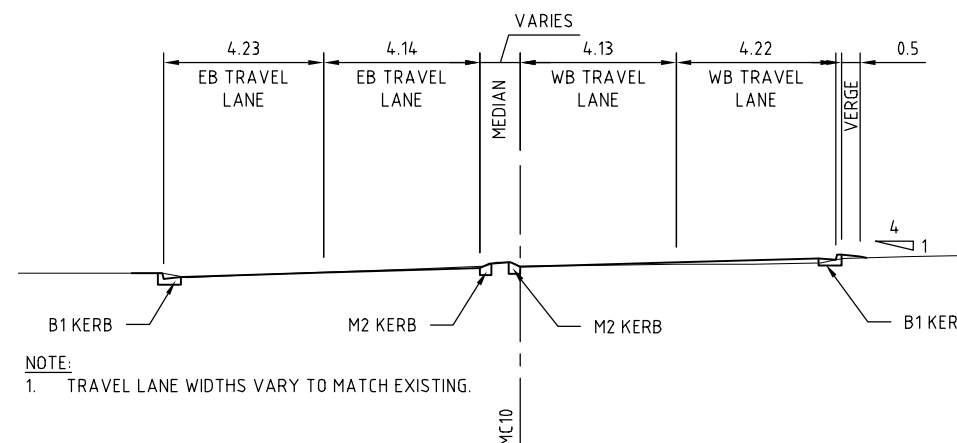
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GOODWOOD ROAD TYPICAL SECTION
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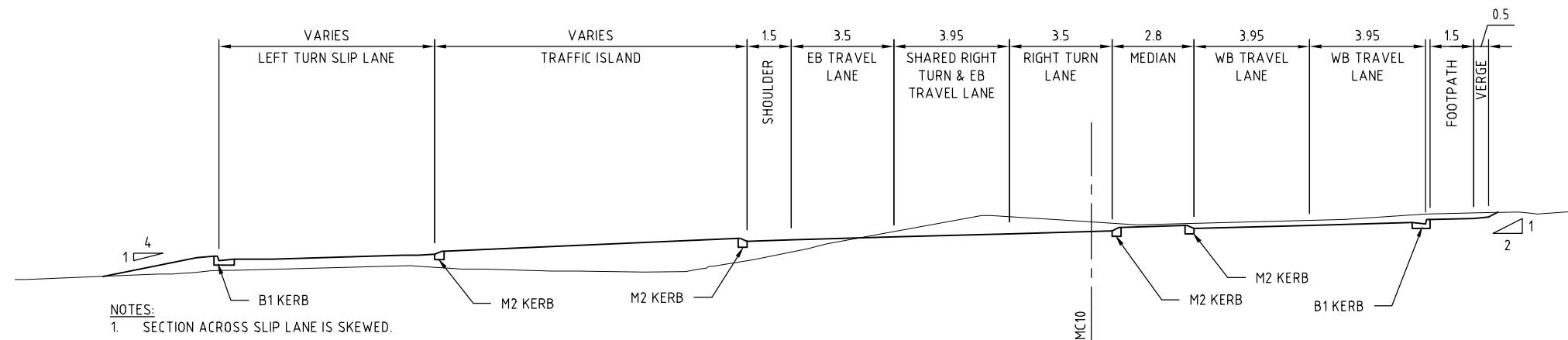
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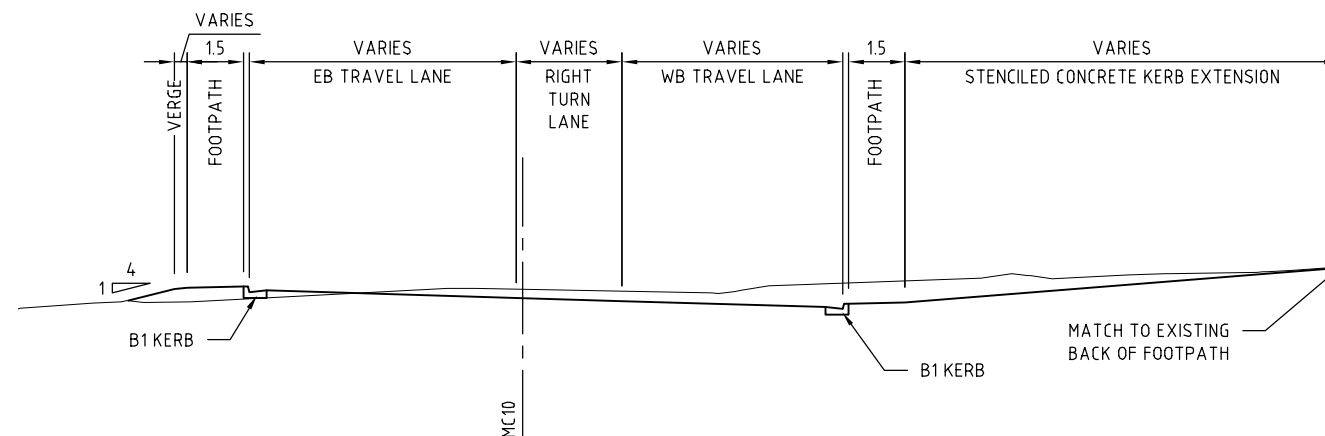
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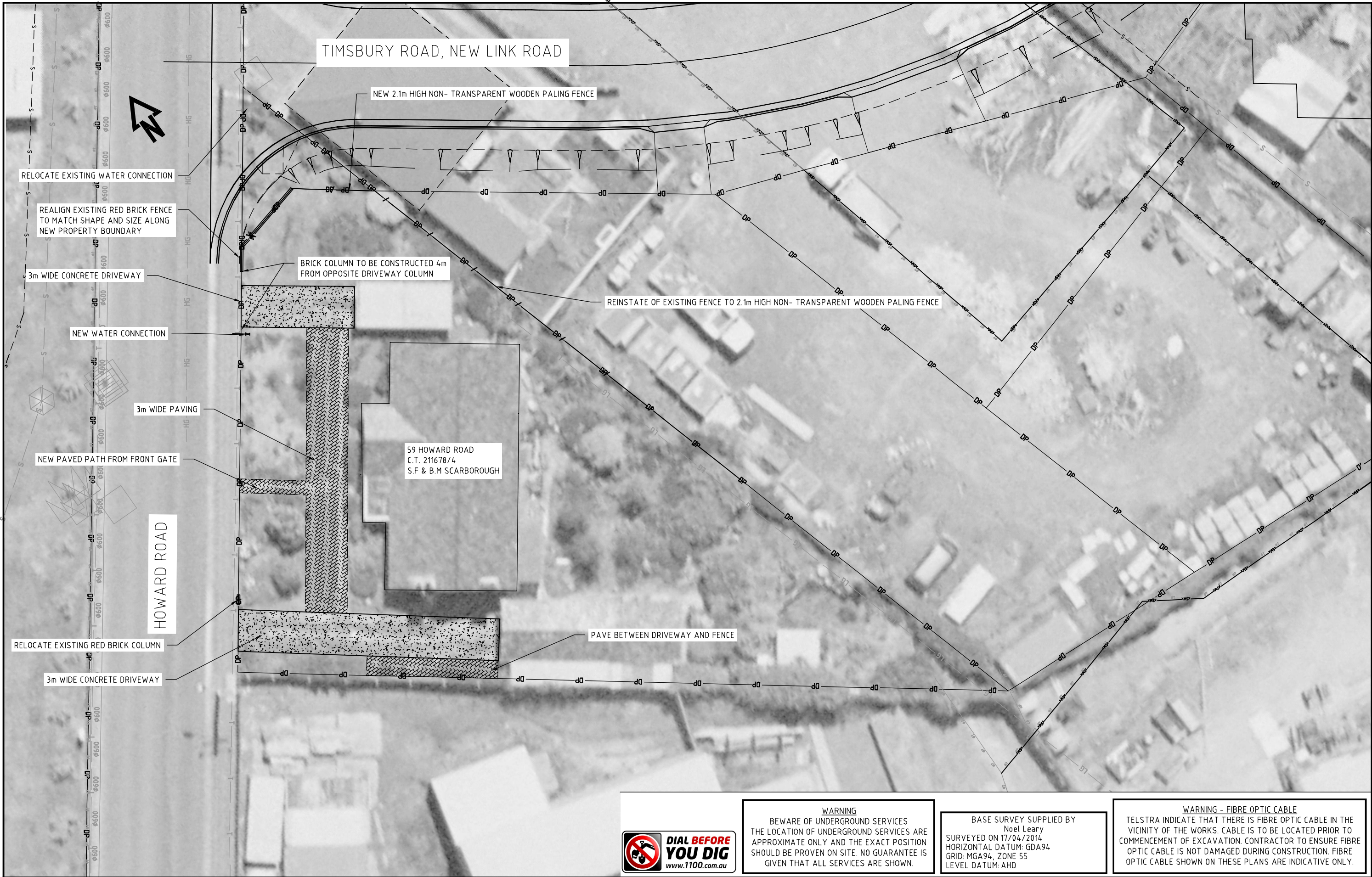
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| No. | Amendment Description | Initials | Date | Co-ordinate System: MGA Zone 55 | Height Datum: A.H.D. | DESIGNED | REVIEWED | REGISTRATION NUMBER A0090.??? | | 0116 | |
| A3 original This sheet may be prepared using colour and may be incomplete if copied | | | | | | ELWICK ROAD TYPICAL SECTIONS | | | | REVISION A | |

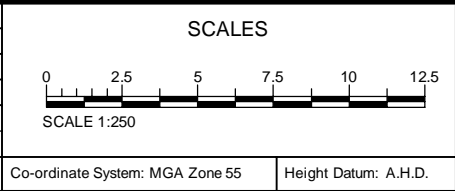




WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

BASE SURVEY SUPPLIED BY
Noel Leary
SURVEYED ON 17/04/2014
HORIZONTAL DATUM: GDA94
GRID: MGA94, ZONE 55
LEVEL DATUM: AHD

WARNING - FIBRE OPTIC CABLE
TELSTRA INDICATE THAT THERE IS FIBRE OPTIC CABLE IN THE VICINITY OF THE WORKS. CABLE IS TO BE LOCATED PRIOR TO COMMENCEMENT OF EXCAVATION. CONTRACTOR TO ENSURE FIBRE OPTIC CABLE IS NOT DAMAGED DURING CONSTRUCTION. FIBRE OPTIC CABLE SHOWN ON THESE PLANS ARE INDICATIVE ONLY.

| | | | |
|-------------|---|----------|------|
| | | | |
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| | | | |
| No. | Amendment Description | Initials | Date |
| A3 original | This sheet may be prepared using colour and may be incomplete if copied | | |





DESIGNED

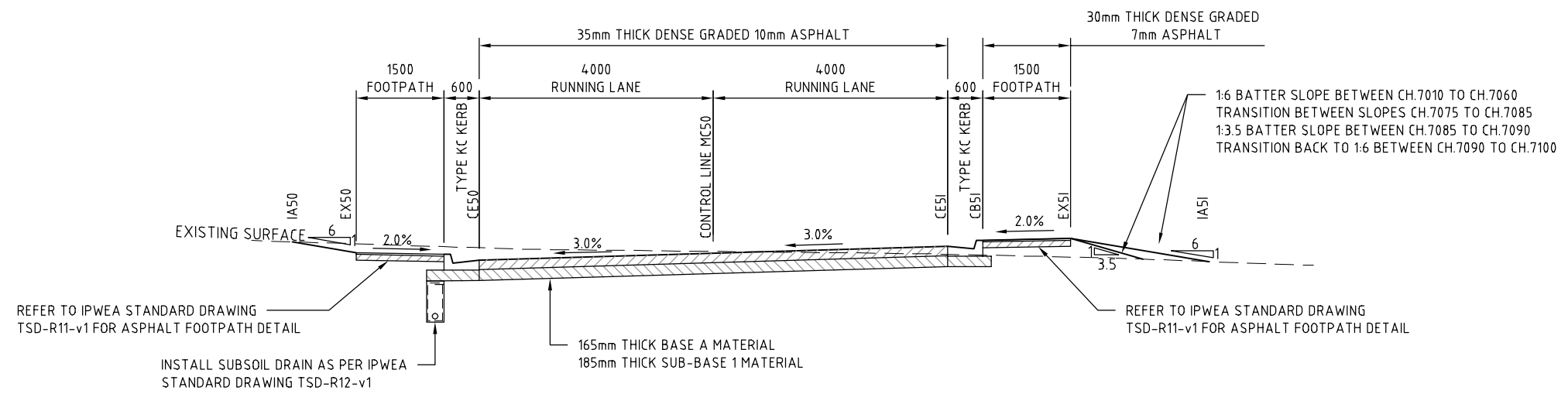
REVIEWED

Department of State Growth



TIMSBURY ROAD, GLENORCHY
HOWARD ROAD / TIMSBURY ROAD JUNCTION
TIMSBURY ROAD REALIGNMENT

ACCOMMODATION WORKS - 59 HOWARD ROAD

| | | | |
|---------------------|------------------------------|------------------------------------|--------------------------|
| CONTRACT No. | DRAWING 32-17132-C080.dwg | PRINTED DATE 03-Jul-14, 4:50 PM | SHEET No. 0080 |
| REGISTRATION NUMBER | | | REVISION A |



TYPICAL SECTION (MC50)
SCALE 1:100

| | | | | | | | | | | | | | | |
|-------------|---|----------|------|---------------------------------|---|---|----------------------------|----------------|--------------|---|------------------------------------|---------------------|--|------|
| | | | | SCALES |  |  | Department of State Growth | | CONTRACT No. | DRAWING 32-17132-C005.dwg | PRINTED DATE 03-Jul-14, 4:44 PM | SHEET No. | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 0005 |
| | | | | | | | | | | | | | | |
| No. | Amendment Description | Initials | Date | | | | | DESIGNED | | TIMSBURY ROAD, GLENORCHY HOWARD ROAD / TIMSBURY ROAD JUNCTION TIMSBURY ROAD REALIGNMENT | | REGISTRATION NUMBER | | |
| A3 original | This sheet may be prepared using colour and may be incomplete if copied | | | Co-ordinate System: MGA Zone 55 | Height Datum: A.H.D. | | TYPICAL SECTIONS | | | | | | | |

BROOKER HIGHWAY - Timsbury Road link to Howard Road Project Site



Appendix B: P50 / P90 Estimate

| Project Element | Preliminary Cost Estimate | |
|---|---------------------------|--------------|
| | \$ M | |
| Client costs excluding Property Acquisition | 2.74 | |
| Construction and Property Acquisition | 24.04 | |
| Contingencies | P50 | P90 |
| | 0.99 | 4.65 |
| Subtotal Project Estimate | 27.78 | 31.43 |
| Escalation | 0.48 | 0.55 |
| Total Project Outturn Cost, to nearest \$0.1 M | 28.3 | 31.9 |

Note: Property acquisition costs have been included with construction costs in this publically available document as acquisition processes including commercial in confidence negotiations are currently underway.

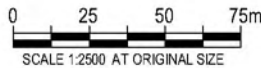
Contract No. 1280-2-89
Brooker Highway
Elwick-Goodwood to Howard Road
Project Estimate Summary

Base Date of Estimate:

April 2015

| Item | | Amount | |
|--|--|--------------------------|------------------------|
| | | Totals have been rounded | |
| 1 Scoping Phase | | | |
| Project Scoping | \$ | | - |
| State Growth - Project Management | \$ | | - |
| Subtotal: Scoping Phase | | \$ | - |
| 2 Development Phase | | | |
| Design - Concept | \$ | | 190,000.00 |
| Design - Preliminary | \$ | | 850,000.00 |
| Design - Detailed | \$ | | 560,000.00 |
| Design Applications, Permits, Fees, Advertising etc. | \$ | | 25,000.00 |
| State Growth - Project Management | \$ | | 111,600.00 |
| State Growth - Public Consultation | \$ | | 75,000.00 |
| Subtotal: Development Phase | | \$ | 1,811,600.00 |
| 3 Minor Property Acquisition | | | |
| Subtotal: Minor Property Acquisition | | \$ | 20,000.00 |
| 4 Delivery Phase | | | |
| State Growth - Project Management | \$ | | 111,600.00 |
| State Growth - Contract Management | \$ | | 730,000.00 |
| State Growth - Miscellaneous | \$ | | - |
| Insurances | \$ | | 90,000.00 |
| Subtotal: Delivery Phase | | \$ | 931,600.00 |
| 5 | Total Client Costs | \$ | 2,763,200.00 |
| Construction | | | |
| Project Specific | \$ | | 1,402,941.00 |
| Earthworks | \$ | | 1,391,500.00 |
| Drainage | \$ | | 2,152,880.00 |
| Pavement | \$ | | 1,188,960.00 |
| Bituminous Surfacing | \$ | | 7,896,335.00 |
| Traffic Facilities | \$ | | 868,000.00 |
| Landscaping | \$ | | 1,789,285.00 |
| Miscellaneous | \$ | | 3,337,500.00 |
| Precast Units | \$ | | - |
| Note: Direct & indirect costs factored into rates | | | |
| Subtotal: Contractor's Costs | | \$ | 20,027,401.00 |
| 8 Client Supplied Materials or Services | | | |
| Services | \$ | | 900,000.00 |
| Traffic Signals | \$ | | 2,200,000.00 |
| Street Lighting | \$ | | 900,000.00 |
| Reseal | \$ | | - |
| Subtotal: Client Supplied Materials or Services | | \$ | 4,000,000.00 |
| 9 | Total Construction Cost (TCC) | \$ | 24,027,401.00 |
| 10 Base Estimate (Lines 5 + 9) | | \$ | 26,790,601 |
| | | P50 | P90 |
| 12 Total Contingency | \$ | 992,567.11 4% | \$ 4,649,360.14 17% |
| Total Contingency | | \$ 992,567.11 | \$ 4,649,360.14 |
| 13 Project Estimate (Lines 10 + 12) | | \$ 27,783,168.11 | \$ 31,439,961.14 |
| Cash Flow: Start Escalation 27/04/2015 Start Construction 31/08/2015 | | | |
| 14 | Escalation (applied to Project Estimate) | \$ 484,438.98 | \$ 548,200.36 |
| 15 Total Outturn Cost (rounded to nearest \$1000) | | \$ 28,268,000 | \$ 31,989,000 |

Appendix C: Acquisition Plans



SCALE 1:2500 AT ORIGINAL SIZE

PRELIMINARY

| | | | |
|-----|------------------------|-------|------|
| C | 1A GOODWOOD RD REMOVED | | |
| B | 1A GOODWOOD RD ADDED | | |
| rev | description | app'd | date |

DEPT. OF STATE GROWTH
BROOKER HIGHWAY UPGRADE
ELWICK RD TO HOWARD RD
RACECOURSE ACQUISITION

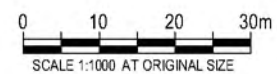


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| | | | | |
|-------|----------|--------|---------|----------|
| scale | 1:2500 | for A3 | job no. | 32-17132 |
| date | OCT 2014 | | rev no. | C |

approved (PD) **SK066**



PRELIMINARY

| | | | |
|-----|--------------------------|-------|------|
| C | CROWN TRANSFERS ADDED | | |
| B | EXISTING BOUNDARIES ONLY | | |
| rev | description | app'd | date |

DEPT. OF STATE GROWTH
BROOKER HIGHWAY UPGRADE
ELWICK RD TO HOWARD RD
PROPERTY ENCROACHMENT



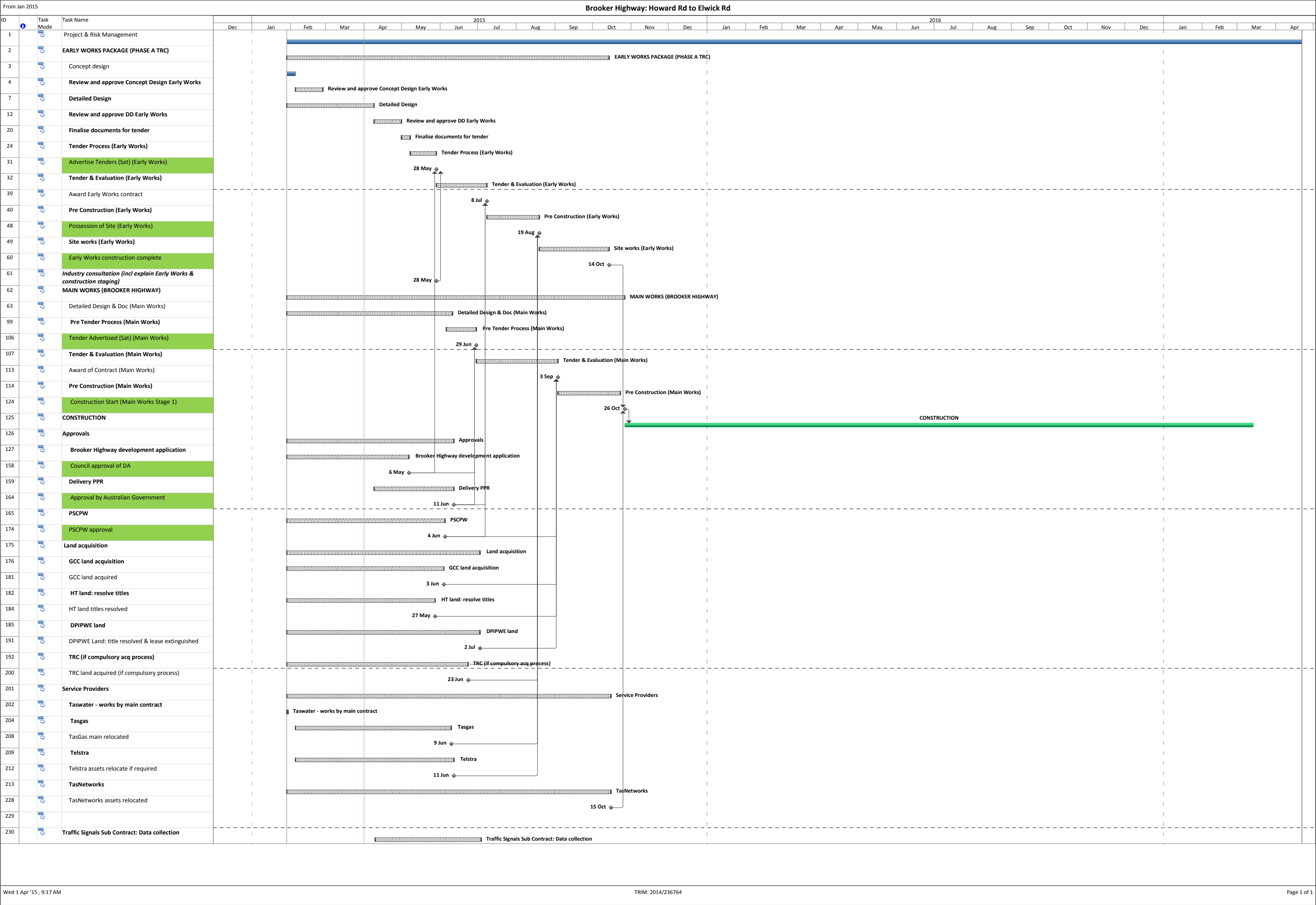
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| | | | | |
|-------|----------|--------|---------|----------|
| scale | 1:1000 | for A3 | job no. | 32-17132 |
| date | JAN 2015 | | rev no. | C |

approved (PD) SK076

Appendix D: Program



Appendix E: Stakeholder Information

List of key stakeholders, summary of consultation to date, issues, actions and future consultation

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|---|--|---|---|---|---|
| Tasmanian Racing Club (TRC), TasRacing and clients | <p>An Initial meeting 11th April 2014 with TRC and TasRacing.</p> <p>Ongoing meetings have been held with TRC and TasRacing. Including a site walk through.</p> <p>Further meetings have been held on an ongoing basis with an agreed working group and with the Solicitor General's Office.</p> <p>In Dec 2014 a meeting was held with the new CEO. The CEO has appointed a Board Member as the internal project manager for this project.</p> | <p>Concept design</p> <p>Preliminary Design</p> <p>Discussion Paper</p> <p>Concept designs for reinstatement of entrance/exits and function centre car parking and other racecourse infrastructure.</p> | Impact of land acquisition on major events and function centre including car parking and other site infrastructure. | <p>A joint Impact Discussion Paper has been developed recognising the impact of the planned acquisition on the Racecourse. The design and compensation process provides for reinstatement of agreed impacted racecourse functions.</p> <p>A brief for engaging a racecourse design manager for internal racecourse works has been provided.</p> <p>The land acquisition process is progressing.</p> | <p>Close liaison throughout all stages of project.</p> |
| | | | Safety of current entrance (too close to Brooker turn off). | In the design the entrance to the racecourse has been moved further from the Brooker Junction. | |
| Glenorchy City Council | <p>Meetings with Council Executive team, Community Inclusion Officers and Planning officers from April 2014 onwards.</p> <p>Presentation at Council Workshop 26th May 2014.</p> <p>Presentation at Council Workshop 15th Dec 2014.</p> <p>Feb 2015, E-mailed public display material.</p> | <p>Concept and Preliminary Design.</p> <p>Power point presentation.</p> <p>Public display material.</p> | Consultation with impacted community. | Ongoing consultation. | <p>Close liaison throughout all stages of project.</p> <p>Start of works information to be provided to councillors.</p> |
| | | | Concern about impact of road works - traffic delays. | Included in assessment of Traffic Management Plan for the construction contract. | |
| | | | Concern about impact of design on local roads. | Ongoing discussion with Traffic section of Council and consideration of impact on local roads in the design. | |
| | | | Wheel chair indicator loop for pedestrian signals. | To be considered in design. | |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|---|--|---------------------------------------|---|---|--|
| Royal Hobart Showgrounds and clients | Initial meeting 7 th May 2014. Follow up meetings 19 th Aug 2014 and December 2014. | Concept design Preliminary design. | Compatibility with RAST Master plan including direct access from Brooker Highway. | Design does not prevent the construction of a slip lane from the Brooker Highway. | Close liaison throughout all stages of project. |
| | | | Access across Brooker Highway for pedestrians during show days. | At level pedestrian crossing lights at all junctions included in design. | |
| | | | Would like to continue current lease on Crown land for show day parking. | Lease arrangements unaltered, some minor adjustment of lease area. | |
| | | | Impact of construction on major events. | Close liaison during construction. Commencement of works planned for after the show in 2015. | |
| Bunnings | Teleconference 16 th June. | Concept design. | New store opening Feb/Mar 2015. Prefer if roundabout work does not happen for 6 months after store opening. | Work will not begin on roundabout until the store has been opened for 6 months. | Teleconference to discuss start of works to provide detailed construction timetable. |
| Metro | Meeting 10 th June 2014 | Concept design | Supported project objective to improve reliability of travel times. | Construction staging and contract requirements to minimise traffic delays. | Call/meet to discuss start of works and provide detailed construction timetable. Contractor to liaise with Metro regarding temporary bus stop arrangements. |
| | | | Delays need to be kept within timetable float during construction. | | |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|---|--|--|---|--|--|
| Goodwood Community | Initial meeting and ongoing discussion through Community Centre coordinator. | Preliminary design and invitation to Goodwood information session mailed to Goodwood residents. | Advocated for pedestrian crossing arrangements at Renfrew Circle. | At grade pedestrian crossings provided in the design. | Ongoing communication with concerned residents including Acton Crescent group. |
| | Information session at Goodwood Community Centre 9 th Dec 2014. | Invitation to public display e-mailed to community centre for notice board. | Would like Brooker improvements to happen ASAP. | Noted. | Special considerations, where appropriate to be included in the tender. |
| | Additional on-site meeting with Acton Crescent residents. | Design discussed on site. Written response to be provided with offer of further site visit. | Concerns about impact of project on Acton Crescent, noise, pollution and dust, stormwater run-off, public nuisance behaviour on crown land. | The current drainage issues will be fixed by the project. A high fence on the Acton Crescent house boundaries has been included in the design. Landscaping will be used to reduce nuisance access to crown land. | Mail or letter box start of works information including construction timetable. |
| Utilities, electricity/water/gas service providers | Ongoing meetings and discussion with the Design Consultant. | Draft service relocation plans. | | Cost of service relocation paid for by project. Only short service outages expected. All affected stakeholders will be managed through the service authorities. | Ongoing. |
| Ambulance and Fire services | Meeting with Operations Managers Aug 2014. | Concept design. | Would like to be kept informed, of design and construction staging - every second counts. | Construction staging and contract requirements to minimise traffic delays. | Call/meet to discuss start of works and provide detailed construction timetable. |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|--|---|---|--|---|---|
| Schools, Goodwood, Timsbury, Big Picture | E-mailed invitation to public display at Northgate. | Preliminary design. | Access for parents with prams has been raised through community consultation. | At grade pedestrian crossings provided in the design to facilitate crossing by parents with prams. Public display timing ensured schools were back from summer holidays. | E-mail start of works information including construction timetable. |
| McGough St residents | Letter sent proposing left in left out only for McGough Street including an invitation to the information session at Goodwood Community Centre 9th Dec 2015. | Preliminary design access from website or at meeting. | Some residents have a preference for leaving current turning arrangement, although a number also indicated their support for left in left out as a safety improvement. | Further discussions with traffic section of Council about turning options, ongoing. | Advise of final decision about left in left out. Mail start of works information including construction timetable. |
| Little Elwick residents (service road to Showgrounds) | Letter sent proposing eliminating the right turn out of Little Elwick including an invitation to the information session at Goodwood Community Centre 9th Dec 2015. | Preliminary design | Preference for leaving current turning arrangement. | Further discussions with traffic section of Council about turning options, ongoing. | Mail to advise of final decision on turning and landscaping. Mail start of works information including construction timetable. |
| | | | Concern about sight distance. | Removal of central gravel/scrub area will improve sight distance. | |
| | | | Want some visual screening from Elwick Road. | A landscaping plan is under development. | |
| Proposed Elwick Clearway residents | Letter sent to residents adjacent to a proposed peak time clearway on Elwick Road including an invitation to the information session at Goodwood Community Centre 9th Dec 2015. | Preliminary design | Concern about being able to reverse out of driveway into traffic. | Direct discussion with each resident being organised. | Meet with each resident to discuss egress from property. Mail start of works information including construction timetable. |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|--|---|--|--------------------|---|--|
| Acquisitions | Housing Tasmania, DPIWE, GCC. | | | Standard acquisition process. | |
| Landowners requiring minor alteration to driveways/access | Meetings with each resident. | Preliminary design. | | Direct discussion with each owner/resident. | Contract to include requirement for contractor to provide notice to landowners prior to affecting access. Mail start of works information including construction timetable. |
| Timsbury Rd residents | Initiation sent to information session at Goodwood Community Centre 9th Dec 2015. | Invitation to Goodwood Meeting. Preliminary design. | | | Mail start of works information including construction timetable. |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|---|---|--|--|---|--|
| Glenorchy community general, and the travelling public including heavy vehicle operators | <p>Project announced by the Prime Minister.</p> <p>Public notice in Glenorchy Gazette and Mercury informing of public display.</p> <p>Invitation posters for public display sent to community houses, library, history society and Magnolia café.</p> <p>Website with preliminary design Message Board at DEC with public display dates, time and location.</p> <p>Public display held Friday and Saturday 6th and 7th February at Northgate and remaining at Glenorchy Council through February.</p> | Preliminary design provided at public display and on public website. | Congestion and delays along Brooker Highway and Elwick Road. | Aim of project to improve flow along Brooker and local connectivity. | Detailed communication plan to inform the community of start of works and possible delays. |
| | | | Would like improvement work to start as soon as possible. | Noted. | |
| | | | Traffic delays during construction. | Construction to be staged and traffic managed to minimise delays. | |
| | | | Would like the left merge lane to be as long as possible. | <p>Unlike other lanes on the Brooker Hwy this lane will be fed from 3 full lanes through the entire project section and consequently work much better than current lanes.</p> <p>To be any longer it would impact on Balmoral Motel entrance.</p> | |
| | | | Would like to be able to do a U-turn at the Howard Road junction to access Brooker residences. | This is included in the design. | |
| Cycling organisations | E-mail exchange with Cycling South. | Concept design. | | Agreed cycle routes and facilities on Howard Road and Renfrew Circle. | E-mail public notice of start of works including construction timetable. |

| Stakeholder | Consultation to date | Information Provided | Main Issues Raised | Actions Taken | Future Consultation |
|---|----------------------|----------------------|--------------------|---------------|--|
| Businesses along Howard Road, Elwick Road and Brooker Highway in close proximity to works areas | | | | | Mail/visit to advise of start of works including construction timetable and likely impact. |

Appendix F: Public Display Plans

LEGEND:

- CUT
- FILL
- FOOTPATH / SHARED PATH
- PAVED MEDIAN / TRAFFIC ISLAND
- CLEARWAY (PEAK ONLY)





ELWICK RACECOURSE

ACTON CRESCENT

GOODWOOD ROAD

REFUGE LANE

SHARED FOOTPATH / CYCLEWAY

BROOKER HIGHWAY

FILL

FILL

 SIGNALISED PEDESTRIAN CROSSING
ACROSS EACH LEG OF THE INTERSECTION

RETAINING WALL

SHARED FOOTPATH / CYCLEWAY

FILL

FILL

HOBART SHOWGROUND

BROOKER HIGHWAY

ELWICK ROAD

NO RIGHT TURN OUT
OF SERVICE ROAD

MCGOUGH STREET TO BE
LEFT-IN / LEFT-OUT ONLY

MCGOUGH STREET

CLEARWAY
(PEAK ONLY)



ACTON CRESCENT

RENFREW CIRCLE

BROOKER HIGHWAY

FENCE TO BE RELOCATED BACK TO PROPERTY BOUNDARY

CYCLE LANE AND STORAGE BOX

 SIGNALISED PEDESTRIAN CROSSING
 ACROSS EACH LEG OF THE INTERSECTION

SHARED FOOTPATH / CYCLEWAY

FILL

FILL

CYCLE LANE AND STORAGE BOX

NEW TIMSBURY ROAD CUL-DE-SAC

TIMSBURY ROAD

NEW LINK ROAD BETWEEN HOWARD ROAD AND TIMSBURY ROAD

HOBART SHOWGROUND

BUNNINGS WAREHOUSE

HOWARD ROAD