15 Mile Irrigated Agricultural Development project

Coordinator-General's evaluation report on the impact assessment report

July 2019



COORDINATOR-GENERAL

The Department of State Development, Manufacturing, Infrastructure and Planning

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Synopsis

This report details my evaluation of the 15 Mile Irrigated Agricultural Development project (the project). It has been prepared in accordance with section 34L of the *State Development and Public Works Organisation Act 1971* (SDPWO Act).

Flinders Shire Council (the proponent) proposes to develop a master planned irrigated agricultural precinct on the banks of the Flinders River, approximately 12 kilometres (km) north-northwest of Hughenden.

The project involves the development of approximately 306 hectares (ha) of land for high value agricultural crops and 156 ha of land for farming and water storage infrastructure. The remaining 450 ha of the site would consist of watercourses, wetlands, remnant vegetation and buffers to these features.

The initial 150 ha development of the precinct is expected to include 75 ha of citrus, 50 ha of table grape and 25 ha of avocado crops and would be developed by growers who have an agreement with the proponent to invest in the project. The crops would fulfil current market opportunities within the growers' existing supply chains and be distributed to major supermarkets within Australia and internationally.

The project would also include:

- · production bores, dams, pumps and irrigation networks
- a co-use cooling, packaging and logistics facility
- staff amenities and caretaker accommodation
- machinery and chemical storage sheds
- public and internal access roads
- power supply infrastructure.

The project involves an estimated initial capital expenditure of \$20 million and an additional capital expenditure of approximately \$27 million to fully develop the remaining 156 ha of the site. At full production, the project would generate the following benefits:

- an average of five full-time equivalent (FTE) jobs during the five-year construction and establishment phase
- an average of 77 ongoing FTE jobs per annum for the initial operations
- an average of 165 ongoing FTE jobs per annum at full production, the equivalent of 11 per cent of the current population of Hughenden or 21 per cent of the Flinders Shire workforce
- annual crop production value of \$8-9 million per year, a 12 per cent increase to the current gross agricultural production value of \$73.5 million for Flinders Shire
- flow-on benefits for associated industries including agricultural supplies and transport.

Vegetation clearing

Remnant vegetation

The project would require clearing of 462.3 ha of native vegetation—305.7 ha for irrigated crops, 64.7 ha for farming infrastructure and 91.9 ha for water storage infrastructure. The cleared vegetation would include very sparse woodland and grassland communities which are of 'least concern' under the Queensland vegetation management framework. 'Least concern' remnant vegetation is not considered to be a matter of state environmental significance (MSES) unless it coincides with waterways, wetlands or essential habitat for wildlife.

Under section 22A of the *Vegetation Management Act 1999* (VM Act), clearing can only be considered for irrigated agriculture if it is for a relevant purpose. A project declared to be a coordinated project under the SDPWO Act is a relevant purpose. In determining the areas appropriate for clearing, the VM Act specifies clearing can only occur where a land suitability assessment finds that the land is suitable for the proposed crops and in areas which are essential for infrastructure that supports the effectiveness of the proposed cropping operation.

The impact assessment report (IAR) includes a land suitability assessment which relies on extensive site investigations and laboratory analysis to confirm areas which are suitable for proposed crops. The land suitability assessment found that 370.4 ha of the site is suitable for irrigated table grapes and citrus and that 311.0 ha would be suitable for irrigated avocado production. The land suitability assessment confirms that the project site is suitable for the proposed crops.

Vegetation clearing must be limited to areas of land which are suitable for proposed crops or required for essential infrastructure. Accordingly, I have stated conditions limiting clearing to the development footprint described in the IAR. The conditions I have set also protect wetlands, watercourses and remnant vegetation outside of the development footprint.

Matters of state environmental significance

The IAR confirms that the site contains the following MSES:

- remnant vegetation which intersects with an area shown on the vegetation management wetland map, of which 2.3 ha of vegetation would be cleared
- remnant vegetation located within the defined distance from the defining banks of a watercourse identified on the vegetation management watercourse map, of which 1.9 km would be disturbed
- connectivity areas
- habitat for the protected squatter pigeon.

The project generally avoids and provides buffers to wetlands. Minor clearing would be required in some wetland buffer areas to accommodate essential infrastructure. There would, however, be no clearing within 10 metres of the defining bank of a wetland and where clearing is required it would be within prescribed widths which meet the requirements of the relevant State Development Assessment Provisions.

Similarly, the project avoids and buffers watercourses, with clearing limited to that which is essential to allow the construction of essential infrastructure. Clearing for the project would not adversely impact watercourse bank stability, water quality or aquatic or terrestrial habitat.

The proposed precinct plan appropriately considers the maintenance of landscape connectivity by ensuring that sufficient vegetation is retained to maintain ecological processes. In particular, the clearing required for the project would not reduce the extent of vegetation to less than 30 per cent of the lot, a key performance outcome of the State Development Assessment Provisions. The IAR demonstrates that the connectivity of the remnant vegetation and ecological processes can be maintained.

I am satisfied that my conditions will protect wetlands, watercourses and connectivity areas and ensure they would not be disturbed unnecessarily by the project. The key performance outcomes of the State Development Assessment Provisions which relate to wetlands, watercourses and connectivity areas would be met by the project.

The IAR concluded that there would not be significant residual impacts on vegetation associated with wetlands, watercourses and connectivity values and I accept this conclusion.

I am also satisfied that the project would not have a significant residual impact on the squatter pigeon. This is due to the protection of important habitats for this species by the conditions I have set in this evaluation report.

Water resources

Availability of water

The project's initial 150 ha development would require up to 1,630 million litres per year (ML/year) of water, with the total development requiring up to 3,395 ML/year. The proponent holds licenses for up to 6,170 ML/year from multiple ground and surface water sources and has access to at least an additional 1,038 ML/year from unlicensed bores.

The full volume of water from these sources is not available at all times due to the seasonal availability of water from the Flinders River and associated aquifers. Consequently, the project requires the establishment of multiple storage dams to hold enough water to ensure crop requirements can be met. The total water storage proposed for the site is 2,250 ML.

I am satisfied that the project has access to sufficient water to allow the proposed cropping activity to be successfully undertaken.

Impacts on groundwater and surface water

The project would draw surface water from the Flinders River during periods of high rainfall and groundwater from the Great Artesian Basin (GAB) and the Flinders River Alluvium. Taking of water from these systems is governed by the Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017 and Water Plan (Gulf) 2007. These plans consider the impacts of groundwater take on the natural processes of the artesian

(and subartesian) systems and the sustainable management of surface water and groundwater associated with riverine systems, respectively.

The proponent has been offered a water licence for GAB water and has demonstrated compliance with the relevant water plan through the Department of Natural Resources, Mines and Energy's assessment of the proposed extraction of 720 ML from the Eromanga Hutton aquifer unit.

The IAR confirms that pumping rates for production bores have been investigated by the proponent to inform the development of sustainable pumping schedules. Careful management of pumping schedules would ensure that impacts on groundwater aquifers are minimised. The proponent has also committed to the monitoring of groundwater water levels at monitoring bores and the installation of automatic water level loggers installed to production bores to confirm that pumping rates are sustainable in the long term.

I am satisfied that the project's use of surface water and groundwater from alluvial aquifers would not adversely impact on the natural riverine environment of the Flinders River, other users' ability to access the resource or the physical integrity of the watercourse.

I accept that the water requirements for the project are sustainable and note also that these matters have been carefully considered in the granting of water allocations and licenses.

To ensure that best practice water management techniques are employed, the proponent has committed to preparing a water management/efficiency plan for end users which includes a water inventory. The water management/efficiency plan would also confirm the guiding principles to be adopted by all growers within the precinct. I expect the proponent to fully comply with this commitment.

Salinity

Clearing for irrigated agriculture would only be undertaken in areas with soil that is suitable for proposed crops and not saline. The project would however, involve the irrigation of crops with water of low and medium salinity which could result in the accumulation of salts in the soil profile or the salinisation of ground or surface water.

Despite favourable site conditions, there is a risk that salinity could increase as a result of irrigating of crops with saline water. To address this risk, the proponent has proposed a strategy to mix GAB water with less saline alluvial water to supply an acceptable quality of water for the intended crops. I consider this approach to be appropriate, subject to the development of specific irrigation management protocols that consider characteristics of water and the soil in the area proposed for irrigation.

To protect soil and groundwater from increased salinity, I have stated a condition which requires a salinity management plan to be prepared prior to the commencement of development activities and in accordance with relevant guidelines. The salinity management plan would confirm details of the proponent's management approach as described in the IAR and would require the proponent to:

• ensure that water sources are of adequate quantity and quality to establish, cultivate and ultimately harvest proposed crops

- construct and maintain all water storages to avoid leakage and rising groundwater tables
- · analyse soil chemical and physical properties that influence irrigation management
- develop ongoing management protocols that consider soil characteristics, site drainage characteristics and appropriate irrigation management measures
- include a groundwater monitoring program, including monitoring bores adjacent to proposed dams.

The salinity management plan must be implemented to achieve these objectives.

Soil conservation and water quality

Clearing and grading of the site would expose large areas of topsoil, particularly during construction and establishment of the project. There is a risk that topsoil could be eroded and increase sedimentation in the Flinders River, thereby impacting water quality.

The project incorporates substantial environmental buffers to reduce the potential impacts on the Flinders River and wetlands associated with erosion, sedimentation and the runoff of nutrients, fertilisers and contaminants.

To manage impacts of the project on erosion and water quality, the proponent has committed to implementing best practice farming techniques which would implement topsoil conservation measures to further reduce the potential for topsoil loss. Relevant measures include the minimisation of soil disturbance and runoff, protection of riparian vegetation and the testing of soil to ensure that fertiliser application rates are tailored to suit soil conditions.

To ensure that these measures are implemented, I have stated conditions requiring that a construction phase erosion and sediment control plan is prepared in accordance with relevant guidelines. This plan must be implemented from the commencement of site works, including site preparation and pre-construction activities.

In addition, the proponent has committed to preparing a soil conservation management plan for the site in accordance with soil conservation guidelines relevant for Queensland. This will focus on implementing best practice soil conservation measures for the life of the project. I expect this commitment to be undertaken.

Social and economic impacts

The proponent is advancing the project as a key initiative to stimulate and diversify the local economy, increase employment opportunities and reverse a trend of population decline. By facilitating the development of high value, low volume, irrigated agriculture in the local area, the project would create an average of five FTE jobs per annum during the five-year construction and establishment phase, an average of 77 FTE jobs per annum in the initial operations and an average of 165 FTE jobs per annum at full production. The project would also support further industry growth in the region by contributing to the shire's establishment as an emerging centre for irrigated agriculture.

The project would also generate flow-on opportunities for associated industries in the region including transport services, building and concrete supplies, and irrigation supplies and repairs.

I note that despite population decline, Hughenden retains important community infrastructure and has sufficient housing to satisfactorily accommodate the increase in population from the workforce without impacting on essential services or housing affordability and availability. Furthermore, there are no expected impacts on residents from construction activities as the project is located 12 km away from the residential population.

I am satisfied that the project would have a positive contribution to the Flinders Shire economy through employment opportunities and the diversification of industries contributing to the local and regional economic growth.

Coordinator-General's conclusion

This report has evaluated the IAR documentation, agency advice, and other material relevant to the project.

I consider that the IAR requirements of the SDPWO Act for the project have been met and that sufficient information has been provided to enable an evaluation of the impacts of the project.

I conclude that there are significant local and regional benefits to be derived from the 15 Mile Irrigated Agricultural Development project, and that any negative environmental effects can be adequately avoided, minimised or mitigated as required through the implementation of the measures outlined in the IAR documentation. The conditions I have specified in this report have been formulated to ensure all potential impacts associated with the project can be adequately managed.

Accordingly, I approve the project, subject to conditions included in this report.

This report will lapse 4 years after the date of this report or 23 July 2023.

A copy of this report will be provided to the proponent and relevant state government agencies and will also be made publicly available at: <u>www.dsdmip.qld.gov.au/15mile</u>.

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Barry Broe Coordinator-General

2 Z July 2019

1. Introduction

This report has been prepared pursuant to section 34L of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) and provides an evaluation of the impact assessment report (IAR) for the 15 Mile Irrigated Agricultural Development project (the project).

This report does not record all the matters that were identified and subsequently addressed during the assessment. Rather, it concentrates on the substantive issues identified during the IAR process. The report:

- summarises the key issues associated with the potential impacts of the project on the physical, social and economic environments at the local, regional and state levels
- presents an evaluation of the project, based on information contained in the IAR and information and advice from advisory agencies
- states conditions under which the project may proceed.

2. About the project

2.1 The proponent

The proponent for the project is Flinders Shire Council (the proponent), a rural local government located in north-western Queensland. The local government area covers an area of 41,632 square kilometres (km²) and includes the town of Hughenden and the smaller communities of Prairie, Torrens Creek and Stamford.

2.2 Project location

The project is located on the banks of the Flinders River, approximately 12 kilometres (km) north-northwest of Hughenden and 380 km west of Townsville (Figure 2.1). Hughenden, with a population of 1,521 is both the shire's business centre and a major transport hub in the region, with major highways connecting to Townsville, Mount Isa, Cairns and Melbourne, along with direct access to the Mount Isa rail line and Hughenden airport.





2.3 Project description

2.3.1 Project components

The project is a master-planned irrigated agricultural precinct which would involve the development of 305.7 hectares (ha) of land for high value horticultural crops and 156.6 ha of land for infrastructure and water storages. Farming infrastructure requires 64.7 ha of land and 91.9 ha of land is required for water storages. The precinct would also include 450.2 ha of land for environmental protection purposes including watercourses, wetlands, remnant vegetation and buffers to these features.

The project includes the following infrastructure:

- production bores, pumps and irrigation network
- co-use cooling, packaging and logistics facility (co-use facility)
- staff amenities and two cabins for the owner and the caretaker
- five irrigation dams, including three ring tank dams, each with a capacity of 500 ML, a hillside dam with a capacity of 500 ML and an overland flow farm dam with a capacity of between 220 and 250 ML
- machinery and chemical storage sheds
- power supply infrastructure
- public and internal access roads.

The project's infrastructure footprint is shown on the precinct master plan in Figure 2.2.



Figure 2.2 Precinct master plan

2.3.2 Development stages

Construction of the project is expected to commence in 2019 and the construction and establishment would take around five years to complete. Construction would involve:

- site preparation works—including clearing, deep ripping, levelling, application of manure and gypsum, or other soil amelioration if required, and perimeter fence construction
- irrigation set-up—including bore construction, pump and spin filter installation, irrigation water distribution and field set-up and irrigation dam construction
- field development—including posts, trellises, wires, grafted vines and vine guards for grapes and grafted trees and tree guards for citrus
- building and infrastructure construction—including logistics facility, sheds, cold rooms, packing facilities, machinery sheds, pump and filter sheds, chemical storage sheds and amenities.

The proponent proposes to stage the development of the site, with the initial establishment of crops over an area of 150 ha including 50 ha of table grapes, 75 ha of citrus and, potentially, 25 ha of avocados.

At full development, the remaining area of developable land (approximately 155.7 ha) in the precinct would be cultivated with crops determined by future growers and market demands.

2.3.3 Infrastructure requirements

Roads

Access to the site is via Old Richmond Road, a council-managed dual lane sealed road that links directly to the Flinders Highway. There are no road upgrades and no significant road infrastructure required to allow the project to proceed.

An unsealed local road off Old Richmond Road passes through the site providing access to properties and a residence/farming building and infrastructure approximately 350 metres north of the Flinders River. The proponent proposes to close the existing road traversing the site whilst simultaneously opening a new 12-metre-wide internal road reserve incorporating a 7-8 metre unsealed road.

Power

There are no significant power generation or transmission infrastructure requirements for the project. The site would be connected to the reticulated electricity infrastructure network and power supply would be the responsibility of the growers as required.

Telecommunications

During the initial site development, the project would be serviced by mobile broadband. Subsequently, telecommunications would be the responsibility of growers, as required.

Sewerage

There are no significant sewerage infrastructure requirements for the site. On-site waste water treatment to meet the requirements of the Flinders Shire Planning Scheme would be conducted in accordance with the Water Services Association of Australia Sewerage Code of Australia.

2.4 Project rationale

The project has been proposed by the proponent to stimulate economic development and promote sustainable growth in light of negative population growth rates experienced by the Flinders Shire over the last decade.

The project arises from the 2013 CSIRO report, *Agricultural resource assessment for the Flinders catchment* which was prepared as part of the North Queensland Irrigated Agriculture Strategy. The report identified that the Flinders catchment has potential to support significant areas of irrigated agricultural development, however, there is more soil suited to irrigation than there is water to irrigate it.

Further, it determined that the high capital costs of water infrastructure might preclude reliable economic returns on irrigated farming, however, with the introduction of third party investment in water infrastructure, commercial returns on irrigated agriculture are possible.

The project aligns with the draft North West Queensland Economic Diversification Strategy. This strategy identifies that the realisation of opportunities for irrigated agriculture would capitalise on North Queensland's agricultural competitive advantages including its proximity to growing populations in Asia and the Indo-Pacific, established infrastructure and supply chains, arable land, expertise in tropical and dry tropical production systems and favourable biosecurity status—to increase productivity and maximise regional economic benefits.

The project would support further industry growth in the region by contributing to the shire's establishment as an emerging centre for irrigated agriculture.

3. Impact assessment process

In undertaking this evaluation, I have considered information from the following:

- the initial advice statement (IAS)
- the IAR
- technical reports
- advice from agencies including the Department of Natural Resources, Mines and Energy (DNRME), Department of Agriculture and Fisheries (DAF) and Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP).

The steps taken in the project's IAR process are documented on the project's webpage at **www.dsdmip.qld.gov.au/15mile**.

3.1 Coordinated project declaration

On 24 August 2018, I declared the project a 'coordinated project' under section 26(1)(b) of the SDPWO Act. This declaration initiated the statutory environmental impact evaluation procedure of Part 4 of the SDPWO Act, which required the proponent to prepare an IAR for the project.

3.2 Impact assessment report

3.2.1 Draft impact assessment report

On 4 July 2019, the proponent submitted a draft IAR for the project, in accordance with section 34G of the SDPWO Act.

On 9 July 2019, I decided public notification of the draft IAR was not required under section 34H of the SDPWO Act, as there are no subsequent notifiable approvals for the project.

3.2.2 Final impact assessment report

On 17 July 2019, I accepted the draft IAR as the final IAR under section 34I of the SDPWO Act.

4. Project approvals

4.1 Local government approvals

The primary approvals required to allow the project to proceed are development permits for material change of use (MCU), reconfiguration of a lot (ROL) and operational works (OW) which are code assessable against the Shire of Flinders Planning Scheme 2017 (the planning scheme). Flinders Shire Council (FSC) is the assessment manager for the MCU, ROL and OW applications under the planning scheme.

4.2 State government approvals

4.2.1 Water related

The project also requires approvals for the construction of new water bores, including a new bore which accesses the Great Artesian Basin and conversion of existing test bores near the Flinders River to production bores. These approvals are OW approvals where the State Assessment Referral Agency (SARA) is the assessment manager and DNRME would be a referral/technical advice agency.

4.2.2 Section 22A determination

Under the provisions of the *Vegetation Management Act 1999* (VMA), an application for vegetation clearing can only be considered if it is for a relevant purpose. A project declared to be coordinated project under the SDPWO Act is a relevant purpose under section 22A of the VMA. The proponent received a relevant purpose determination from NRME on 1 November 2018 which confirmed that the proposed development to clear native vegetation for the purpose of a coordinated project meets the requirements of section 22A of the VMA.

4.3 Commonwealth approval

The IAR includes an *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) self-assessment which considers the potential impacts of the project on matters of national environment significance (MNES). The self-assessment considers the EPBC Act Significant Impact Guidelines 1.1 - Matters of National Environmental Significance and associated Guidelines for EPBC Act listed species as relevant to the site. The EPBC significant impact assessment concluded that the project would not have a significant impact on MNES and there is no requirement for referral to the Commonwealth DEE. MNES are not discussed further in this report.

4.4 Conditions attached to this report

The project requires approval for native vegetation clearing which is made assessable by the *Planning Regulation 2017* (Planning Regulation). Outside of the SDPWO Act process, the proposed MCU would be referrable to the Chief Executive responsible for the administration of the *Planning Act 2016* (Planning Act).

This evaluation report is taken to be the referral agency response to the development application for the MCU, as the information and referral stage which would typically apply under the Planning Act is removed by Section 37 of the SDPWO Act. A properly made application made by the proponent for the MCU would therefore move to the decision stage of the application process under the Planning Act.

Schedule 10, Part 3, Division 4, Table 1 of the Planning Regulation establishes that operational works vegetation clearing relating to a material change of use does not require a separate referral to the Chief Executive responsible for the administration of the Planning Act if it is assessed as part of the application for MCU.

This report includes conditions (in Appendix 1) which must be attached to the subsequent development approval for the MCU including conditions relating to native vegetation clearing.

The project requires an OW approval for taking or interfering with water under the *Water Act 2000* (Water Act). The Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)/SARA is the assessment manager for this approval and would seek technical agency advice from DNRME. DNRME has provided technical agency conditions which must be attached to the subsequent OW development approval which are included in this report in Appendix 1. The approvals required for the project to proceed are identified in Table 4.1, including confirmation of those approvals for which conditions have been stated in this report.

Project component/ activity	Permit/approval	Legislation	Authority	Conditions included in this report
Caretaker's accommodation	Material Change of Use	Planning Act	Flinders Shire Council	Yes
Co-use cooling, packaging and logistics facility (co-use facility) and associated workforce amenities	Material Change of Use	Planning Act	Flinders Shire Council	Yes
High value irrigated agriculture	Material Change of Use	Planning Act	Flinders Shire Council	Yes
Reconfiguring Lot 168 on SP262319	Reconfiguration of a Lot	Planning Act	Flinders Shire Council	Yes
Overland flow dam and ring tank where excavation and filling exceeds 10,000 tonnes.	Operational works	Planning Act	Flinders Shire Council	No
Operational work that involves taking water under the <i>Water</i> <i>Act 2000</i> – construction of a water bore	Operational works	Planning Act Water Act	DSDMIP/SARA	Yes
Taking or interfering with water – conversion of existing test bores to production bores	Licence	Water Act	DNRME	Yes

Table 4.1 List of project approvals

4.5 Permits and approvals held by the proponent

To support the project, the proponent has obtained water licenses and other approvals, including the following:

 water licence 609134 for the take of 450 ML from the Flinders River on or adjacent to Lot 168 on SP262319, Lot 167 on SP262319, Lot 22 on DG137 and Lot 60 on DG209.

- water licence 618019 for the take of 5,000 ML from the Flinders River on or adjacent to Lot 168 on SP262319, limited to when the flow of water in the Flinders River at GS915008A exceeds 1,500 ML per day. This water licence also authorises the taking of overland flow water on land described as Lot 168 on SP262319.
- a water licence for the extraction of 720 megalitres from the Eromanga Hutton aquifer unit which complies with requirements of the Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017.
- approval of simultaneous opening and closing of a road under the *Land Act 1994*, for which DNRME has lodged the survey plan for the simultaneous road opening and road closure with the Titles Registry.

5. Evaluation of environmental impacts

This section discusses the major environmental effects identified in the IAR. I consider some potential impacts of the project to have been adequately addressed in the IAR. For these matters, I have determined that the proponent's mitigation measures and commitments are appropriate. For the remaining matters evaluated below, I have included conditions to mitigate adverse impacts.

5.1 Vegetation clearing

To enable the establishment of crops, irrigation systems and associated infrastructure, around 51 percent of the site would be cleared. Other infrastructure requiring vegetation clearing include the construction of internal access roads, sheds, cold rooms, machinery and pump sheds and amenities.

5.1.1 Existing environment

Remnant vegetation

The vegetation of the project site is predominately very sparse open woodlands featuring coolabah and eucalypts with grassland/saltbush communities. The entire land parcel is mapped with regional ecosystems classed as 'least concern' under the *Vegetation Management Act 1999* (VM Act). The analysis of the different types of remnant regional ecosystems on the project site is listed in Table 5.1 below.

	-	-			
Regional Ecosystem	VMA Status	Area (ha)	Short description	Structure category	Pre-clearing and 2017 remnant estimated extent (ha)
4.3.10	Least concern	279.72	Corymbia terminalis +/- Lysiphyllum gilvum and Acacia victoriae low open woodland on alluvium	Very sparse	109,000 103,000

Table 5.1 Regional ecosystems present on the project sit		
	Table 5.1	Regional ecosystems present on the project site

Regional Ecosystem	VMA Status	Area (ha)	Short description	Structure category	Pre-clearing and 2017 remnant estimated extent (ha)
4.3.14	Least concern	9.05	Astrebla lappacea, Astrebla spp. +/- <i>Eulalia aurea</i> grassland on alluvium	Grassland (not regulated)	830,000 812,000
4.3.15	Least concern	14.98	Astrebla squarrosa +/- Dichanthium spp. +/- Eulalia aurea grassland on alluvium	Grassland (not regulated)	388,000 386,000
4.3.2	Least concern	0.54	Eucalyptus camaldulensis +/- E. coolabah woodland on drainage lines	Sparse	94,000 93,000
4.3.20	Least concern	135.66	Atriplex spp. and Sclerolaena spp. +/- Astrebla spp. +/- short grasses +/- forbs, open herbland on braided or flat alluvial plains	Grassland (not regulated)	995,000 984,000
4.3.23	Least concern	8.35	Acacia tephrina, Lysiphyllum spp., Acacia cambagei and Ventilago viminalis in mixed low open woodlands on alluvial plains in the northeast	Very sparse	34,000 30,000
4.3.4	Least concern	364.78	<i>Eucalyptus coolabah</i> open woodland on drainage lines and/or plains	Very sparse	985,000 968,000
4.9.1	Least concern	59.51	Astrebla lappacea +/- Aristida latifolia +/- Panicum decompositum grassland on Cretaceous sediments	Grassland	4,938,000 4,915,000

These ecosystems are well represented in Queensland with their remnant status classed as 'least concern' meaning there is over 30 percent of their pre-clearing extent across the bioregion remaining and the remnant area is greater than 10,000 ha. Although the grassland ecosystems are mapped as 'least concern' they are not regulated under the VM Act, therefore approvals are not required for their clearing.

Field surveys to confirm the remnant regional ecosystem mapping found that no 'of concern' regional ecosystems were present and that the site is mostly very sparse open woodland interspersed with grassland communities. The very sparse, open nature of the vegetation is indicative of its natural low density and reflects the seasonally dry and arid conditions of the location. The site has been intensively grazed in recent years which may

have supressed tree recruitment and shrub density and created sparse ground cover. There are also weed infestations in some areas.

The site is located in the Flinders River floodplain and there are wetlands and drainage features which would hold water on a seasonal basis.

Matters of state environmental significance

'Least concern' remnant vegetation is not considered to be a matter of state environmental significance (MSES) unless it coincides with waterways, wetlands or essential habitat for wildlife. The majority of the remnant vegetation on the project site which would be cleared by the project is therefore not a MSES.

The IAR confirms that the site contains the following MSES:

- remnant vegetation which intersects with an area shown on the vegetation management wetland map
- remnant vegetation which is located within the defined distance from the defining banks of a watercourse identified on the vegetation management watercourse map
- connectivity areas
- wildlife habitat for the protected Squatter Pigeon (Geophaps scripta scripta).

5.1.2 Impacts and mitigation

Remnant vegetation

The IAR states that the total requirement for clearing of regulated native vegetation is 462.3 ha. This area is made up of 305.7 ha for irrigated crops, 64.7 ha for farming infrastructure and 91.9 ha for water storage infrastructure.

Proposed clearing for the project has been minimised by:

- avoiding clearing in areas of high ecological significance, including appropriate buffers to wetlands and watercourses
- · restricting clearing to least concern regional ecosystems
- situating infrastructure to the greatest extent practicable within areas mapped as nonregulated grassland regional ecosystems; and,
- situating water storages where soils are more conducive to the establishment of such infrastructure limiting the need to import suitable construction materials (i.e. fill).

The IAR identifies a range of potential impacts associated with vegetation clearing, including:

- loss of biodiversity as a result of clearing regional ecosystems
- impacts on fauna habitat
- loss of ecological connectivity
- direct impacts to conservation significant flora and fauna
- · soil erosion and degradation from broad scale clearing
- introduction of invasive species and diseases.

The primary mitigation measure to reduce impacts on regulated vegetation is to avoid clearing wetlands, watercourses and water features and retaining remnant vegetation buffers around these important landscape features. In addition, areas which are not suitable for proposed crops would not be cleared.

Other impacts to the landscape from construction and farming operations would be mitigated through the requirement for growers to develop plans for soil conservation, soil health and nutrient management, irrigation and drainage management including salinity and sodicity mitigation and weed, pest and disease management. These requirements are discussed further in section 5.2.

Matters of state environmental significance

The IAR describes potential impacts on watercourses, wetlands and connectivity areas. If clearing were to disturb these important landscape features, impacts would be minimised by avoidance of clearing in the watercourses and incorporating appropriate buffers to these features.

The IAR indicates that the project would require the clearing of 1.9 km of regulated vegetation associated with a watercourse. DNRME advice confirms the following in relation to the clearing of watercourse vegetation:

- the clearing would not perceptibly adversely impact watercourse bank stability, water quality or aquatic or terrestrial habitat within the site or in the greater landscape
- the structure and function of each of the described watercourse regional ecosystems can be maintained within the adjacent areas of the same vegetation assemblages and in the broader landscape
- offsets are not required for significant residual impacts on watercourse vegetation.

The project would also result in the clearing of 2.3 ha of vegetation within 100 metres of a vegetation management wetland. In relation to the clearing of vegetation associated with a wetland, DNRME advice confirms that:

- proposed clearing would not occur within 10 metres of the defining bank of the natural wetland
- proposed clearing would not exceed prescribed widths of 20 metres and 25 metres in very sparse and grassland regional ecosystems respectively
- offsets are not required for significant residual impacts on vegetation associated with wetlands.

The proposed precinct plan appropriately considers the maintenance of landscape connectivity by ensuring sufficient vegetation is retained to maintain ecological processes. The precinct master plan shows that clearing would not:

- · occur in areas of vegetation less than 50 ha
- reduce the extent of any area of vegetation to less than 50 ha
- occur in areas of vegetation less than 200 m wide
- reduce the width of vegetation to less than 200 m
- reduce the extent of vegetation to less than 30 per cent of the lot.

These considerations demonstrate that the connectivity of the remnant vegetation can be maintained.

The IAR concludes that the project would not have a significant residual impact on these matters. DNRME's submission in relation to the draft IAR, and proposed conditions, which do not require offsets, support this finding.

The project site supports protected wildlife habitat for the Squatter Pigeon (*Geophaps scripta scripta*). The IAR concludes that the project would not have a significant residual impact on this species. I note that on the project site this species was most often recorded near standing water. Watercourses and wetlands would be protected by the proposed development layout and a substantial area of suitable habitat would be conserved on the project site which is suitable for this species.

I agree with the conclusion of the IAR that there would be no significant residual impact on any MSES.

5.1.3 Consistency with State Code 16: vegetation clearing

State Code 16 seeks to minimise vegetation clearing to conserve vegetation, avoid land degradation, avoid the loss of biodiversity and maintain ecological processes. Key performance outcomes of the code include:

- avoiding and minimising clearing
- retaining the extent of natural wetland and watercourse vegetation
- maintaining necessary vegetation connectivity
- · avoiding erosion and salinity
- only clearing where the soil is suitable for cropping
- having sufficient water to irrigate the proposed crops.

To meet the code's performance outcomes, clearing for irrigated agriculture can only occur on parts of the site where a land suitability assessment demonstrates that the site area can support the types of crops proposed and that these areas have access to enough water to successfully establish those crops.

A comprehensive land suitability assessment report has been submitted as part of the IAR. A technical review of the land suitability assessment by DNRME has found that:

- the methodology used to conduct the land suitability assessment for the identified crop types was rigorous and accords with accepted best practice
- the land suitability assessment clearly identified all assumptions and practices used in the assessment
- the land suitability assessment demonstrated the land is suitable for the proposed crop types and irrigation methods having regard to topography, climate and soil attributes.

In determining the extent of clearing to be approved, I have considered whether enough water is available for establishing, cultivating and harvesting the proposed crops. I accept that there is sufficient water available to allow the project to proceed. Further discussion about the water resources and availability is included in section 5.2.

I have considered the advice of DNRME in relation to the project, including consideration of the requirements of State Code 16. DNRME advice confirms that the project would meet the relevant performance outcomes of State Code 16, subject to conditions.

5.1.4 Coordinator-General's conclusion: vegetation clearing

I am satisfied that the IAR has adequately evaluated the potential impacts of the project associated with clearing vegetation on the site to make land available for cropping.

I note that the project would result in the clearing of 462.3 ha of native vegetation and consider it to be necessary for the development of the project. I accept the IAR's conclusion that only vegetation classed as 'least concern' under the Queensland vegetation management framework would be cleared. I note that the areas to be cleared are of limited habitat value to threatened species and that the project is unlikely to result in significant impacts to any MSES.

I note that potential impacts from vegetation clearing can include loss of biodiversity and connectivity, impacts on flora and fauna habitat, soil erosion and degradation, and introduction of invasive species and diseases however I am satisfied that the project's preservation of remnant vegetation, wetlands, watercourses, connectivity areas and buffers to these features would mitigate impacts on these vegetation communities.

To ensure compliance with State Code 16 under the State Development Assessment Provisions I have stated a condition for the MCU which limits vegetation clearing to areas suitable for proposed crops or necessary for essential infrastructure. These limits are provided in the Technical Agency Response Plan (TARP) (Appendix 1) and will ensure clearing occurs only on land suitable for cropping and essential for the establishment of essential infrastructure.

I note the proponent has committed to develop and implement a clearing plan as part of the construction environmental management plan, to ensure clearing undertaken by third parties complies with all conditions of approval, legal requirements, and best practise controls relating to the clearing of vegetation. I am satisfied that the implementation of the proposed clearing plan, which would include requirements for pre-clearing surveys and spotter/catchers, would minimise the impacts of clearing.

I am satisfied that my stated conditions and the proponent's commitments would ensure that potential impacts of the vegetation clearing required for the project are appropriately managed.

I have considered State Code 16 under the State Development Assessment Provisions and I am satisfied that the project would be consistent with the performance outcomes of State Code 16. On that basis, I have approved the vegetation clearing required for the project.

5.2 Water resources

The project involves growing fruit crops not commonly grown in the locality due to the hot and dry semi-arid climate. Conditions such as variable rainfall and high summertime temperatures creates challenges for growing plants. The high temperatures and evaporation rates throughout summer require water for climate control through mini sprinklers as well as trickle or drip irrigation to feed and water crops to sustain optimum growth and production. The use of water from underground and river water sources is therefore an essential component of the project.

5.2.1 Existing environment

Groundwater and surface water

The project is located adjacent to the Flinders River, which is a declared watercourse, and there are multiple existing water bores across the site. Groundwater under or within 1 km of a declared watercourse is treated as water in a watercourse in the Water Plan (Gulf) 2007 (Gulf Water Plan) under the *Water Act 2000*. This means that any water user drawing from an aquifer within 1 km of the Flinders River, for a purpose other than stock and domestic, would require a water licence. Licensing is regulated by the Gulf Water Plan.

Due to the close connectivity with the surface water and the composition of the intervening sand and gravel beds, the water quality of the Flinders River alluvial aquifer is good and is inherently suitable for irrigation.

Groundwater located at a distance of 1 km or more from a declared watercourse is not regulated under the Gulf Water Plan. While this water is unregulated, it is not unlimited and the sustainability of proposed pumping rates is an important consideration. The proponent has carried out appropriate investigations to locate suitable bore sites and testing to determine recharge capacity and reliability of proposed production bores.

Water sources available to the project

Identified sources of irrigation water for the project, available annual quantities and reliability of those sources are listed in Table 5.2.

Source	Volume	Reliability
Bores exploiting the shallow alluvial aquifer located more than 1 km from the Flinders River	1,038 ML	High reliability
Direct pumping from the Flinders River or bores exploiting the shallow alluvium located less than 1 km from the river	450 ML	High reliability
Bore 1 exploiting the Hutton Great Artesian Basin (GAB) formation	720 ML	High reliability
Total high reliability	2,208 ML	
Farm dam to harvest overland flow	220 - 250 ML	Medium reliability
Water-harvesting Flinders River (Stage 1) ring-tank storage	500 ML	Medium reliability
Water-harvesting Flinders River (Stage 2) ring-tank storage	500 ML	Medium reliability
Total medium reliability	1,250 ML	

Table 5.2 Irrigation sources

While the proponent has obtained multiple water authorisations to sustain the project, the water from these sources would not be available at all times of the year or during all years. The seasonal nature of rainfall and aquifer replenishment entails the storage of sufficient water to maintain a continuous supply for optimum crop development and production. Consequently, the project requires the establishment of multiple storage dams to hold sufficient water supply.

The IAR proposes that water would be stored in three ring tank dams, each with a capacity of 500 ML, as well as a hillside dam with a capacity of 500 ML and an overland flow dam with a capacity of 220 to 250 ML. The total water storage proposed for the site is 2,250 ML.

5.2.2 Impacts and mitigation

Surface water and groundwater

As described above, the project relies on water from five possible sources:

- groundwater from the Flinders River alluvium less than 1 km from the river (water in a watercourse)
- groundwater from the Flinders River alluvium greater than 1 km from the river
- groundwater from the GAB
- surface water from the Flinders River when flows in the river reach a prescribed flowrate
- overland flow water captured in a farm dam (up to 250 ML).

The initial 150 ha development would require up to 1,630 ML per year of water, with the total development requiring up to 3,395 ML per year.

The proponent holds a license to extract up to 5,000 ML per year from Flinders River surface water, however as the Flinders River flows infrequently the project would not rely solely on this water source. Existing and proposed water bores in the Flinders River alluvium and GAB would provide certainty of water supply.

The proponent also holds licenses to extract 450 ML per year from existing and proposed bores within 1 km of the Flinders River. This authorisation is based on sustainable limits for extraction to avoid impacts on other users nearby and the recharge capacity of the alluvium.

Additional, new bores which would be located further than 1 km from the Flinders River would sustainably yield up to 1,038 ML per year; these do not require a licence.

The project has access to an allocation of 720 ML per year from the GAB and a new GAB bore would be constructed for the project.

The Gulf Water Plan provides a framework for sustainably managing water in the region, identifying priorities for future water requirements and aims to achieve a balance between economic, social and ecological outcomes. The plan confirms the importance of this project through the specific outcome to make 720 ML of water available to support growth of irrigated agriculture in the Flinders River catchment area. This requirement is

considered along with demand to support water supply for communities and industries while still meeting ecological outcomes for the project area.

The issue of water authorisations for this project has been considered within the context of the existing holistic management framework that ensure impacts to other water users and the environment are minimised. Based on the volumes stated in the IAR, I accept that the project would not result in significant impacts to other water users or the environment.

To maximise water use efficiency, the proponent has committed to developing a water management/efficiency plan (Proponent Commitments, Appendix 2) that outlines guiding principles for all growers to implement best practice water management techniques including soil moisture testing, high efficiency irrigation and leak detection.

Notwithstanding this, my stated conditions include a requirement for a groundwater monitoring program to be developed as part of a proposed salinity management plan. The proponent has committed to the monitoring of groundwater levels to ensure that usage rates are sustainable (Appendix 2), and I expect this monitoring to be undertaken.

The IAR found that water requirements for the project are sustainable in the context of aquifer production, linkages and recharge and the proponent has committed to ongoing monitoring to ensure that impacts to groundwater are identified. I accept that the water requirements for the project are sustainable and note that these matters have been carefully considered in the granting of water licenses and authorisations under the Water Act.

Salinity

Clearing for irrigated agriculture would only be undertaken in areas with low root zone salinity and with soil profiles that are not saline. The IAR states that, despite this, salinity and sodicity risks may be exacerbated through the application of poor-quality irrigation water and/or the accumulation of salts within the root zone as a result of the low volume trickle irrigation.

The primary mitigation measure is the application of good quality irrigation water to crops sourced from the Flinders River alluvium and Flinders River during flow events supplemented in the dry season from the GAB Hutton formation. Low to medium salinity water would be applied to crops and would generally meet the following requirements:

- low (electrical conductivity (EC) less than 650 µS/cm-1) generally suitable for use on all crops with all methods of water application, with little probability of salinity problem developing
- medium (EC 650-1,300 µS/cm-1) suitable for use on all but very low salt tolerant crops. Water can be used if a moderate amount of leaching occurs. Plants with medium salt tolerance can be grown, usually without special practices for salinity control.

As the new GAB bore is yet to be drilled, it is not possible to guarantee the quality of the water that could be sourced to supplement the surface water, however other GAB bores in the targeted Hutton formation do produce water of an acceptable salinity. Depending on the water quality results of the bore when it's drilled there may be special salinity controls and consideration of the salt tolerance of the crop required.

Irrigation management protocols are yet to be finalised and would be dependent on the quality of water available from production bores, which would be subject to ongoing testing. However, the IAR describes a general strategy to mix GAB water with better quality alluvial water to supply an acceptable quality of water for the intended crops. The IAR acknowledges that further investigative work including additional Flinders River alluvium groundwater and subsequent GAB Hutton formation sampling and analysis would be required to inform any specific irrigation management requirements (i.e. mixing of water sources).

It is in the proponent's best interest to ensure that this aspect of the project is carefully managed to ensure the long term viability of the proposed cropping activity and to ensure that potential environmental impacts are avoided.

I have stated a condition in Appendix 1 which requires that a salinity management plan is prepared prior to the commencement of cropping. The salinity management plan would require the proponent to:

- ensure that water sources are of adequate quantity and quality to establish, cultivate and ultimately harvest proposed crops
- construct and maintain all water storages to avoid leakage and rising groundwater tables
- analyse soil chemical and physical properties that influence irrigation management
- develop ongoing management protocols that consider soil characteristics, site drainage characteristics and appropriate irrigation management measures
- include a groundwater monitoring program, including monitoring bores adjacent to proposed dams.

The salinity management plan must be implemented to achieve these objectives.

Soil conservation and water quality

Clearing of vegetation and the ongoing use of land for cropping purposes presents a risk to water quality in the Flinders River from sedimentation and nutrient enrichment. The project incorporates substantial environmental buffers which reduce this risk. The proponent has committed to implementing best practice farming techniques which would further reduce the potential for the loss of topsoil and reduce sediment and nutrient inputs to the Flinders River.

Examples of best practice that would be implemented include:

- reducing the risk of soil loss from cropping areas by minimising soil disturbance to the minimum required area and by decreasing run-off quantity and velocity
- implementing practices that promote soil health considering physical, chemical and biological indicators
- reducing run-off carrying fertiliser, herbicides and sediment, with a view to capturing and recycling and enhancing profitability
- protecting and enhancing riparian vegetation to maintain ecological function and minimise erosion

- maximising water use efficiency and promoting natural recharge and drainage from both rain and irrigation to match plant and catchment water needs
- testing soil and applying fertiliser at sustainable rates to promote production and profitability and minimise the risk of loss to the environment (tailoring fertiliser application to crop and soil requirements).

To ensure that these measures are implemented, I have stated conditions requiring that an erosion and sediment control plan is prepared in accordance with relevant guidelines and implemented from the commencement of site works, including pre-construction or site preparation activities.

In addition, the proponent has committed to preparing a soil conservation management plan for the site in accordance with soil conservation guidelines which are relevant for Queensland. This will focus on implementing best practice soil conservation measures for the life of the project. I expect this commitment to be undertaken.

5.2.3 Consistency with State Code 10: taking or interfering with water

State Code 10 seeks to maintain the riverine environment, underground water systems and the physical integrity of watercourses. These objectives are achieved primarily by ensuring that interference with water is consistent with the requirements of water planning instruments and authorities to take or interfere with water under the *Water Act 2000*.

The Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017 considers the impacts of groundwater take on the natural processes of the artesian and subartesian groundwater systems. DNRME's assessment of a water licence for the extraction of 720 megalitres from the Eromanga Hutton aquifer unit found that the project complies with requirements of the Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017.

The Gulf Water Plan provides the framework for sustainably managing surface water and groundwater associated with riverine systems in the region. The Gulf Water Plan identifies priorities for future water requirements and aims to achieve a balance between economic, social and ecological outcomes.

Where required, the proponent already holds the appropriate water licence/s for the take of water. Assessment of impacts under the Gulf Water Plan and associated water management protocol has been completed through the process of issuing water licences under the *Water Act 2000*.

I am satisfied that the project would not adversely impact on the natural riverine environment of the Flinders River, other users' ability to access the resource or the physical integrity of the watercourse.

The IAR provides a detailed assessment against the provision of State Code 10 and concludes that the project would comply. DNRME advice confirms that the project would meet the relevant performance outcomes of State Code 10, subject to conditions. I am satisfied that the relevant performance outcomes would be met by the project and that the proposed water related operational works should be approved.

5.2.4 Coordinator-General's conclusion: water resources

I am satisfied that the IAR has adequately assessed the impacts of the project on groundwater and surface water resources.

I note that the project would draw 1,630 ML/year of water for the initial development and up to 3,395 ML/year of water at full development from the Flinders River, Flinders River Alluvium and GAB and that the allocations from these sources have been carefully assessed by DNRME to ensure the volume of water taken is sustainable.

I am satisfied that the proposed volumes to be used by the project would result in a sustainable use of groundwater and surface water resources and that the proposed use of groundwater is consistent with the existing management outcomes required by the relevant water plans.

I accept that the potential risks of increased salinity associated with irrigating crops would be adequately managed through well-planned irrigation practices including the use of suitable quality water.

I note the potential for irrigated agriculture to impact the water quality of the Flinders River and wetlands as a result of topsoil erosion, sedimentation and the run-off of nutrients, fertilisers and contaminants. The proponent would implement measures to protect the Flinders River including minimising soil disturbance, reducing run-off and maintaining substantial environmental buffers.

To ensure the protection of the natural riverine environment of the Flinders River, I have stated a condition for the proponent to develop and implement an erosion and sediment control plan from the commencement of site works, including pre-construction activities.

I have also stated a condition for the proponent to develop and implement a salinity management plan to minimise the risk of the project creating increased salinity impacts to the land or water. The salinity management plan must include irrigation management protocols appropriate to the proposed activities and recommend salinity management measures to ensure that clearing does not contribute to or accelerate land degradation through waterlogging, or through the salinisation of groundwater, surface water or soil.

Furthermore, the proponent has committed to develop and implement a soil conservation management plan to ensure the implementation of best practice soil conservation measures for the life of the project and a water management/efficiency plan to ensure the implementation of best practice water management techniques. I expect these plans to be prepared and implemented.

I am satisfied that my stated conditions, water licensing requirements and the proponent's commitments would ensure that potential impacts on water resources are appropriately managed. I am also satisfied that sufficient water is available to the project to allow the successful establishment of proposed crops.

5.3 Land Use

5.3.1 Shire of Flinders Planning Scheme

Material Change of Use

The site is located within the Rural Zone under the planning scheme. The proposed high value agriculture is accepted development and is consistent with the strategic objectives of the planning scheme. The proposed caretaker's accommodation, co-use facility and workforce amenities are code assessable against the planning scheme.

The IAR has assessed the project against the relevant provisions of the planning scheme including the Rural Zone Code, relevant overlay codes, use codes and other development codes and concludes that the project complies with the relevant performance requirements. These codes require that the development does not result in the interference of the natural flow of stormwater and that soil loss and sediment movement rates are maintained at current levels. To meet the code requirements for stormwater I have stated conditions at Appendix 1 which must attach to the development approval for the MCU.

As the MCU would result in the clearing of native vegetation which is a state interest, my evaluation must also consider the State Development Assessment Provisions (SDAP), and in particular the provisions of State Code 16: native vegetation clearing. These provisions are considered below.

State Code 16: native vegetation clearing

State Code 16 seeks to minimise vegetation clearing to conserve vegetation, avoid land degradation, avoid the loss of biodiversity and maintain ecological processes. To achieve this aim, clearing for irrigated agriculture can only occur on parts of the site where a land suitability assessment demonstrates that the site can support the types of crops proposed and that the project has access to enough water to successfully establish those crops. I am satisfied that the project meets these key performance requirements.

The IAR provides a comprehensive assessment against all the provisions of the code which relate to coordinated projects including the avoidance of impacts, provision of buffers to watercourses and wetlands and maintains ecological processes.

The IAR provides a detailed assessment against the provision of State Code 16 and concludes that the project would comply. DNRME advice confirms that the project would meet the relevant performance outcomes of State Code 16, subject to conditions. I am satisfied that the relevant performance outcomes would be met by the project and that the vegetation clearing should be approved.

I have stated conditions at Appendix 1 which must attach to the development approval for the MCU, including conditions relating to native vegetation clearing. These conditions are discussed further in Section 5.1 of this report. The conditions include a Technical Agency Response Plan which identifies through both maps and extrapolated coordinates, those areas which can be cleared for cropping and infrastructure and those parts of the site which cannot.

Reconfiguration of a lot

The proponent proposes to reconfigure Lot 168 on SP262319 into two separate lots and a new road. The proposed reconfiguration is code assessable against the planning scheme and does not require referral to DSDMIP. There are no referral agencies for the ROL application.

The proponent undertook an assessment of the proposed reconfiguration against the ROL code in the IAR, concluding that the project complies with the overall outcomes of the ROL code and planning scheme.

The planning scheme achieves the purpose of the ROL code through six overall outcomes and 18 performance outcomes and I am satisfied that the project would comply with these requirements. To ensure that the reconfiguration is carried out in a manner consistent with that described in the IAR I have stated conditions in Appendix 1 for the ROL, including a subdivision plan.

Operational works

Construction of the proposed overland flow dam and ring tanks is assessable against the planning scheme where the excavation and filling exceed 10,000 tonnes. The proponent undertook an assessment of the proposed works against the OW code in the IAR, concluding that the project complies with the requirements of the OW code and planning scheme.

The planning scheme achieves the purpose of the code through seven overall outcomes and seven performance outcomes (and associated acceptable outcomes) relevant to excavation and filling and I am satisfied that the project would comply with these requirements.

To manage potential environmental impacts of filling and excavation, the proponent has committed to preparing a construction environmental management plan (CEMP). I expect this commitment to be undertaken.

5.3.2 State government approvals

Water related operational works

The project requires OW approval for taking and interfering with water, assessable under the Planning Act. DSDMIP is the assessment manager for that approval and DNRME would be the relevant technical advisory agency.

As taking and interfering with water is a state interest, I have considered the SDAP, in particular the provisions of State Code 10: taking or interfering with water, in completing my evaluation.

State Code 10: taking or interfering with water

State Code 10 seeks to maintain the riverine environment, underground water systems and the physical integrity of watercourses. State Code 10 also seeks to minimises adverse impacts on the connectivity between underground water and water in a watercourse, lake or spring and the property of others. These objectives are achieved primarily by ensuring that interference with water is consistent with the requirements of water planning instruments and authorities to take or interfere with water under the *Water Act 2000*.

The IAR provides a detailed assessment against the provision of State Code 10 and concludes that the project would comply. DNRME advice confirms that the project would meet the relevant performance outcomes of State Code 10, subject to conditions. I am satisfied that the relevant performance outcomes would be met by the project and that the proposed water related operational works should be approved.

I have stated conditions for the OW approval for taking or interfering with water, included at Appendix 1 for ensuring the construction and management of the bores meets recognised safety and integrity standards. These conditions must attach to the subsequent OW development approval.

5.3.3 Coordinator-General's conclusion: land use

The IAR comprehensively assesses the project against applicable elements of the planning framework, including:

- relevant planning scheme zone and use codes including the rural zone code, major infrastructure overlay code, operational works code and reconfiguration of a lot code
- applicable planning scheme overlay codes, which reflect state interests and include the biodiversity overlay code, bushfire hazard overlay code, flood hazard overlay code, and wetland and waterway corridor overlay code
- the SDAP including the provisions of State Code 10 and State Code 16 which set out the State's interest in development assessment relating to taking and interfering with water and the clearing of vegetation respectively.

The IAR demonstrates that the proposed land uses are consistent with the strategic intent of the planning scheme and that the project would meet the objectives and performance outcomes sought by the relevant zone, use and overlay codes.

The IAR concludes that, through consistency with overall outcomes and performance outcomes the project complies with the purpose of State Code 10 and 16. I accept that the project would comply with the SDAP, if carried out in accordance with my conditions and the proponent's commitments.

I am satisfied that my stated conditions for the MCU, ROL and OW approvals and the proponent's commitments would ensure that acceptable land use outcomes are achieved and that potential impacts on state interests are acceptable.

5.4 Economic and social impacts

The project would make a positive contribution to the local and regional economy, with key economic and social impacts resulting from the creation of employment opportunities and the stimulation of population growth during the construction and operation of the project.

5.4.1 Economic impacts

Investment, employment and output

The IAR states that the project would result in an investment of \$47 million—\$20 million for the initial development of the project and a further \$27 million for the development of the remainder of the site. It would also create employment opportunities, with the IAR estimating the project would create:

- an average of five FTE jobs per annum during the five-year construction and establishment phase
- an average of 77 FTE jobs per annum during the three-year initial operations, comprising two full-time staff and 75 FTE seasonal jobs
- an average of 165 FTE jobs per annum at full production, comprising six full-time operational staff and 159 FTE seasonal jobs.

One hundred and sixty-five full-time equivalent personnel is equivalent to around 11 per cent of the current population of Hughenden and 21 per cent of the total workforce of Flinders Shire of 795 people.

The IAR estimates the gross value of the crops at full production would be in the order of \$8-9 million per year. This is a significant contribution to the current gross agricultural production value of approximately \$73.5 million for Flinders Shire.

Industry development and contribution to sustainable growth

The project would introduce a new type of industry contributing to the Flinders Shire economy. The shire's largest industry, beef cattle production, employs 32.2 per cent of the working population and contributes \$73.5 million to the local economy. By establishing the shire as an emerging centre for irrigated agriculture, the proponent would support the diversification of the shire's economy and the associated flow on benefits for employment and local supply opportunities.

The project aligns with the state government policy Advancing North Queensland 2016, which recognises the importance of agriculture to the North Queensland economy, and the draft North West Queensland Economic Diversification Strategy¹. This strategy identifies that the realisation of opportunities for irrigated agriculture would capitalise on North Queensland's agricultural competitive advantages—including its proximity to growing populations in Asia and the Indo-Pacific, established infrastructure and supply chains, arable land, expertise in tropical and dry tropical production systems and favourable biosecurity status—to increase productivity and maximise regional economic benefits.

The IAR states that the project would contribute to sustainable growth and address the above state average disadvantage² being experienced in the shire. By facilitating the development of irrigated agriculture in the local region, the project would remove barriers

¹ DSDMIP 2019: <u>https://www.statedevelopment.qld.gov.au/regional-development/north-west-queensland-economic-diversification-strategy.html</u>

² The Australian Bureau of Statistics Index of Relative Socio-economic Disadvantage is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area.

to entry for growers including purchasing land, undertaking groundwater and other technical environmental investigations and acquiring required licences and approvals.

Furthermore, the project may reduce barriers to entry and provide opportunities for agricultural businesses in the region through the provision of the co-use cooling, packing and logistics facility which would provide increased freight options and market access for growers.

The project would potentially generate flow-on opportunities for industries in the shire including transport services, building and concrete supplies and irrigation pump supplies and repairs. It would also provide opportunities for the use of currently underutilised transport infrastructure.

I am satisfied that the project would have a positive contribution to the Flinders Shire economy through the growth of employment opportunities and the diversification of industries contributing to the local and regional economy.

5.4.2 Social impact

Population growth

The IAR states that the project would facilitate population growth. The shire has a low unemployment rate of 4.5 per cent and the IAR concludes that to meet employment demand, most of the project's workforce would be attracted from outside the region.

The IAR indicates that an increase in population would be beneficial for the shire as it currently faces both a declining and aging population, with the population declining 30.5 per cent between 2001 and 2017, from 2,191 to 1,521 residents and the median age of residents increasing from 35.7 in 2006 to 44.6 in 2016 in comparison to the median age for Queensland of 37.

Community infrastructure and housing

The additional population growth resulting from the project would be supported by existing community infrastructure. Despite the decline in the shire's population, Hughenden has retained critical community infrastructure including Queensland Police, Fire and Ambulance stations and a hospital with a 24-hour accident and emergency department, a 15-bed acute facility and a broad range of health services. Similarly, Hughenden's two schools – a prep to year 6 private school and a prep to year 12 state school – have experienced substantial declines in enrolments in recent years and would have adequate capacity to support population increases.

The project's workforce would be accommodated within the region's existing housing, which the IAR reported currently has 184 unoccupied dwellings, equating to 23.8 per cent of the dwellings in Hughenden.

I accept the IAR's conclusion that the increase in population resulting from the project would be beneficial to the shire and that existing infrastructure would be able to support any population growth attributable to the project.

5.4.3 Coordinator-General's conclusion: economic and social impacts

I am satisfied that the IAR has adequately assessed the potential economic and social impacts of the project.

I note the project would contribute economic benefits—\$47 million capital investment, an average of 165 FTE jobs per annum at full production and \$8-9 million in production value of crops—that are substantial relative to the current value of the shire's agricultural industry and the size of its workforce.

I accept the IAR's findings that Hughenden has adequate supply of housing and capacity within existing community infrastructure to accommodate an increased population resulting from new workers being attracted to the region without having detrimental impacts on housing affordability or essential services.

I note that the intent of the project to diversify the shire's economy aligns with current Queensland government plans and policies relating to promoting economic development and sustainability in North Queensland. I am satisfied that the project would advance the shire's economic development in this regard.

I am satisfied that the project would make a substantial contribution to economic development in the Flinders Shire while accommodating the increased population in the community.

6. Conclusion

In undertaking my evaluation, I have considered the IAR, technical reports and advice I have received from relevant state and local government agencies.

I am satisfied that the requirements of the SDPWO Act have been met and that sufficient information has been provided to enable the evaluation of potential impacts, and the development of mitigation strategies and conditions of approval.

The impact assessment report process commenced with the declaration of this project as a coordinated project in August 2018. I have assessed and considered the potential impacts identified in the IAR and I consider that the mitigation measures together with the conditions stated in this report would result in acceptable overall outcomes.

Based on the information provided by the proponent, I conclude that the project would deliver economic and social benefits to the Flinders Shire resulting from increased employment opportunities, diversification of the industries contributing to the economy and population growth. Accordingly, I approve the 15 Mile Irrigated Agriculture Development project, subject to the conditions in Appendix 1. In addition, it is expected that the proponent's commitments (Appendix 2) will be fully implemented as presented in the IAR documentation and summarised in Appendix 1 of this report.

To proceed further, the proponent will be required to obtain the relevant development approvals under the Planning Act and the Water Act.
If there are any inconsistencies between the project (as described in the IAR documentation) and the conditions in this report, the conditions shall prevail. The proponent must implement all the conditions of this report.

Copies of this report will be issued to:

- the Flinders Shire Council
- DNRME
- DSDMIP/SARA.

A copy of this report will also be available on the DSDMIP website at **www.dsdmip.qld.gov.au/15mile**.

This report will lapse 4 years after the date of this report or 23 July 2023.

Appendix 1. Stated conditions

This schedule includes the Coordinator-General's stated conditions for a material change of use and operational works under *Planning Act 2016*, stated under section 37 of the *State Development and Public Works Organisation Act 1971*. The entities with jurisdiction for conditions in this appendix are the Flinders Shire Council, the State Assessment Referral Agency and the Department of Natural Resources, Mines and Energy.

Schedule 1. Planning Act 2016

Part A. Material change of use

The entity with jurisdiction for this part is the Flinders Shire Council as Assessment Manager for the Material Change of Use application under the *Planning Act 2016*.

Condition number	Conditions of development approval	Condition timing
Condition 1.	General	At all times
	 (a) The proposed development must generally be in accordance with the 15 Mile Irrigation Project Impact Assessment Report dated July 2019. 	
	(b) The proposed development must comply with all Planning Scheme requirements applying at the date of this application, except as otherwise specified by any condition of this approval.	
	(c) The proposed development must generally be in accordance with all relevant conditions stated by the Coordinator-General.	
Condition 2.	Approved Plans	At all times
	 The development must be carried out generally in accordance with the following plans: (a) Flinders Shire Council 15 Mile Project, Precinct Master Plan, GHD, 04/07/2019, Project Number 42-20851, Revision B (b) Flinders Shire Council 15 Mile Project, Infrastructure footprint and clearing requirements, GHD, 03/07/2019, Project Number 42-20851, Revision B 	
	 (c) Flinders Shire Council 15 Mile Project, high value cropping and clearing requirements, GHD, 03/07/2019, Project Number 42-20851, Revision B 	
Condition 3.	Stormwater drainage	At all times
	The approved development and use must not interfere with the natural flow of stormwater in the locality in such a manner as to cause ponding or concentration of stormwater on the site.	

Condition 4.	Public utilities If any existing public utility service including telephone, electricity, needs to be altered or relocated to complete the development, the development must bear the cost of alteration or relocation.	At all times
Condition 5.	Building works A subsequent Development Permit for Building Works must be obtained before any Building Works are carried out as part of the approved use.	At all times
Condition 6.	Operational works All civil infrastructure works associated with this development must be submitted to council for assessment and approval prior to any works commencing on site. Design associated with such an application must be prepared and certified by a RPEQ if applicable.	At all times
Condition 7.	 Erosion and sediment control plan An erosion and sediment control plan must be prepared and implemented from the commencement of site works, including site preparation. The plan must meet the following requirements: (a) The management plan must be prepared by a suitably qualified professional and recommend erosion and sediment control measures to ensure the rates of soil loss and sediment movement are the same or less than those prior to the proposed development. (b) The plan must be in accordance with "Soil conservation guidelines for Queensland", Department of Science, Information, Technology and Innovation (2015) and the International Erosion Control Association Guidelines. (c) Submit a copy of the Management Plan mentioned at part (a) of this condition to the assessment manager prior to the commencement of site works. A suitably qualified professional under this condition is a person who has demonstrated skills and experience in erosion and sediment control, soil conservation and land management in relation to both infrastructure and cropping. 	Prior to the commencement of clearing

Part B. Native vegetation clearing

The project requires approval for native vegetation clearing which is made assessable by the *Planning Regulation 2017* (Planning Regulation). Outside of the SDPWO Act process, the proposed MCU would be referrable to the Chief Executive responsible for the administration of the *Planning Act 2016* (Planning Act).

This evaluation report is taken to be the referral agency response to the development application for the MCU, as the information and referral stage which would typically apply under the Planning Act is removed by Section 37 of the SDPWO Act.

Flinders Shire Council is the assessment manager for the MCU application, including vegetation clearing relating to the MCU under the *Planning Act 2016*. The entity with jurisdiction for this part is the Department of Natural Resources, Mines and Energy under the *Planning Act 2016* and *Vegetation Management Act 1999*.

Condition number	Conditions of development approval	Condition timing
Condition 1.	No clearing of vegetation is to occur within area[s] identified as Area[s] A (Parts A ¹ -A ¹⁹) as shown on the attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019.	At all times
Condition 2.	No built structure is to be established, constructed or located within area[s] identified as Area B (Parts B ¹ -B ²) as shown on attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019.	At all times
Condition 3.	No built structure, other than for fences, roads and underground services, is to be established, constructed or located within area[s] identified as Area[s] C (Parts C ¹ -C ¹³) as shown on attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019.	At all times
Condition 4.	The <u>clearing</u> of <u>vegetation</u> under this development approval for the establishment of built infrastructure is limited to the area[s] identified as Area[s] D (Parts D ¹ -D ¹²) as shown on attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019.	At all times
Condition 5.	The <u>clearing</u> of <u>vegetation</u> under this development approval for the purpose of cropping is limited to the areas identified as Area E (Parts E ¹ -E ⁶) on the attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019.	While clearing is occurring

Condition 6.	Unless authorised by the attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019, <u>Clearing</u> must not occur in a natural <u>wetland</u> or within 100 metres of the <u>defining</u> <u>bank</u> of any natural <u>wetland</u> .	While clearing is occurring
Condition 7.	 Unless authorised by the attached Technical Agency Response Plan (TARP) 2019/003044 dated 22 July 2019, <u>Clearing</u> must not occur in any <u>watercourse</u> or <u>drainage feature</u> shown on 2019/003044 dated 22 July 2019 or within: (a) 10 metres of the defining bank for any watercourse or drainage feature labelled 'Y; and, (b) 25 metres of the defining bank for any watercourse or drainage feature labelled 'X'; (c) except where identified clearing is required into or across the watercourse or drainage 	While clearing is occurring
	feature.	
Condition 8.	 Prepare a Management Plan addressing Salinity: a) The Salinity Management Plan must: be developed in accordance with the "Salinity Management Handbook", Second edition, 2011, Department of Environment and Resource Management be prepared by an independent and <i>suitably qualified professional</i> consider potential impacts of all clearing to which this approval relates; and, recommend salinity management measures to ensure that: (i) clearing does not contribute to or accelerate land degradation through waterlogging, or through the salinisation of groundwater, surface water or soil (ii) there is sufficient access to enough suitable water for establishing, cultivating and harvesting the crops to which the clearing relates (iii) <i>preliminary and ongoing analysis</i> of water quality, soil chemical and physical properties, construction and maintenance of water storages is considered; and, (iv) <i>ongoing management protocols</i> that consider characteristics of water and soil in the area proposed for irrigation area are stipulated; 	Prior to clearing, and for the duration of the clearing and land use

b) submit a copy of the Salinity Management Plan mentioned in part (a) of this condition to Flinders Shire Council and to: Vegetation Management Department of Natural Resources, Mines and Energy Address: PO Box 5318 Townsville QLD 4810 Email: northvegetation@dnrm.qld.gov.au c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology.	
Vegetation Management Department of Natural Resources, Mines and Energy Address: PO Box 5318 Townsville QLD 4810 Email: northvegetation@dnrm.qld.gov.au c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and oroundwater hydrology.	
Department of Natural Resources, Mines and Energy Address: PO Box 5318 Townsville QLD 4810 Email: northvegetation@dnrm.qld.gov.au c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology.	
Address: PO Box 5318 Townsville QLD 4810 Email: northvegetation@dnrm.qld.gov.au c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology.	
 Email: <u>northvegetation@dnrm.qld.gov.au</u> c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology. 	
 c) implement and maintain all required salinity management measures identified within the Salinity Management Plan mentioned at part (a) of this condition. A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology. 	
A suitably qualified professional must have demonstrated skills and experience in salinity management, irrigation management and groundwater hydrology.	
9.00.000.00097	
Preliminary and ongoing analysis includes:	
 a. The water quality; demonstrating the volumes of water from all sources to which the permit holder has lawful access, are of adequate quantity and quality to establish, cultivate and harvest the crops to which the clearing relates. This includes the evaluation of water quality indicators such as electrical conductivity, important cations/anions (CI, Na, Ca, Mg, bicarbonates) and sodium absorption ratios and residual alkali. 	
b. Soil chemical and physical properties that influence or otherwise affect irrigation management, drainage, and the development and management of salinity in cropping and infrastructure areas; and,	
 c. The construction and maintenance of all water storages to avoid leakage and rising groundwater tables. 	
Ongoing management protocols that consider characteristics of water and the soil in the area proposed for irrigation that address the following:	
a. Soil structural stability and permeability	
 b. Characteristics of crop types proposed for the irrigated area and in particular salt tolerance 	
 Likely leaching fraction of the soil and the consequent root zone salinity and amount of drainage below the root zone 	
d. Effects of irrigation water sodicity on soil behaviour	

e.	A comprehensive soil and groundwater monitoring program including soil quality and groundwater at existing production and monitoring wells	
f.	Appropriate irrigation practices to be applied, inclusive of any necessary leaching required to remove salts that may build up in irrigated soils	
g.	Quality of water supplies available for particular crop types; and,	
h.	Sufficient monitoring of groundwater undertaken at representative sites across all cropping areas, and include at least 1 monitoring bore adjacent to each constructed dam installed to a minimum depth of 6 metres.	

Part C. Operational works for taking or interfering with water

DSDMIP/SARA is the assessment manager for this approval under the *Planning Act 2016*. The entity with jurisdiction for this part is the Department of Natural Resources, Mines and Energy under the *Planning Act 2016* and *Water Act 2000*.

Condition number	Conditions of development approval	Condition timing
Condition 1.	Any person(s) contracted to construct the works authorised by this development approval, must be provided with a full copy of the development approval and made aware of the conditions.	For the duration of works
Condition 2.	For Great Artesian Basin (GAB) bore/s the water bore/s must be constructed to take underground water from any one (1) single aquifer of the Great Artesian Basin, Eromanga Hutton aquifer unit.	During construction
Condition 3.	For GAB bore/s the water bore/s must be constructed with production casing that is manufactured of inert material that is corrosion resistant (such as uPVC, ABS or FRP) in accordance with the "Minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland" that is current at the time of construction.	During construction
Condition 4.	For GAB bore/s the water bore/s must be constructed in accordance with the Department of Natural Resources, Mines and Energy standard "Minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland" that is current at the time of construction.	During construction
Condition 5.	For GAB bore/s any subsequent decommissioning of the water bore/s must be carried out in accordance with the Department of Natural Resources, Mines and Energy standard "Minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland" that is current at the time of decommissioning.	At decommissioning
Condition 6.	For GAB bore/s the water bore/s must be constructed within 50m of either of the following locations: 120.78658 S, 144.07905 E; or, 220.76657 S, 144.04000 E.	During construction

Condition 7.	For non-GAB bore/s the water bore/s must be constructed to take underground water from only alluvial sediments.	During construction
Condition 8.	For non-GAB bore/s the water bore/s must be located so that it is more than 5 metres from another water bore on a neighbouring property and more than 5 metres from the boundaries of the land to which this permit relates.	For the duration of works
Condition 9.	For non-GAB bore/s the water bore/s must be constructed in accordance with the "Minimum construction requirements for water bores in Australia" developed by the National Uniform Drillers Licensing Committee, that is current at the time of construction.	During construction
Condition 10. For non-GAB bore/s any subsequent decommissioning of the water bore/s must be carri out in accordance with the "Minimum construction requirements for water bores in Australia" develope by the National Uniform Drillers Licensing Committ that is current at the time of decommissioning.		At decommissioning

Part D. Reconfiguration of a Lot

The entity with jurisdiction for this part is the Flinders Shire Council as Assessment Manager for the Reconfiguration of a Lot application under the *Planning Act 2016*.

Condition number	Conditions of development approval	Condition timing
Condition 1.	 General (a) The proposed development must generally be in accordance with the approved Plan No. 41891/003-B (Attachment B to Schedule 1) dated 16 November 2018 which forms part of this approval, unless otherwise specified. (b) The proposed development must comply with all Planning Scheme requirements applying at the date of this application, except as otherwise specified by any condition of this approval. 	At all times
Condition 2.	All requirements of the conditions of this approval must be satisfied prior to Council signing the survey plan.	At all times
Condition 3.	Public utilities If any existing public utility service including telephone, electricity, water, sewerage needs to be altered or relocated to complete the subdivision the developer must bear the cost of alteration or relocation.	At all times
Condition 4.	Stormwater Drainage The approved development and use must not interfere with the natural flow of stormwater the locality in such a manner as to cause ponding or concentration of stormwater on adjoining land or roads.	At all times
Condition 5.	Building work A subsequent Development Permit for Building Works must be obtained before any Building Works are carried out as part of the approved use.	At all times
Condition 6.	Operational works All civil infrastructure works associated with this development must be submitted to council for assessment and approval prior to any works commencing on site. Design associated with such an application must be prepared and certified by a RPEQ if applicable.	At all times

DEFINITIONS

In these conditions -

- a reference to an Act includes all statutory instruments and subordinate legislation made under that Act
- terms used have the meaning contained in the Planning Scheme, the *Planning Act 2016* or the legislation referred to in those conditions, as the case may be.



Attachment A to Schedule 1: Technical agency response plan (TARP) 2019/003044









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Attachment to Plan: 2019/003044

Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
A1	1	195928	7697725	A3	61	195943	7698171	A6	121	196779	7698351
A1	2	195915	7697631	A3	62	195955	7698183	A6	122	196864	7698368
A1	3	195292	7697978	A3	63	195957	7698236	A6	123	196927	7698399
A1	4	195336	7697981	A3	64	195970	7698200	A6	124	197002	7698428
A1	5	195426	7697960	A3	65	195971	7698186	A6	125	197067	7698435
A1	6	195508	7697929	A3	66	195978	7698089	A6	126	197111	7698455
A1	7	195577	7697869	A4	67	196487	7698084	A6	127	197155	7698479
A1	8	195676	7697843	A4	68	196547	7698074	A6	128	197172	7698483
A1	9	195754	7697804	A4	69	196602	7698077	A6	129	197167	7698315
A1	10	195849	7697744	A4	70	196639	7698086	A6	130	197132	7698303
A1	11	195928	7697725	A4	71	196659	7698093	A6	131	197090	7698286
A2	12	197158	7698138	A4	72	196683	7698089	A6	132	197040	7698267
A2	13	197117	7697302	A4	73	196703	7698088	A6	133	197004	7698259
A2	14	197105	7697117	A4	74	196725	7698098	A6	134	196976	7698251
A2	15	197103	7697088	A4	75	196741	7698099	A6	135	196930	7698244
A2	16	197040	7697088	A4	76	196738	7698086	A6	136	196894	7698243
A2	17	196971	7697101	A4	77	196742	7698068	A6	137	196864	7698237
Δ2	18	196921	7697098	Δ4	78	196723	7697960	46	138	196852	7698242
A2	19	196876	7697096	A4	79	196707	7697950	A6	139	196844	7698265
A2	20	196130	7697511	A4	80	196532	7697969	A6	140	196833	7698279
A2	21	196064	7697548	A4	81	196060	7698033	A6	141	196814	7698283
Δ2	22	195927	7697624	Δ4	82	195998	7698042	46	142	196803	7698283
Δ2	23	195928	7697636		83	195985	7698042	46	143	196785	7698275
Δ2	24	196048	7697617		84	195989	7698066	46	140	196770	7698257
Δ2	25	196110	7697609		85	195992	7698088	46	145	196763	7698243
Δ2	26	196370	7697574	Δ4	86	195982	7698206	46	146	196759	7698220
Δ2	20	196386	7697565	Δ4	87	195975	7698250	46	140	196747	7698210
Δ2	28	196474	7697553		88	195995	7698261	46	148	196641	7698206
A2	20	196523	7697546	Δ.4	89	196023	7698249	46	140	196545	7698205
Δ2	30	197012	7697483	Δ4	90	196055	7698240	46	150	196474	7698209
A2	31	197072	7697486	Δ4 Δ4	01	196086	7698230	46	151	196396	7698222
A2	32	197023	7697500	A4	02	196107	7698217	A6	152	196334	7698241
A2	33	197041	7697519	Δ1	92	196133	7698202	46	152	196288	7698265
A2	34	197087	7697877	Δ1	94	196168	7698196	46	154	196247	7698287
A2	35	197087	7697889	A4	05	196214	7698190	<u></u>	155	196184	7698333
Δ2	36	196788	7697936		96	196270	7698179	46	156	196148	7698356
Δ2	37	196808	7698050	Δ1	97	196323	7698167	46	157	196090	7698387
Δ2	38	196819	7698066	Δ4	98	196378	7698152	46	158	196060	7698404
Δ2	30	196824	7698094	Δ4	90	196423	7698132	46	150	196022	7698431
Δ2	40	196836	7698096	Δ4	100	196458	7698105	46	160	196004	7698454
Δ2	40	196865	7698102	Δ <u>4</u>	100	196487	7698084	46	161	195993	7698477
Δ2	42	196886	7698110	Δ5	102	195717	7698456	46	162	195987	7698503
A2	43	196903	7698125	A5	103	195588	7698456	A6	163	196063	7698589
Δ2	40	196930	7698129	A5	103	195487	7698417	46	164	196084	7698560
A2	45	196958	7698127	A5	105	195419	7698387	AG	165	196129	7698509
A2	46	196991	7698126	A5	106	195406	7698381	A6	166	196185	7698460
Δ2	47	197027	7698152	A5	107	195415	7698392	A6	167	196239	7698417
Δ2	48	197043	7698166	A5	108	195465	7698448	46	168	196301	7698388
A2	49	197069	7698175	A5	109	195478	7698467	A6	169	196397	7698359
Δ2	50	197106	7698168	A5	110	195499	7698457	46	170	196500	7698339
Δ2	51	197125	7698151	A5	111	195536	7698449	Δ7	171	194627	7698759
Δ2	52	197147	7698141	Δ5	112	195568	7698454	Δ7	172	194634	7698711
Δ3	53	195978	7698089	Δ5	112	195595	7698468	Δ7	173	194636	7698676
Δ3	54	195959	7697948	Δ5	114	195624	7698479	Δ7	174	194650	7698598
A3	55	195895	7697966	A5	115	195659	7698479	A7	175	194654	7698584
Δ3	56	195680	7697974	Δ5	116	195702	7698466	Δ7	176	194683	7698514
Δ3	57	195650	7697985	Δ5	117	195717	7698456	Δ7	177	194719	7698444
A3	58	195540	7698026	46	118	196500	7698339	Δ7	178	194756	7698393
Δ3	59	195677	7698073	A6	119	196593	7698330	Δ7	179	194797	7698351
A3	60	195692	7698084	A6	120	196692	7698336	A7	180	194860	7698297
10	00	100002	1 1000007	10	120	100002	1 1000000	~ ~ ~	100	104000	1 1000201

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Attachment to Plan: 2019/003044

Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northina	Parcel	ID	Easting	Northing
A7	181	194875	7698286	A8	241	194836	7698454	A10	301	196568	7699364
A7	182	194941	7698253	AS	242	194808	7698490	A10	302	196604	7699355
A7	183	194953	7698248	A8	243	194775	7698553	A10	303	196637	7699334
A7	184	194966	7698245	A8	244	194749	7698616	A10	304	196659	7699300
A7	185	195034	7698238	A8	245	194736	7698682	A10	305	196712	7699258
A7	186	195045	7698237	A8	246	194734	7698721	A10	306	196765	7699229
A7	187	195058	7698238	A8	247	194727	7698772	A10	307	196846	7699185
A7	188	195107	7698245	A8	248	194713	7698835	A10	308	196903	7699165
A7	189	195123	7698247	A8	249	194701	7698874	A10	309	196934	7699145
A7	190	195108	7698238	A8	250	194682	7698940	A10	310	196949	7699110
A7	191	195101	7698220	A8	251	194667	7699000	A10	311	196947	7699081
A7	192	195104	7698122	A8	252	194643	7699063	A10	312	196928	7699069
A7	193	195110	7698105	A8	253	194628	7699096	A10	313	196903	7699057
A7	194	195225	7698041	A8	254	194599	7699150	A10	314	196886	7699047
A7	195	195143	7698061	A8	255	194589	7699177	A10	315	196872	7699040
A7	196	194797	7698254	A8	256	194608	7699192	A10	316	196842	7699021
A7	197	194685	7698472	48	257	194640	7699177	A10	317	196823	7699006
Δ7	198	194628	7698583	48	258	194667	7699153	A10	318	196814	7698983
Δ7	199	194616	7698725	48	259	194689	7699117	A10	319	196796	7698956
Δ7	200	194606	7698755	48	260	194718	7699060	A10	320	196764	7698929
Δ7	200	194618	7698754	40	261	194751	7699003	A10	321	196745	7698921
A8	201	195033	7698514	48	262	194778	7698943	A10	322	196712	7698914
48	202	195063	7698501	48	263	194799	7698880	A10	323	196689	7698913
48	200	195099	7698484	48	264	194806	7698862	A10	324	196644	7698922
48	204	105111	7698478	40	265	194813	7698845	A10	325	196604	7698916
48	205	105133	7698478	48	266	104873	7698817	A10	326	196564	7698904
A8	200	195174	7698478	48	267	194023	7698757	A10	327	196531	7698889
A9	207	105234	7698496	A9	269	104863	7608738	A10	328	196507	7608886
48	200	195276	7698526	48	260	194875	7698713	A10	320	196472	7698881
48	203	195312	7698565	48	203	194888	7698688	A10	330	196441	7698883
48	210	195330	7698622	48	270	194000	7698663	A10	331	196413	7698901
48	212	195336	7698673	48	272	194900	7698649	A10	332	196395	7698923
48	212	195333	7698736	48	273	194929	7698613	A10	333	196372	7698956
A8	213	195313	7698799	48	274	194938	7698598	A10	334	196364	7698984
A8	215	195282	7698844	A8	275	194963	7698570	A10	335	196357	7699012
A8	216	195246	7698889	48	276	194995	7698538	A10	336	196352	7699054
48	217	195216	7698946	48	277	195013	7698528	A10	337	196346	7699082
A8	218	195204	7698991	A8	278	195033	7698514	A10	338	196343	7699115
A8	210	195225	7699012	49	279	194962	7699238	A10	339	196322	7699143
48	220	195258	7699009	49	280	194989	7699234	A10	340	196293	7699171
A8	221	195313	7698988	A9	281	195010	7699235	A10	341	196280	7699213
A8	222	195363	7698934	A9	282	195029	7699247	A10	342	196287	7699251
A8	223	195396	7698883	A9	283	195052	7699253	A10	343	196307	7699279
A8	224	195417	7698844	A9	284	195068	7699244	A10	344	196333	7699301
A8	225	195440	7698781	A9	285	195088	7699228	A10	345	196344	7699327
A8	226	195453	7698712	A9	286	195099	7699208	A10	346	196346	7699362
A8	227	195448	7698646	A9	287	195105	7699191	A10	347	196345	7699400
A8	228	195427	7698577	A9	288	195081	7699180	A10	348	196362	7699411
A8	229	195390	7698514	A9	289	195048	7699164	A10	349	196413	7699409
A8	230	195348	7698466	A9	290	194986	7699171	A11	350	193658	7699580
A8	231	195315	7698436	A9	291	194951	7699182	A11	351	193836	7699473
A8	232	195277	7698415	A9	292	194914	7699203	A11	352	194000	7699401
A8	233	195228	7698394	A9	293	194897	7699227	A11	353	194168	7699372
A8	234	195168	7698370	A9	294	194900	7699250	A11	354	194162	7699348
A8	235	195104	7698345	A9	295	194917	7699255	A11	355	194156	7699326
A8	236	195045	7698337	A9	296	194939	7699247	A11	356	194149	7699284
A8	237	194986	7698343	A9	297	194962	7699238	A11	357	194149	7699249
A8	238	194925	7698373	A10	298	196413	7699409	A11	358	194155	7699213
A8	239	194891	7698402	A10	299	196450	7699369	A11	359	194172	7699180
A8	240	194868	7698421	A10	300	196502	7699360	A11	360	194190	7699153

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Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
A11	361	194209	7699143	A11	421	192363	7698916	A11	481	193602	7698847
A11	362	194229	7699120	A11	422	192419	7698900	A11	482	193632	7698853
A11	363	194236	7699085	A11	423	192468	7698906	A11	483	193661	7698861
A11	364	194230	7699062	A11	424	192518	7698924	A11	484	193689	7698872
A11	365	194227	7699032	A11	425	192564	7698946	A11	485	193716	7698886
A11	366	194245	7698985	A11	426	192578	7698959	A11	486	193741	7698903
A11	367	194252	7698973	A11	427	192588	7698979	A11	487	193765	7698922
A11	368	194255	7698953	A11	428	192592	7698998	A11	488	193786	7698944
A11	369	194248	7698925	A11	429	192582	7699015	A11	489	193804	7698967
A11	370	194239	7698903	A11	430	192564	7699023	A11	490	193821	7698993
A11	371	194239	7698884	A11	431	192547	7699023	A11	491	193834	7699020
A11	372	194256	7698860	A11	432	192597	7699037	A11	492	193845	7699048
A11	373	194286	7698844	A11	433	192628	7699054	A11	493	193852	7699077
A11	374	194321	7698845	A11	434	192639	7699062	A11	494	193856	7699107
A11	375	194348	7698855	A11	435	192665	7699086	A11	495	193858	7699137
A11	376	194377	7698856	A11	436	192700	7699115	A11	496	193856	7699167
A11	377	194398	7698853	A11	437	192753	7699167	A11	497	193850	7699197
A11	378	194431	7698835	A11	438	192809	7699234	A11	498	193842	7699226
Δ11	379	194469	7698814	Δ11	439	192829	7699293	Δ11	400	193831	7699254
Δ11	380	194490	7698799	Δ11	440	192847	7699350	Δ11	500	193817	7699281
Δ11	381	194515	7698783	Δ11	441	192875	7699388	Δ11	501	193800	7699306
Δ11	382	194550	7698763	Δ11	442	192070	7699/12	Δ11	502	193781	7699329
Δ11	383	104581	7698755	A11	1/3	102000	7699450	Δ11	502	193759	7699350
Δ11	384	194596	7698721	Δ11	445	192926	7699443	Δ11	504	193735	7699369
	395	104608	7608578	A11	444	102060	7600423		505	103734	7600376
Δ11	386	194766	7698271	Δ11	445	192969	7600300	Δ11	506	193748	7699419
A11	387	194700	7698278	A11	440	192909	7699369	Δ11	507	193765	7699419
A11	300	104523	7698407	A11	149	102063	7600343	Δ11	508	103703	7699466
	380	104400	7608412	A11	440	102080	7600322		500	103775	7600480
Δ11	300	194499	7698429	Δ11	449	192900	7699322	Δ11	510	193769	7699400
Δ11	301	194430	7698423	A11	450	192999	7699268	Δ11	511	193752	7699506
	302	104470	7698424	A11	452	103018	7600281	A11	512	193741	7699510
	302	104447	7698456	A11	452	193010	7699201		512	103741	7699509
A11	204	104292	7608460	A11	455	102066	7600300		514	102716	7699503
A11	305	194302	7698444	A11	455	193085	7699300	A11	515	193704	7699301
	306	104377	7608452	A11	456	103112	7600207		516	103688	7699461
	307	104306	7608518	A11	450	103142	7600207		517	103660	7600411
	209	104216	7698545	A11	457	102170	7600209		519	102625	7600410
	200	104159	7698545	A11	450	102102	7600224		510	102614	7600421
A11	400	194156	7698536	A11	409	1033133	7699324	A11	520	193014	7699421
	400	194050	7696030	A11	400	193312	7699200	A11	520	193003	7699419
A11	401	103709	7698592	A11	401	103204	7699247		522	193592	7609421
A11	402	103537	7698697	A11	402	103284	7600100	A11	522	193534	7699421
Δ11	403	193037	7698630	Δ11	403	193204	7699190	Δ11	524	193034	7699419
	404	193047	76986030	Δ11	404	193200	7699100	A11	525	193004	7699414
A11	400	102222	7609746	A11	400	102200	7600100	A11	526	102447	7600205
	400	102200	7698020	Δ11	400	193200	7699070	Δ11	527	193447	7699390
A11	407	10242	7608043	Δ11	407	103200	7699041	Δ11	522	1033420	7600364
A11	400	103163	7609953	A11	400	193294	7699041	A11	520	190090	7600345
A11	409	193102	7608060	A11	409	102210	7602006	A11	520	102250	7600222
A11	410	193090	7608049	A11	470	102226	7602061	A11	524	102220	7600200
A11	411	193024	7609006	A11	4/1	102255	7602022	A11	520	193332	7600285
A11	412	192987	7609065	A11	472	193300	7602017	A11	522	193322	7600227
A11	413	192934	7090900	A11	4/3	1933//	7696917	A11	533	193204	7600340
A11	414	192902	7696907	ATT	4/4	193401	7698898	A11	534	193213	7600260
A11	410	192840	7090840	ATT	4/0	19342/	7696662	A11	530	193227	7699369
A11	416	192780	7696803	A11	4/6	193454	7698869	A11	536	193232	7699396
A11	41/	192211	7696933	A11	4//	193482	7698858	A11	537	193240	7699429
A11	418	192157	7699028	A11	4/8	193512	7698851	A11	538	193251	7699403
A11	419	192231	7090984	A11	4/9	193542	7096847	A11	539	193269	7099409
A11	420	192312	/ 698940	A11	480	1935/2	/698845	A11	540	193292	/699484

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Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
A11	541	193313	7699498	A13	601	195902	7698752	A15	661	192173	7699514
A11	542	193326	7699512	A13	602	195887	7698752	A15	662	192159	7699501
Δ11	5/3	103335	7699532	A13	603	195885	7698801	A15	663	192165	7699552
Δ11	544	193347	7699562	Δ13	604	195888	7698881	A15	664	192174	7699598
Δ11	545	193355	7699587	Δ13	605	195904	7699009	A15	665	192193	7699644
Δ11	546	193369	7699619	Δ13	606	195911	7699065	A15	666	192216	7699715
A11	547	103386	7699651	Δ13	607	195921	7699137	A15	667	192235	7699756
A11	5/8	193407	7699679	A13	608	1050321	7699211	A15	668	192268	7699817
	5/0	103/31	7699697	A13	600	195932	7699284	A15	669	192200	7600002
	550	103453	7699710	A13	610	105015	7699357	A15	670	102200	7600045
A11	551	193403	7699710	A13	611	195915	7699307	A15	671	192299	7699945
ATT	550	193460	7699720	A13	610	195901	7699432	A 15	670	192300	7699966
A11	552	193030	7699560	A13	612	195665	7699490	A 15	672	192312	7099900
A12	553	197159	7699364	A13	613	195671	7699546	A 15	674	192322	7700026
A12	555	197120	7699361	A13	014	195863	7699573	A15	074	192324	7700061
A12	555	197047	7699359	A14	615	192061	7700014	A15	675	192325	7700075
A12	556	197009	7699368	A14	616	192002	7700074	A15	676	192336	7700084
A12	557	196967	7699370	A14	617	191996	7700091	A15	6//	192362	7700093
A12	558	196910	7699364	A14	618	192033	7700093	A16	678	192113	7700638
A12	559	196879	7699359	A14	619	192038	7700082	A16	679	192113	7700588
A12	560	196818	7699367	A14	620	192050	7700074	A16	680	192138	7700588
A12	561	196791	7699385	A14	621	192060	7700033	A16	681	192138	7700563
A12	562	196744	7699387	A14	622	192061	7700014	A16	682	192163	7700563
A12	563	196694	7699388	A15	623	192362	7700093	A16	683	192163	7700488
A12	564	196664	7699388	A15	624	192352	7700067	A16	684	192188	7700488
A12	565	196635	7699387	A15	625	192339	7700014	A16	685	192188	7700363
A12	566	196606	7699397	A15	626	192342	7699988	A16	686	192213	7700363
A12	567	196565	7699413	A15	627	192339	7699952	A16	687	192213	7700338
A12	568	196554	7699417	A15	628	192347	7699922	A16	688	192188	7700338
A12	569	196604	7699424	A15	629	192361	7699892	A16	689	192188	7700318
A12	570	196668	7699428	A15	630	192376	7699868	A16	690	192163	7700313
A12	571	196758	7699415	A15	631	192384	7699830	A16	691	192163	7700338
A12	572	196976	7699383	A15	632	192374	7699797	A16	692	192138	7700338
A12	573	197159	7699364	A15	633	192358	7699776	A16	693	192138	7700363
A13	574	195863	7699573	A15	634	192335	7699760	A16	694	192113	7700363
A13	575	195901	7699543	A15	635	192313	7699749	A16	695	192113	7700463
A13	576	195983	7699501	A15	636	192297	7699735	A16	696	192088	7700463
A13	577	196037	7699474	A15	637	192275	7699702	A16	697	192088	7700638
A13	578	196045	7699362	A15	638	192259	7699665	A16	698	192113	7700638
A13	579	196065	7699121	A15	639	192235	7699608	A17	699	192319	7701059
A13	580	196065	7699057	A15	640	192233	7699591	A17	700	192467	7700934
A13	581	196054	7698998	A15	641	192247	7699507	A17	701	192449	7700847
A13	582	196014	7698859	A15	642	192257	7699446	A17	702	192447	7700830
A13	583	196006	7698834	A15	643	192267	7699409	A17	703	192448	7700799
A13	584	196003	7698773	A15	644	192292	7699345	A17	704	192449	7700757
A13	585	196007	7698726	A15	645	192312	7699315	A17	705	192463	7700727
A13	586	196052	7698622	A15	646	192331	7699302	A17	706	192480	7700710
A13	587	196061	7698605	A15	647	192355	7699293	A17	707	192509	7700702
A13	588	195976	7698522	A15	648	192367	7699279	A17	708	192531	7700686
A13	589	195945	7698549	A15	649	192360	7699264	A17	709	192552	7700665
A13	590	195928	7698568	A15	650	192346	7699264	A17	710	192569	7700651
A13	591	195910	7698599	A15	651	192327	7699229	A17	711	192609	7700640
A13	592	195898	7698654	A15	652	192315	7699215	A17	712	192643	7700622
A13	593	195893	7698687	A15	653	192299	7699227	A17	713	192671	7700608
A13	594	195905	7698687	A15	654	192294	7699258	A17	714	192703	7700585
A13	595	195919	7698692	A15	655	192275	7699280	A17	715	192732	7700550
A13	596	195929	7698703	A15	656	192245	7699328	A17	716	192796	7700507
A13	597	195935	7698716	A15	657	192221	7699382	A17	717	192845	7700454
A13	598	195934	7698731	A15	658	192206	7699429	A17	718	192869	7700410
A13	599	195927	7698743	A15	659	192197	7699480	A17	719	192867	7700377
A13	600	195915	7698751	A15	660	192192	7699541	A17	720	192858	7700353
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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
A17	721	192828	7700338	A17	781	192115	7701292	A17	841	192220	7700645
A17	722	192806	7700350	A17	782	192162	7701236	A17	842	192211	7700657
A17	723	192794	7700354	A17	783	192319	7701059	A17	843	192207	7700670
A17	724	192789	7700375	A17	784	191991	7700663	A17	844	192202	7700682
A17	725	192770	7700398	A17	785	191988	7700651	A17	845	192196	7700693
A17	726	192743	7700419	A17	786	191988	7700638	A17	846	192183	7700708
A17	727	192713	7700426	A17	787	191988	7700463	A17	847	192168	7700721
A17	728	192675	7700420	A17	788	191988	7700449	A17	848	192157	7700727
A17	729	192628	7700396	A17	789	191991	7700437	A17	849	192145	7700732
A17	730	192589	7700357	A17	790	191995	7700424	A17	850	192132	7700736
A17	731	192559	7700310	A17	791	192001	7700413	A17	851	192119	7700737
A17	732	192536	7700274	A17	792	192012	7700397	A17	852	192088	7700738
A17	733	192503	7700231	A17	793	192013	7700363	A17	853	192074	7700737
A17	734	192468	7700195	A17	794	192013	7700349	A17	854	192062	7700734
A17	735	192450	7700188	A17	795	192016	7700337	A17	855	192049	7700730
A17	736	192419	7700173	A17	796	192020	7700324	A17	856	192038	7700724
A17	737	192391	7700145	A17	797	192026	7700313	A17	857	192027	7700717
A17	738	192384	7700130	A17	798	192037	7700297	A17	858	192012	7700703
A17	739	192368	7700107	A17	799	192052	7700283	A17	859	192001	7700688
A17	740	192343	7700107	A17	800	192062	7700272	A17	860	191995	7700676
A17	741	192339	7700120	A17	801	192077	7700258	A17	861	191991	7700663
A17	742	192329	7700131	A17	802	192087	7700247	B1	862	195478	7698467
A17	743	192315	7700136	A17	803	192102	7700233	B1	863	195469	7698453
A17	744	192296	7700138	A17	804	192113	7700226	B1	864	195423	7698400
A17	745	192234	7700143	A17	805	192124	7700220	B1	865	195398	7698376
A17	746	192196	7700146	A17	806	192137	7700216	B1	866	195382	7698362
A17	747	192142	7700146	A17	807	192149	7700213	B1	867	195371	7698353
A17	748	192092	7700138	A17	808	192163	7700213	B1	868	195325	7698328
A17	749	192080	7700134	A17	809	192188	7700213	B1	869	195267	7698302
A17	750	192067	7700132	A17	810	192201	7700213	B1	870	195205	7698277
A17	751	192055	7700130	A17	811	192213	7700216	B1	871	195140	7698252
A17	752	192041	7700124	A17	812	192226	7700220	B1	872	195129	7698249
A17	753	192033	7700113	A17	813	192238	7700226	B1	873	195117	7698246
A17	754	191992	7700104	A17	814	192253	7700237	B1	874	195059	7698238
A17	755	191964	7700193	A17	815	192267	7700252	B1	875	195045	7698237
A17	756	191976	7700204	A17	816	192278	7700262	B1	876	195034	7698238
A17	757	191980	7700218	A17	817	192292	7700277	B1	877	194976	7698244
A17	758	191978	7700229	A17	818	192299	7700288	B1	878	194960	7698246
A17	759	191843	7700535	A17	819	192305	7700299	B1	879	194947	7698251
A17	760	191777	7700646	A17	820	192309	7700312	B1	880	194881	7698283
A17	761	191763	7700658	A17	821	192312	7700324	B1	881	194869	7698290
A17	762	191749	7700659	A17	822	192313	7700338	B1	882	194803	7698345
A17	763	191738	7700673	A17	823	192313	7700363	B1	883	194764	7698384
A17	764	191745	7700687	A17	824	192312	7700376	B1	884	194729	7698429
A17	765	191743	7700701	A17	825	192309	7700388	B1	885	194721	7698440
A17	766	191709	/700759	A17	826	192305	7700401	B1	886	194686	7698507
A17	/67	191915	//00835	A17	827	192299	//00413	B1	887	194656	/698577
A1/	/68	191928	7700837	A1/	828	192292	7700423	B1	888	194652	/698590
A17	/69	192301	7700973	A17	829	192288	7700488	B1	889	194638	/698664
A1/	770	192315	7700979	A1/	830	192287	7700501	B1	890	194636	/6986/5
A1/	770	192326	7700991	A1/	831	192284	7700513	B1	891	194634	/698/11
A1/	772	192335	7701004	A1/	832	192280	7700526	B1	892	194628	/698/54
A1/	774	192339	7701018	A1/	833	192274	7700538	B1	893	194616	7698810
A1/	775	192335	7701032	A1/	834	192263	7700500	B1	894	194605	/698845
A1/	770	192318	7701050	A1/	835	192262	7700569	B1	895	194586	7698913
A17	775	192306	7701057	A17	030	192261	7700505	B1	896	1945/1	7698970
A17	770	192291	7701057	A17	03/	192257	7700595	B1	897	194551	7699025
A17	770	192279	7701050	A17	030	192252	7700649	B1	898	194539	7699001
A17	790	192256	7701041	A17	039	192246	7700632	B1	000	194518	7699089
A1/	/80	192060	1 1100909	A17	840	192233	1/00033	BI	900	194009	1099100

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Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	D	Easting	Northing
R1	901	194503	7699112	R1	961	195117	7699043	R1	1021	194643	7699063
B1	902	194498	7699124	B1	962	195124	7699054	B1	1022	194667	7699000
B1	903	194494	7699136	B1	963	195132	7699065	B1	1022	194682	7698940
B1	904	194490	7699160	B1	964	195146	7699078	B1	1024	194701	7698874
B1	905	194489	7699177	B1	965	195165	7699092	B1	1025	194713	7698835
B1	906	194490	7699190	B1	966	195181	7699102	B1	1026	194727	7698772
B1	907	194492	7699203	B1	967	195193	7699107	B1	1027	194734	7698721
B1	908	194496	7699215	B1	968	195205	7699110	B1	1028	194736	7698682
B1	909	194502	7699227	B1	969	195218	7699112	B1	1029	194749	7698616
B1	910	194509	7699238	B1	970	195231	7699112	B1	1030	194775	7698553
B1	911	194523	7699252	B1	971	195267	7699109	B1	1031	194808	7698490
B1	912	194545	7699270	B1	972	195278	7699107	B1	1032	194836	7698454
B1	913	194558	7699279	B1	973	195290	7699104	B1	1033	194868	7698421
B1	914	194569	7699284	B1	974	195349	7699081	B1	1034	194891	7698402
B1	915	194582	7699289	B1	975	195363	7699075	B1	1035	194925	7698373
B1	916	194595	7699291	B1	976	195374	7699067	B1	1036	194986	7698343
B1	917	194608	7699292	B1	977	195386	7699056	B1	1037	195045	7698337
B1	918	194621	7699291	B1	978	195436	7699002	B1	1038	195100	7698345
B1	919	194634	7699289	B1	979	195446	7698990	B1	1039	195168	7698370
B1	920	194646	7699284	B1	980	195480	7698937	B1	1040	195228	7698394
B1	921	194682	7699268	B1	981	195505	7698892	B1	1041	195277	7698415
B1	922	194695	7699260	B1	982	195511	7698879	B1	1042	195315	7698436
B1	923	194706	7699252	B1	983	195534	7698816	B1	1043	195348	7698466
B1	924	194733	7699228	B1	984	195538	7698801	B1	1044	195390	7698514
B1	925	194747	7699214	B1	985	195551	7698730	B1	1045	195427	7698577
B1	926	194775	7699168	B1	986	195553	7698719	B1	1046	195448	7698646
B1	927	194806	7699108	B1	987	195553	7698705	B1	1047	195453	7698712
B1	928	194838	7699053	B1	988	195547	7698638	B1	1048	195440	7698781
B1	929	194869	7698983	B1	989	195546	7698626	B1	1049	195417	7698844
B1	930	194875	7698967	B1	990	195522	7698548	B1	1050	195396	7698883
B1	931	194894	7698914	B1	991	195516	7698533	B1	1051	195363	7698934
B1	932	194915	7698807	BI	992	195478	7698467	B1	1052	195313	7698988
	933	194942	7696602		993	195033	7696514	B1	1053	195258	7699009
	934	194966	7696700		994	195015	7696526		1054	195229	7699012
B1	930	104977	7698697	B1	990	194995	7698536	B1	1055	195207	7698946
B1	930	194990	7698651	B1	990	194903	7698585	B1	1050	1952/10	7698889
B1	938	195052	7698618	B1	998	194938	7698598	B1	1057	195240	7698844
B1	939	195067	7698612	B1	999	194931	7698609	B1	1059	195313	7698799
B1	940	195080	7698603	B1	1000	194913	7698640	B1	1060	195333	7698736
B1	941	195134	7698578	B1	1001	194902	7698659	B1	1061	195336	7698673
B1	942	195159	7698578	B1	1002	194888	7698688	B1	1062	195330	7698622
B1	943	195190	7698587	B1	1003	194877	7698709	B1	1063	195312	7698565
B1	944	195210	7698601	B1	1004	194863	7698738	B1	1064	195276	7698526
B1	945	195224	7698616	B1	1005	194852	7698757	B1	1065	195234	7698496
B1	946	195232	7698643	B1	1006	194823	7698817	B1	1066	195174	7698478
B1	947	195236	7698676	B1	1007	194817	7698834	B1	1067	195138	7698478
B1	948	195234	7698718	B1	1008	194813	7698845	B1	1068	195111	7698478
B1	949	195222	7698754	B1	1009	194807	7698859	B1	1069	195099	7698484
B1	950	195201	7698784	B1	1010	194799	7698880	B1	1070	195063	7698501
B1	951	195168	7698827	B1	1011	194778	7698943	B1	1071	195042	7698511
B1	952	195159	7698839	B1	1012	194751	7699003	B2	1072	192228	7700638
B1	953	195128	7698900	B1	1013	194718	7699060	B2	1073	192242	7700623
B1	954	195122	7698914	B1	1014	194689	7699117	B2	1074	192249	7700613
B1	955	195108	7698965	B1	1015	194667	7699153	B2	1075	192255	7700601
B1	956	195105	7698978	B1	1016	194640	7699177	B2	1076	192259	7700588
B1	957	195104	7698991	B1	1017	194608	7699192	B2	1077	192262	7700576
B1	958	195105	7699004	B1	1018	194589	7699177	B2	1078	192263	7700563
B1	959	195108	7699017	B1	1019	194592	7699156	B2	1079	192267	7700548
B1	960	195112	7699031	B1	1020	194628	7699096	B2	1080	192277	7700532

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Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
B2	1081	192282	7700520	B2	1141	192151	7700730	C2	1201	196113	7697629
B2	1082	192286	7700507	B2	1142	192163	7700724	C2	1202	196349	7697597
 B2	1083	192287	7700494	B2	1143	192178	7700713	C2	1203	196411	7697589
 B2	1084	192288	7700429	B2	1144	192192	7700698	C2	1204	196478	7697579
B2	1085	192296	7700418	B2	1145	192202	7700682	C2	1205	196527	7697573
B2	1086	192302	7700407	B2	1146	192207	7700670	C2	1206	196988	7697513
B2	1087	192307	7700395	B2	1147	192211	7700657	C2	1207	197018	7697509
B2	1088	192311	7700382	B2	1148	192220	7700645	C2	1208	197023	7697544
B2	1089	192312	7700369	B2	1149	192113	7700638	C2	1200	197067	7697879
B2	1090	192313	7700338	B2	1150	192088	7700638		1210	196764	7697919
B2	1091	192312	7700324	B2	1151	192088	7700463	C2	1210	196787	7698045
B2	1097	192309	7700312	82	1152	192000	7700463	- C2	1217	196796	7698091
B2	1092	192305	7700299	82	1152	102113	7700363	- 02	1212	196912	7608183
 	1095	102200	7700299	B2	1154	102138	7700363	- C2	1213	196822	7608238
 	1094	192299	7700288	B2	1154	192130	7700303	- C2	1214	190622	76090230
<u> </u>	1095	192292	7700277	- D2 - D2	1155	192130	7700338	- 02	1210	196616	7696205
B2	1096	192276	7700262	- D2	1100	192163	7700340	02	1210	196605	7696203
<u>B2</u>	1097	192267	7700252	B2	1107	192163	7700313	- 02	1217	196796	7698242
<u>B2</u>	1098	192253	7700237	B2	1158	192183	7700313		1218	196784	7698186
<u>B2</u>	1099	192238	7700226	B2	1159	192188	7700338	C2	1219	196768	7698101
B2	1100	192226	7700220	B2	1160	192213	7700338	C2	1220	196760	7698055
B2	1101	192213	7700216	B2	1161	192213	7700363	C2	1221	196739	7697938
B2	1102	192201	7700213	B2	1162	192188	7700363	C2	1222	196724	7697940
B2	1103	192188	7700213	B2	1163	192188	7700488	C2	1223	196722	7697926
B2	1104	192163	7700213	B2	1164	192163	7700488	C2	1224	196529	7697950
B2	1105	192149	7700213	B2	1165	192163	7700563	C2	1225	196057	7698013
B2	1106	192137	7700216	B2	1166	192138	7700563	C2	1226	195995	7698022
B2	1107	192124	7700220	B2	1167	192138	7700588	C2	1227	195980	7697949
B2	1108	192113	7700226	B2	1168	192113	7700588	C2	1228	195985	7698042
B2	1109	192102	7700233	B2	1169	192113	7700638	C2	1229	195998	7698042
B2	1110	192087	7700247	C1	1170	195331	7698014	C2	1230	196054	7698034
B2	1111	192077	7700258	C1	1171	195289	7698025	C2	1231	196531	7697969
B2	1112	192062	7700272	C1	1172	195288	7698037	C2	1232	196706	7697947
B2	1113	192052	7700283	C1	1173	195331	7698014	C2	1233	196718	7697959
B2	1114	192037	7700297	C2	1174	196844	7698265	C2	1234	196742	7698067
B2	1115	192026	7700313	C2	1175	196849	7698253	C2	1235	196738	7698082
B2	1116	192020	7700324	C2	1176	196852	7698242	C2	1236	196741	7698099
B2	1117	192016	7700337	C2	1177	196847	7698207	C2	1237	196760	7698207
B2	1118	192013	7700349	C2	1178	196842	7698195	C2	1238	196759	7698220
B2	1119	192013	7700363	C2	1179	196824	7698094	C2	1239	196763	7698243
B2	1120	192013	7700396	C2	1180	196819	7698066	C2	1240	196767	7698254
B2	1121	192004	7700407	C2	1181	196813	7698054	C2	1241	196782	7698272
B2	1122	191998	7700418	C2	1182	196788	7697936	C2	1242	196793	7698280
B2	1123	191993	7700430	C2	1183	197070	7697899	C2	1243	196814	7698283
B2	1124	191989	7700443	C2	1184	197082	7697892	C2	1244	196828	7698281
B2	1125	191988	7700456	C2	1185	197087	7697879	C2	1245	196840	7698272
B2	1126	191988	7700638	C2	1186	197040	7697520	C3	1246	195888	7698453
B2	1127	191988	7700651	C2	1187	197042	7697509	C3	1247	195901	7698453
B2	1128	191991	7700663	C2	1188	197039	7697496	C3	1248	195942	7698453
B2	1129	191995	7700676	C2	1189	197025	7697484	C3	1249	195955	7698450
B2	1130	192001	7700688	C2	1190	197012	7697483	C3	1250	195966	7698440
B2	1131	192012	7700703	C2	1191	196523	7697546	C3	1251	195969	7698426
B2	1132	192027	7700717	C2	1192	196476	7697552	C3	1252	195967	7698345
B2	1133	192038	7700724	C2	1193	196387	7697564	C3	1253	195965	7698254
	1134	192049	7700730	C2	1194	196374	7697570	C3	1254	195961	7698241
B2	1135	192062	7700734	C2	1195	196116	7697608	C3	1255	195956	7698190
B2	1136	192074	7700737	C2	1196	196054	7697617	C3	1256	195952	7698177
B2	1137	192088	7700738	C2	1197	105037	7697632	- 03	1257	195692	7698085
 	1129	102000	7700738	- C2	1109	195937	76977002		1259	195632	7698073
- D2 - D2	1120	102110	7700730	- 02	1100	105020	7607652		1200	195640	7608026
 	1140	102120	7700734	- 02	1200	106054	7607637		1209	195540	7609026
D2	1140	132130	1 1100134	62	1200	190001	103/03/	00	1200	190010	1030030

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Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
C3	1261	195455	7698025	C4	1321	195896	7698751	C5	1381	193326	7699235
C3	1262	195649	7698091	C4	1322	195910	7698752	C5	1382	193317	7699210
C3	1263	195697	7698108	C4	1323	195923	7698746	C5	1383	193310	7699183
C3	1264	195936	7698190	C4	1324	195932	7698735	C5	1384	193306	7699156
C3	1265	195937	7698227	C4	1325	195935	7698721	C5	1385	193305	7699129
C3	1266	195938	7698274	C4	1326	195931	7698707	C5	1386	193307	7699101
C3	1267	195940	7698345	C4	1327	195923	7698695	C5	1387	193312	7699075
C3	1268	195942	7698426	C4	1328	195910	7698688	C5	1388	193320	7699048
C3	1269	195901	7698426	C4	1329	195899	7698687	C5	1389	193330	7699023
C3	1270	195880	7698426	C5	1330	193771	7699489	C5	1390	193343	7698999
C3	1270	195811	7698426	00	1331	193775	7699475	C5	1391	193358	7698976
C3	1272	195588	7698426	C5	1332	193771	7699462	C5	1392	193376	7698955
- 00	1272	195532	7698404	C5	1333	193749	7699422	C5	1302	193396	7698936
- 03	1270	195470	7698378	C5	1334	193724	7699376	C5	130/	193/18	7698920
C3	1274	195429	7698362	C5	1335	193735	7699369	C5	1395	193441	7698905
- 03	1276	195416	7698356	C5	1336	193757	7600352	C5	1306	193466	7608803
- 03	1270	105400	7609242	- 05	1227	102770	7600221	- 05	1207	102400	7609093
- 03	1070	105296	76093342	00	1007	102709	7699331	- 00	1007	102519	7609004
- 03	1270	195360	7696331	00	1220	193790	7699306	- 00	1390	102545	7609077
- 03	1279	190309	7696304	00	1240	193615	7699265	- 05	1400	193040	7609073
- 03	1200	190320	7696299	00	1340	193630	7699207	- 05	1400	193073	7699072
	1201	195276	7696277	05	1341	193041	7699229	- 05	1401	193600	7690074
- 03	1202	195215	7696252	05	1342	193650	7699200	- 05	1402	193627	7696679
	1283	195150	7698227	05	1343	193800	7699170		1403	193654	7696667
	1284	195138	7698223	05	1344	193857	7699140		1404	193679	7698897
	1285	195131	7698122	- 05	1345	193857	7699110		1405	193703	7698910
	1200	195277	7696043	05	1340	193603	7699080		1400	193720	7696925
	1287	195277	7698027	- 05	1347	193845	7699051		1407	193747	7698943
	1288	195225	7698041	05	1348	193830	7699022		1408	193766	7698962
	1289	195118	7698098	05	1349	193822	7698995		1409	193783	7698984
	1290	195107	7698109	05	1350	193806	7698970		1410	193798	7699007
	1291	195104	7698122	05	1301	193788	7698946		1411	193810	7699032
	1292	195101	7698220	05	1352	193767	7698924		1412	193819	7699057
	1293	195105	7698234	- 05	1353	193743	7698904		1413	193826	7699084
	1294	195119	7698246	- 05	1354	193718	7698887		1414	193830	7699111
	1295	195130	7698249	05	1355	193692	7698873		1415	193831	7699138
	1296	195204	7698277	05	1356	193664	7698862		1416	193829	7699166
	1297	195265	7698301	05	1357	193635	7698853		1417	193824	7699192
	1298	195316	7698323	05	1358	193605	7698848		1418	193816	7699219
- 03	1299	195363	7698349	05	1359	193575	7698846		1419	193806	7699244
	1300	195375	7698356	- 05	1360	193544	7698846		1420	193793	7699268
	1301	195398	7698376	- 05	1361	193514	7698850		1421	193778	7699291
	1302	195419	7698387	05	1362	193485	7698858		1422	193760	7699312
	1303	195476	7698410	05	1363	193456	7698868		1423	193740	7699331
	1304	195487	7698417	- 05	1364	193429	7698881		1424	193718	7699347
- 03	1305	190077	7698454	05	1365	193403	7698897		1420	193695	7699362
	1306	190088	7698456	05	1300	193379	7698915		1420	193706	7699399
	1307	195717	7698456	- 05	1367	193357	7698936		1427	193725	7699435
	1308	195838	7698456	- 05	1368	193338	7698959		1428	193736	7699454
- 03	1309	195849	7698454	05	1369	193321	7698984		1429	193742	7699465
- 03	1310	195888	7698453	05	13/0	193306	7699010		1430	193/49	7699476
- 04	1311	195893	/69868/	05	13/1	193295	7699038	05	1431	193738	/699485
- 04	1312	195882	7698692	05	13/2	193286	7699067		1432	193729	/6994/4
<u>C4</u>	1313	195872	7698703	05	13/3	193281	7699097	05	1433	193/10	7699446
- C4	1314	195868	/698/16	05	13/4	193279	/69912/	05	1434	193692	/699413
<u>C4</u>	1315	195870	/698/31	05	13/5	193279	/69915/		1435	193671	/6993/4
<u>C4</u>	1316	195878	/698/44	<u>C5</u>	13/6	193283	/69918/	<u>C5</u>	1436	193645	/699383
<u>C4</u>	131/	195889	/698/48	05	13//	193291	7699216		1437	193618	7699390
<u>C4</u>	1318	195899	/698/3/	05	13/8	193301	7699245	<u>C5</u>	1438	193591	/699394
C4	1319	195896	/698/22	C5	13/9	193312	7699268	C5	1439	193563	/699394
C4	1320	195904	/698736	C5	1380	193335	/699257	C5	1440	193536	/699393

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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
C5	1441	193509	7699388	C6	1501	192306	7699108	C6	1561	192269	7699952
C5	1442	193482	7699380	C6	1502	192375	7699063	C6	1562	192284	7699995
C5	1443	193457	7699370	C6	1503	192429	7699033	C6	1563	192293	7700033
C5	1444	193433	7699357	C6	1504	192455	7699021	C6	1564	192294	7700062
C5	1445	193410	7699342	C6	1505	192480	7699014	C6	1565	192296	7700096
C5	1446	103380	7699324	C6	1506	192516	7699021	C6	1566	192341	7700094
- 05	1440	193309	7699324	C6	1500	192510	7699021	C7	1567	192075	7600852
- 05	1447	193370	7699300	00	1507	192047	7699023	- 07	1567	192075	7099002
- 05	1440	193303	7699265	00	1000	192001	7699023	- 07	1000	192063	7700012
- 05	1449	193345	7699271	00	1509	192574	7699021		1569	192060	7700033
	1450	193320	7699282	6	1510	192586	7699012		1570	192056	7700072
C5	1451	193330	7699297	C6	1511	192592	7698998	67	1571	192042	7700078
C5	1452	193348	7699321	C6	1512	192590	7698984	<u> </u>	1572	192034	7700090
C5	1453	193369	7699343	C6	1513	192578	7698959	C7	1573	192069	7700094
C5	1454	193393	7699363	C6	1514	192564	7698946	C7	1574	192081	7700096
C5	1455	193418	7699380	C6	1515	192520	7698925	C7	1575	192087	7700035
C5	1456	193444	7699394	C6	1516	192474	7698907	C7	1576	192088	7700013
C5	1457	193472	7699405	C6	1517	192431	7698900	C7	1577	192091	7699967
C5	1458	193501	7699414	C6	1518	192419	7698900	C7	1578	192088	7699887
C5	1459	193531	7699419	C6	1519	192368	7698914	C7	1579	192075	7699852
C5	1460	193561	7699421	C6	1520	192314	7698939	C8	1580	192343	7700107
C5	1461	193592	7699421	C6	1521	192232	7698983	C8	1581	192294	7700110
C5	1462	193603	7699419	C6	1522	192157	7699028	C8	1582	192194	7700116
C5	1463	193614	7699421	C6	1523	192131	7699074	C8	1583	192143	7700116
C5	1464	193625	7699419	C6	1524	192166	7699057	C8	1584	192123	7700113
C5	1465	193652	7699412	C6	1525	192246	7699010	C8	1585	192071	7700105
C5	1466	193686	7699458	C6	1526	192326	7698966	C8	1586	192032	7700106
C5	1467	193702	7699487	C6	1527	192376	7698943	C8	1587	192035	7700117
C5	1468	193712	7699499	C6	1528	192427	7698929	C8	1588	192049	7700129
C5	1469	193723	7699507	C6	1529	192463	7698935	C8	1589	192067	7700132
C5	1470	193736	7699510	C6	1530	192507	7698952	C8	1590	192079	7700134
C5	1470	193750	7699507	C6	1531	192551	7698973	C8	1591	192092	7700138
C5	1477	103762	7699499	C6	1532	192562	7698993	C8	1502	192032	7700130
- 00	1472	102341	700094	00	1522	102502	7608002	- 00	1502	102103	7700146
- 00	1473	102222	7700094	C6	1524	102/79	7608082		1504	102234	7700140
	14/4	192333	7700061	00	1534	192470	7030303		1534	192234	7700143
- 00	1475	192324	7700001	00	1535	192445	7696993		1595	192296	7700136
	1470	192323	7700032	00	1030	192416	7699006		1596	192315	7700136
- 00	14//	192313	7699987	00	1537	192360	7699037	0	1597	192329	7700131
	1478	192306	7699968	06	1538	192288	7699084		1598	192339	7700120
C6	14/9	192299	7699945	C6	1539	192244	7699120	C8	1599	192343	7700107
C6	1480	192293	7699906	C6	1540	192187	7699170	C9	1600	191964	7700193
C6	1481	192271	7699823	C6	1541	192141	7699208	C9	1601	191953	7700218
C6	1482	192237	7699760	C6	1542	192117	7699228	C9	1602	191818	7700524
C6	1483	192216	7699715	C6	1543	192105	7699250	C9	1603	191753	7700632
C6	1484	192194	7699647	C6	1544	192092	7699273	C9	1604	191744	7700657
C6	1485	192174	7699598	C6	1545	192085	7699285	C9	1605	191758	7700659
C6	1486	192165	7699552	C6	1546	192082	7699306	C9	1606	191771	7700653
C6	1487	192159	7699504	C6	1547	192084	7699318	C9	1607	191840	7700540
C6	1488	192159	7699469	C6	1548	192086	7699344	C9	1608	191976	7700233
C6	1489	192157	7699436	C6	1549	192109	7699374	C9	1609	191979	7700222
C6	1490	192153	7699403	C6	1550	192123	7699408	C9	1610	191978	7700208
C6	1491	192137	7699363	C6	1551	192127	7699438	C9	1611	191970	7700197
C6	1492	192121	7699340	C6	1552	192129	7699470	C10	1612	191497	7700739
C6	1493	192114	7699316	C6	1553	192129	7699506	C10	1613	191499	7700762
C6	1494	192111	7699300	C6	1554	192136	7699556	C10	1614	191576	7700791
C6	1495	192118	7699289	C6	1555	192145	7699607	C10	1615	191497	7700739
C6	1496	192131	7699265	C6	1556	192166	7699656	C11	1616	192337	7701028
C6	1497	192140	7699247	C6	1557	192188	7699726	C11	1617	192338	7701013
- 00	1408	192159	7690232	60	1558	192210	7699774	C11	1618	192332	7701000
	1/00	192103	7600103		1550	192210	7609831	- C11	1610	192302	7700987
	1400	102262	7600142		1560	192242	7699010	C11	1620	102211	7700307
00	1000	192203	1033140	00	1000	132204	1099910	011	1020	19201	1100311

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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
C11	1621	191928	7700837	D3	1681	196349	7697597	D4	1741	195936	7698190
C11	1622	191916	7700835	D3	1682	196113	7697629	D4	1742	195697	7698108
C11	1623	191709	7700759	D3	1683	196051	7697637	D4	1743	195649	7698091
C11	1624	191739	7700709	D3	1684	195939	7697652	D5	1744	196067	7698593
C11	1625	191745	7700696	D3	1685	195949	7697721	D5	1745	195985	7698512
C11	1626	191743	7700682	D3	1686	195961	7697718	D5	1746	196058	7698602
C11	1627	191732	7700690	D3	1687	196040	7697710	D6	1747	195896	7698751
C11	1628	191718	7700691	D3	1688	196101	7697709	D6	1748	195904	7698738
C11	1629	191669	7700773	D3	1689	196138	7697709	D6	1749	195900	7698722
C11	1630	191890	7700854	D3	1690	196207	7697731	D6	1750	195899	7698737
C11	1631	191944	7700874	D3	1691	196094	7697768	D6	1751	195892	7698749
C11	1632	192291	7701001	D3	1692	196085	7697914	D6	1752	195879	7698744
C11	1633	192309	7701018	D3	1693	196071	7697918	D6	1753	195822	7698726
C11	1634	192298	7701027	D3	1694	196008	7697935	D6	1754	195807	7698721
C11	1635	192277	7701016	D3	1695	195979	7697943	D6	1755	195820	7698730
C11	1636	191941	7700893	D3	1696	195990	7698023	D6	1756	195887	7698752
C11	1637	101887	7700873	D3	1697	196057	7698013	D7	1757	194685	7698472
C11	1638	191659	7700790	D3	1698	196529	7697950	D7	1758	194797	7698254
C11	1639	191635	7700806	D3	1699	196722	7697924	D7	1759	194766	7698271
C11	1640	191661	7700821	D3	1700	196724	7697940	D7	1760	194608	7698578
C11	1641	191770	7700860	D3	1700	196738	7697938	D7	1761	194596	7698721
C11	1642	101821	7700878	D3	1702	196760	7698055	 D7	1762	194538	7698896
C11	1643	191857	7700891	D3	1702	196768	7698101	D7	1763	194338	7699198
C11	1644	191893	7700904	D3	1703	196784	7698186	D7	1764	194430	7699356
C11	1645	101010	7700910	D3	1705	196793	7698238	D7	1765	194537	7699362
C11	1646	192059	7700963	D3	1706	196805	7698253	D7	1766	194805	7699473
C11	1647	192003	7701041	D3	1700	196816	7698253	D7	1767	195043	7699555
C11	1648	192276	7701041	D3	1708	196822	7698239	D7	1768	195252	7699611
C11	1649	102201	7701040	D3	1700	196812	7698183	D7	1760	195242	7699643
C11	1650	192201	7701057	D3	1710	196796	7698091	D7	1770	195256	7699648
C11	1651	192300	7701050	D3	1710	196787	7698045	D7	1771	195250	7699658
C11	1652	192329	7701000	D4	1712	195649	7698091	D7	1772	195299	7699661
C11	1653	192323	7701028	D4	1713	195455	7698025	D7	1773	195311	7699624
D1	1654	195940	7697722	D4	1714	195352	7698009	D7	1774	195316	7699606
D1	1655	195928	7697636	D4	1715	195331	7698014	D7	1775	195258	7699592
D1	1656	195927	7697624	D4	1716	195288	7698037	D7	1776	195049	7699536
D1	1657	195915	7697631		1717	195289	7698025	D7	1777	194876	7699476
D1	1658	195928	7697725	D4	1718	195277	7698027	D7	1778	194813	7699454
D1	1659	195940	7697722	D4	1719	195277	7698043	D7	1779	194640	7699383
D2	1660	195985	7698042	D4	1720	195131	7698122	D7	1780	194535	7699340
D2	1661	195972	7697945	D4	1721	195128	7698221	D7	1781	194460	7699196
D2	1662	195959	7697948	D4	1722	195144	7698225	D7	1782	194616	7698725
D2	1663	195978	7698089	D4	1723	195214	7698252	D7	1783	194628	7698583
D2	1664	195972	7698184	D4	1724	195275	7698276	D7	1784	194685	7698472
D2	1665	195970	7698200	D4	1725	195327	7698298	D8	1785	193749	7699476
D2	1666	195964	7698246	D4	1726	195338	7698304	D8	1786	193742	7699465
D2	1667	195975	7698250	D4	1727	195376	7698325	D8	1787	193736	7699454
D2	1668	195982	7698206	D4	1728	195391	7698335	D8	1788	193725	7699435
D2	1669	195992	7698088	D4	1729	195416	7698356	D8	1789	193706	7699399
D2	1670	195989	7698067	D4	1730	195429	7698362	D8	1790	193688	7699365
D2	1671	195985	7698042	D4	1731	195470	7698378	D8	1791	193718	7699347
D3	1672	196787	7698045	D4	1732	195532	7698404	D8	1792	193740	7699331
D3	1673	196764	7697919	D4	1733	195588	7698426	D8	1793	193760	7699312
D3	1674	197067	7697879	D4	1734	195811	7698426	D8	1794	193778	7699291
D3	1675	197023	7697544	D4	1735	195880	7698426	D8	1795	193793	7699268
D3	1676	197018	7697509	D4	1736	195901	7698426	D8	1796	193806	7699244
D3	1677	196988	7697513	D4	1737	195942	7698426	D8	1797	193816	7699219
D3	1678	196527	7697573	D4	1738	195940	7698345	D8	1798	193824	7699192
D3	1679	196479	7697579	D4	1739	195938	7698274	D8	1799	193829	7699166
D3	1680	196411	7697589	D4	1740	195937	7698227	D8	1800	193831	7699138
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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
D8	1801	193830	7699111	D9	1861	192343	7700107	D9	1921	192032	7700106
D8	1802	193826	7699084	D9	1862	192367	7700105	D9	1922	192066	7700108
D8	1803	193819	7699057	D9	1863	192362	7700093	D9	1923	192123	7700113
D8	1804	193810	7699032	D9	1864	192341	7700094	D9	1924	192143	7700116
D8	1805	193798	7699007	D9	1865	192296	7700096	D9	1925	192194	7700116
D8	1806	193783	7698984	D9	1866	192294	7700062	D9	1926	192293	7700108
D8	1807	193766	7698962	D9	1867	192293	7700033	D9	1927	192343	7700107
D8	1808	193747	7698943	D9	1868	192284	7699995	D10	1928	191953	7700218
D8	1809	193726	7698925	D9	1869	192269	7699952	D10	1929	191915	7700301
B	1810	193703	7698910	 D9	1870	192264	7699910	D10	1930	191843	7700408
B	1811	193679	7698897	D9	1871	192242	7699831	D10	1931	191803	7700502
B	1812	193654	7698887	D9	1872	192210	7699774	D10	1932	191753	7700632
B	1813	193627	7698879	 	1873	192188	7699726	D10	1032	191817	7700526
B	1814	193600	7698874	D0	1874	192166	7699656	D10	1034	101052	7700220
0	1815	193573	7698872	D9	1875	192100	7699607	D10	1035	197309	7701018
0	1816	1935/15	7608873	D3	1976	102136	7699556	D11	1036	102208	7701010
0	1010	102519	7609977	D0	1070	102130	7699506	D11	1027	101044	7701003
O	1017	193016	7090077	D9	1077	192129	7699506	D11	1937	191944	7700854
0	1010	193491	7090004	9	10/0	192129	7699470	D11	1930	191690	7700654
0	1019	193466	7698893	D9	10/9	192127	7699438	D11	1939	191669	7700005
0	1820	193441	7698900	D9	1000	192123	7699408	D11	1940	191716	7700695
0	1821	193418	7698920	D9	1881	192109	7699374	D11	1941	191589	7700708
08	1822	193396	7698936	D9	1882	192086	7699344	D11	1942	191566	7700547
08	1823	193376	7698955	09	1883	192084	7699318	D11	1943	191486	7700627
<u>D8</u>	1824	193358	7698976	D9	1884	192082	7699306	D11	1944	191497	7700739
D8	1825	193343	7698999	D9	1885	192079	7699294	D11	1945	191576	7700791
08	1826	193330	7699023	D9	1886	192092	7699273	D11	1946	191625	7700809
D8	1827	193320	7699048	D9	1887	192105	7699250	D11	1947	191654	7700794
D8	1828	193312	7699075	D9	1888	192117	7699228	D11	1948	191887	7700873
D8	1829	193307	7699101	D9	1889	192141	7699208	D11	1949	191941	7700893
D8	1830	193305	7699129	D9	1890	192187	7699170	D11	1950	192277	7701016
D8	1831	193306	7699156	D9	1891	192244	7699120	D11	1951	192290	7701021
D8	1832	193310	7699183	D9	1892	192288	7699084	D11	1952	192309	7701018
D8	1833	193317	7699210	D9	1893	192360	7699037	E1	1953	197167	7698315
D8	1834	193326	7699235	D9	1894	192416	7699006	E1	1954	197158	7698138
D8	1835	193337	7699257	D9	1895	192445	7698993	E1	1955	197147	7698141
D8	1836	193312	7699268	D9	1896	192478	7698983	E1	1956	197125	7698151
D8	1837	193193	7699324	D9	1897	192521	7698992	E1	1957	197106	7698168
D8	1838	193204	7699337	D9	1898	192562	7698993	E1	1958	197069	7698175
D8	1839	193320	7699282	D9	1899	192551	7698973	E1	1959	197043	7698166
D8	1840	193344	7699271	D9	1900	192507	7698952	E1	1960	197027	7698152
D8	1841	193353	7699283	D9	1901	192463	7698935	E1	1961	196991	7698126
D8	1842	193370	7699305	D9	1902	192427	7698929	E1	1962	196958	7698127
D8	1843	193389	7699324	D9	1903	192376	7698943	E1	1963	196930	7698129
D8	1844	193410	7699342	D9	1904	192326	7698966	E1	1964	196903	7698125
D8	1845	193433	7699357	D9	1905	192246	7699010	E1	1965	196886	7698110
D8	1846	193457	7699370	D9	1906	192166	7699057	E1	1966	196865	7698102
D8	1847	193482	7699380	D9	1907	192131	7699074	E1	1967	196841	7698097
D8	1848	193509	7699388	D9	1908	191969	7699361	E1	1968	196824	7698094
D8	1849	193536	7699393	D9	1909	192004	7699511	E1	1969	196842	7698195
D8	1850	193563	7699394	D9	1910	192093	7699694	E1	1970	196847	7698207
D8	1851	193582	7699394	D9	1911	192076	7699850	E1	1971	196852	7698232
D8	1852	193618	7699390	D9	1912	192088	7699887	E1	1972	196864	7698237
D8	1853	193645	7699383	D9	1913	192091	7699967	E1	1973	196894	7698243
D8	1854	193670	7699374	D9	1914	192088	7700013	E1	1974	196930	7698244
D8	1855	193692	7699413	D9	1915	192087	7700035	E1	1975	196976	7698251
D8	1856	193710	7699446	D9	1916	192081	7700096	E1	1976	197004	7698259
D8	1857	193721	7699465	D9	1917	192069	7700094	E1	1977	197040	7698267
D8	1858	193727	7699476	D9	1918	192033	7700093	E1	1978	197090	7698286
D8	1859	193738	7699485	D9	1919	191996	7700091	E1	1979	197132	7698303
D8	1860	193749	7699476	D9	1920	191992	7700104	E1	1980	197160	7698313

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Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northing
F2	1981	194805	7699473	E3	2041	196796	7698956	F3	2101	196007	7698726
	1982	194537	7699362	E3	2042	196814	7698983		2102	196003	7698773
	1983	194521	7699356	E3	2042	196823	7699006	E3	2102	196006	7698834
	1984	194438	7699198	E3	2040	196842	7699021	E3	2100	196014	7698859
	1985	194538	7698896	E3	2045	196872	7699040	E3	2105	196054	7698998
	1986	194585	7698755	E3	2046	196886	7699047	E3	2106	196065	7699057
	1987	194550	7698763	E3	2040	196903	7699057	E3	2100	196065	7699121
	1988	194515	7698783	E0	2047	196928	7699069	E3	2107	196045	7699362
	1989	194490	7698799	E3	2040	196947	7699081	E3	2100	196037	7699474
	1000	194450	7698814	E3	2045	196949	7699110	E3	2100	196130	7699426
	1001	10//31	7698835	E3	2050	196934	7699145	E3	2110	196293	7600413
	1992	194491	7698853	E3	2057	196903	7699165	E3	2112	196362	7699411
	1002	194337	7698856	E3	2052	196846	7699185	E3	2112	196345	7699400
	1993	194377	7698856	E3	2053	196765	7699229	E3	2113	196346	7699362
	1005	10/321	7698845	E3	2055	196712	7600258	E3	2114	196344	7699327
	1006	104321	7698844	E3	2055	196659	7699300	E3	2116	106333	7609301
	1007	104256	7609960	E2	2050	106627	7600224		2110	106207	7600070
<u> </u>	1000	194200	7090000	E3	2007	196637	7699334	E3	2117	196307	7600251
<u> </u>	1990	194239	7090004	E0 E2	2006	190004	7699300	 	2110	196287	7699201
<u> </u>	1999	194239	7696903	 2	2009	196066	7699364	 	2119	196260	7699213
<u> </u>	2000	194240	7696920	E0 E2	2060	196302	7699360	 	2120	196293	7699171
	2001	194255	7696955	E3	2061	196450	7699369	E3	2121	190322	7699143
E2	2002	194252	7696973	E3 E2	2062	196419	7699406	E3 E2	2122	196343	7699115
	2003	194240	7696960	 	2003	196479	7699406	 	2123	196346	7699062
	2004	194227	7699032	 	2064	196004	7699417	E3	2124	196352	7699004
E2	2005	194230	7699062	E3	2065	196365	7699413	E3	2120	196357	7699012
<u> </u>	2000	194230	7699060	E0 E2	2000	196606	7699397	 	2120	190302	7090991
<u> </u>	2007	194229	7699120	 	2067	196635	7699367	 	2127	196372	7696906
<u> </u>	2006	194209	7699143	E3	2066	196664	7699300	 	2120	196390	7696923
E2 E2	2009	194190	7699155	E3 E2	2069	196694	7699300	E0 E2	2129	196413	7696901
E2	2010	194172	7699180	E3	2070	196744	7699387	E3	2130	196441	7696663
<u> </u>	2011	194100	7699213	= E3 = 2	2071	196791	7699360	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	2131	195313	7699603
<u> </u>	2012	194149	7699249	E0 E2	2072	190010	7699367	E4 E4	2132	195311	7699624
E2	2013	194149	7699264	E3 E2	2073	196679	7699359	E4	2133	195303	7699662
<u> </u>	2014	194100	7699320	= E3 = E2	2074	196910	7699304	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	2104	195326	7699000
<u> </u>	2015	194162	7699340	= E3 = 2	2075	190907	7699370		2130	195455	7699667
<u> </u>	2010	104200	7699300	E3 E2	2070	107047	7699300	<u> </u>	2130	105624	7699705
<u> </u>	2017	194300	7699300	 	2077	197047	7699309	<u> </u>	2137	195624	7699705
<u> </u>	2010	194405	7699374	= E3 = 2	2070	197120	7699361		2130	195660	7699705
<u> </u>	2019	104675	7699391	E3 E2	2079	107016	7699304	E4	2139	105721	7699074
<u> </u>	2020	194075	7699407	E0 E2	2000	197210	7699304	<u></u>	2140	195761	7699639
	2021	194000	7699531	E3	2001	107155	7609404	 	2141	105970	7699575
<u> </u>	2022	105190	7699571	E3	2002	107111	7609475	<u> </u>	2142	105995	7699349
<u> </u>	2023	105215	7699028	E0 E2	2003	107067	7696400	<u> </u>	2143	190660	7699490
<u> </u>	2024	195215	7699634	 2	2004	107007	7696433	<u></u>	2144	195901	7699432
<u> </u>	2020	105242	7600642	E3	2005	106027	7609200	<u> </u>	2140	195915	7600294
<u> </u>	2020	195242	7699043	E3	2000	190927	76090399	<u> </u>	2140	195927	7699204
<u> </u>	2027	195252	7699011	 2	2007	190004	7690300	<u> </u>	2147	195932	7099211
<u> </u>	2020	195045	7699000	E3	2000	196779	7696301		2140	195921	7699137
	2029	194605	7699473	E3	2009	196692	7696330		2149	195911	7699065
- E3 E2	2030	106470	7608003	E3 E2	2090	190093	7608220	E4	2150	105000	7602003
- E3 E3	2031	190472	7608000	E3 E2	2091	190000	7608250	E4	2101	105000	7602001
E3 E2	2032	190007	7090000	E3	2092	106204	7609309	<u></u> 4	2152	190880	7608750
 	2033	196031	7690009	 	2093	196301	7690300		2105	195667	7696752
E3	2034	190304	7696904	E3	2094	190239	7090417	<u>4</u>	2104	190820	7609730
- E3 E2	2030	190004	7696910	E3	2095	190100	7090400	E4	2100	190600	7608720
E3	2030	190044	7609042	E3	2090	106004	7698560	E4	2100	190822	7609744
- E3 E3	2037	190009	7090913	E3	2097	190084	7090000	<u>4</u>	2107	1908/9	7609724
- E3 E2	2036	190712	7690914	E3 E2	2090	196067	7090093	<u><u></u><u></u></u>	2150	190670	7609716
- E3 E2	2039	190/40	7696921	E3	2099	196061	7698600	E4	2159	190806	7609702
E3	2040	190/04	1090929	E 3	2100	190002	1030022	⊏4	2100	190872	1090/03

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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	D	Easting	Northing	Parcel	ID	Easting	Northing	Parcel	D	Easting	Northing
F4	2161	195882	7698692	F4	2221	195624	7698479	F4	2281	195022	7698651
F4	2162	195893	7698687	 F4	2222	195595	7698468	 F4	2282	194995	7698697
 	2162	195898	7698654	F4	2222	195568	7698454	E4	2283	194977	7698733
 	2164	195910	7698599	E4	2220	195536	7698449	 E4	2284	194967	7698754
 	2165	195928	7698568	E4	2224	195499	7698457	E4	2285	194942	7698802
	2166	195945	7698549	F4	2226	195478	7698467	 F4	2286	194915	7698857
 	2167	195970	7698527	E4	2220	195513	7698526	 E4	2287	194894	7698914
 	2168	195983	7698510	E4	2227	195519	7698539	E4	2288	194875	7698967
 	2160	105003	7698477	E4	2220	195543	7698617	E4	2280	194870	7698981
	2100	196004	7698454	 	2220	195547	7698633	 	2200	1948/2	7699043
<u> </u>	2170	196022	7698431	E4	2230	195552	7698704	E4	2200	194806	7699108
 	2171	196060	7698404	E4	2237	195553	7698719	E4	2201	194777	7609163
 	2172	196090	7608387	E4	2202	195551	7698730	E4	2202	194777	7600204
	2173	106148	7608356	E4	2233	105530	7608700	 	2200	194733	7600210
	2174	106194	7608330	E4	2234	105535	7609913	E4	2294	194742	7600252
	2175	190104	7696333		2230	195555	7690013		2290	194706	7699252
<u> </u>	2170	190247	7090207	E4	2230	105505	7090079	E4	2290	194095	7099200
	2177	196200	7696260	E4	2237	195505	7690092	E4	2297	194004	7699267
E4	2170	196334	7696241	E4	2230	195465	7696931	E4	2290	194630	7699263
E4	2179	196396	7698222	E4	2239	195447	7698988	E4	2299	194634	7699289
E4	2180	196474	7698209	E4	2240	195438	7699000	E4	2300	194621	7699291
E4	2181	196545	7698205	E4	2241	195386	7699056	E4	2301	194608	7699292
E4	2182	196641	7698206	E4	2242	195374	7699067	E4	2302	194595	7699291
E4	2183	196747	7698210	E4	2243	195363	7699075	E4	2303	194582	7699289
E4	2184	196759	7698211	E4	2244	195351	7699080	E4	2304	194569	7699284
E4	2185	196741	7698099	E4	2245	195294	7699102	E4	2305	194558	7699279
E4	2186	196725	7698098	E4	2246	195278	7699107	E4	2306	194547	7699271
<u>E4</u>	2187	196703	7698088	E4	2247	195267	7699109	E4	2307	194526	7699255
E4	2188	196683	7698089	E4	2248	195234	7699112	E4	2308	194514	7699243
E4	2189	196659	7698093	E4	2249	195218	7699112	E4	2309	194502	7699227
E4	2190	196639	7698086	E4	2250	195205	7699110	E4	2310	194496	7699215
E4	2191	196602	7698077	E4	2251	195193	7699107	E4	2311	194492	7699203
E4	2192	196547	7698074	E4	2252	195181	7699102	E4	2312	194490	7699190
E4	2193	196487	7698084	E4	2253	195169	7699095	E4	2313	194489	7699177
E4	2194	196458	7698105	E4	2254	195147	7699079	E4	2314	194490	7699164
<u>E4</u>	2195	196423	7698132	E4	2255	195136	7699069	E4	2315	194494	7699139
E4	2196	196378	7698152	E4	2256	195124	7699054	E4	2316	194498	7699124
E4	2197	196323	7698167	E4	2257	195117	7699043	E4	2317	194503	7699112
E4	2198	196270	7698179	E4	2258	195112	7699031	E4	2318	194509	7699100
E4	2199	196214	7698190	E4	2259	195108	7699017	E4	2319	194518	7699089
E4	2200	196168	7698196	E4	2260	195105	7699004	E4	2320	194539	7699051
E4	2201	196133	/698202	E4	2261	195104	7698991	E4	2321	194551	7699025
E4	2202	196107	/698217	E4	2262	195105	7698978	E4	2322	194571	7698970
E4	2203	196086	7698230	E4	2263	195108	7698965	E4	2323	194585	7698915
E4	2204	196055	/698240	E4	2264	195120	7698920	E4	2324	194605	7698847
E4	2205	196023	/698249	E4	2265	195124	7698908	E4	2325	194616	7698810
E4	2206	195995	/698261	E4	2266	195157	/698843	E4	2326	194627	/698759
E4	2207	195984	/698254	E4	2267	195167	/698828	E4	2327	194607	/698/55
E4	2208	195965	/698246	E4	2268	195201	/698/84	E4	2328	194460	/699196
E4	2209	195967	/698345	E4	2269	195222	7698754	E4	2329	194535	/699340
E4	2210	195969	/698420	E4	2270	195234	/698718	E4	2330	194640	/699383
E4	2211	195969	/698431	E4	2271	195236	/698676	E4	2331	194813	/699454
E4	2212	195963	7698443	E4	2272	195232	7698643	E4	2332	194876	7699476
E4	2213	195951	/698451	E4	2273	195224	7698616	E4	2333	195049	7699536
E4	2214	195901	7698453	E4	2274	195210	7698601	E4	2334	195258	7699592
E4	2215	195888	7698453	E4	2275	195190	7698587	E4	2335	195313	7699605
E4	2216	195851	7698453	E4	2276	195159	7698578	E4	2336	194986	7699171
E4	2217	195840	7698456	E4	2277	195134	7698578	E4	2337	195048	7699164
E4	2218	195717	7698456	E4	2278	195084	7698601	E4	2338	195081	7699180
E4	2219	195702	7698466	E4	2279	195067	7698612	E4	2339	195105	7699191
E4	2220	195659	7698479	E4	2280	195056	7698618	E4	2340	195099	7699208

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Derived Reference Points for GPS

Horizontal Datum: GDA94 Projection: Transverse Mercator MGA 94 Zone 55

Parcel	ID	Easting	Northing	Parcel	ID	Easting	Northina	Parcel	ID	Easting	Northina
F4	2341	195088	7699228	E5	2401	192753	7699167	E5	2461	192347	7699922
E4	2342	195068	7699244	 E5	2402	192700	7699115	 E5	2462	192339	7699952
	2343	195052	7699253	E5	2403	192665	7699086	E5	2463	192342	7699988
	2344	195029	7699247	E5	2404	192639	7699062	E5	2464	192339	7700014
	2345	195010	7699235	E5	2405	192628	7699054	E5	2465	192352	7700067
	2346	194989	7699234	E5	2406	192597	7699037		2466	192362	7700093
E4	2347	194962	7699238	E5	2407	192547	7699023	E5	2467	192367	7700105
E4	2348	194939	7699247	E5	2408	192520	7699022	E5	2468	192384	7700130
E4	2349	194917	7699255	E5	2409	192480	7699014	E5	2469	192391	7700145
E4	2350	194900	7699250	E5	2410	192462	7699019	E5	2470	192419	7700173
E4	2351	194897	7699227	E5	2411	192429	7699033	E5	2471	192450	7700188
E4	2352	194914	7699203	E5	2412	192375	7699063	E5	2472	192468	7700195
E4	2353	194951	7699182	E5	2413	192306	7699108	E5	2473	192503	7700231
E4	2354	194986	7699171	E5	2414	192263	7699143	E5	2474	192536	7700274
E5	2355	193011	7700425	E5	2415	192207	7699193	E5	2475	192559	7700310
E5	2356	193147	7700235	E5	2416	192160	7699232	E5	2476	192589	7700357
E5	2357	193244	7700067	E5	2417	192140	7699247	E5	2477	192628	7700396
E5	2358	193391	7699852	E5	2418	192131	7699265	E5	2478	192675	7700420
E5	2359	193470	7699740	E5	2419	192118	7699288	E5	2479	192713	7700426
E5	2360	193485	7699728	E5	2420	192111	7699300	E5	2480	192743	7700419
E5	2361	193455	7699711	E5	2421	192113	7699313	E5	2481	192770	7700398
E5	2362	193431	7699697	E5	2422	192115	7699333	E5	2482	192789	7700375
E5	2363	193407	7699679	E5	2423	192133	7699356	E5	2483	192794	7700354
E5	2364	193386	7699651	E5	2424	192151	7699396	E5	2484	192806	7700350
E5	2365	193369	7699619	E5	2425	192157	7699434	E5	2485	192828	7700338
E5	2366	193355	7699587	E5	2426	192159	7699468	E5	2486	192858	7700353
E5	2367	193347	7699562	E5	2427	192159	7699501	E5	2487	192867	7700377
E5	2368	193335	7699532	E5	2428	192173	7699514	E5	2488	192869	7700410
E5	2369	193326	7699512	E5	2429	192187	7699536	E5	2489	192845	7700454
E5	2370	193313	7699498	E5	2430	192197	7699480	E5	2490	192796	7700507
E5	2371	193292	7699484	E5	2431	192206	7699429	E5	2491	192732	7700550
E5	2372	193269	7699469	E5	2432	192221	7699382	E5	2492	192703	7700585
E5	2373	193251	7699453	E5	2433	192245	7699328	E5	2493	192671	7700608
E5	2374	193245	7699429	E5	2434	192275	7699280	E5	2494	192643	7700622
E5	2375	193232	7699396	E5	2435	192294	7699258	E5	2495	192609	7700640
E5	2376	193227	7699369	E5	2436	192299	7699227	E5	2496	192569	7700651
E5	2377	193213	7699348	E5	2437	192315	7699215	E5	2497	192552	7700665
E5	2378	193204	7699337	E5	2438	192327	7699229	E5	2498	192531	7700686
E5	2379	193196	7699325	E5	2439	192336	7699257	E5	2499	192509	7700702
E5	2380	193170	7699308	E5	2440	192360	7699264	E5	2500	192480	7700710
E5	2381	193143	7699297	E5	2441	192367	7699279	E5	2501	192463	7700727
E5	2382	193112	7699297	E5	2442	192355	7699293	E5	2502	192449	7700700
E0	2383	193085	7699301	ED	2443	192331	7699302	E0	2503	192448	7700799
E5	2384	193066	7699300	E5	2444	192312	7699315	E5	2504	192447	7700830
E0	2385	193044	7699294	E0	2440	192292	7699345	E0	2005	192449	7700024
E0 E5	2000	193018	7699281	E0	2440	192207	7699409	 	2500	192407	7700934
E0 E5	2307	192999	7600200	E0 E5	2447	192207	7699440	E0 E5	2507	192001	7700500
E5	2300	192990	7699299	E0 E6	2440	192247	7699507	E5	2500	192003	7700399
E5	2300	192900	7699342	ES	2449	192200	7699609	E0	2009	193011	1100420
E5	2301	192963	7699369	E5	2400	192250	7699665				
	2392	192969	7699399	E5	2452	192275	7699702				
E5	2393	192969	7699423	E5	2453	192297	7699735	-			
	2394	192956	7699443	E5	2454	192313	7699749	-			
E5	2395	192925	7699450	E5	2455	192335	7699760				
	2396	192900	7699412	 E5	2456	192358	7699776				
E5	2397	192875	7699388	E5	2457	192374	7699797				
E5	2398	192847	7699350	E5	2458	192384	7699830				
E5	2399	192829	7699293	 E5	2459	192376	7699868				
E5	2400	192809	7699234	E5	2460	192361	7699892				





Appendix 2. Proponent commitments

Commitment

Roads and Driveways

- The proposed road will be constructed as per Institute of Public Works Engineers of Australia (IPWEA) Standard Drawings generally including 7-8 m formation, 75 mm wearing course and table drains.
- 2. Access to each property off the realigned road will be constructed in accordance with IPWEA Standard Drawings for rural driveways.

Cultural Heritage

3. Flinders Shire Council (FSC) will work with the Yirendali Traditional Owner Group to develop mitigation strategies for cultural heritage values if required.

Groundwater monitoring

- FSC will monitor groundwater bores on a monthly basis. Water levels will be monitored at adjacent monitoring bores and automatic water level loggers installed to production bores to confirm that there are no impacts to the groundwater aquifer and associated ecosystems.
- In accordance with the Great Artesian Basin and Other Regional Aquifers Water Management Protocol (the Protocol) and associated water licence conditions, a meter which complies with the standards approved by DNRME will be used to measure the volume of water taken.

Best practice water management

- FSC will require that all development within the precinct implements best practice water management techniques (i.e. soil moisture testing, trickle irrigation, leak detection, etc.).
 FSC will develop a Water Management/Efficiency Plan inclusive of water inventory for end users as they come online and monitor actual usage against forecasts.
- 7. The Water Management/Efficiency Plan will outline the guiding principles to be adopted by all third party investors/growers within the precinct.

Sediment and erosion control

8. All temporary construction works will be managed in accordance with the International Erosion Control Association Best Practice Erosion & Sediment Control Guidelines and Catchment & Creeks Construction Site Managers Field Guide and Builders Field Guide.

Soil conservation

 A Soil Conservation Management Plan will be developed for the site in accordance with Department of Science, Information Technology and Innovation (2015) - Soil conservation guidelines for Queensland.

Environmental Management Plan

- 10. A Construction Environmental Management Plan (Planning) will also be developed for the project providing necessary guidance to third party investors/growers to ensure best practice construction phase management controls are implemented as follows:
 - all clearing works are to be undertaken in accordance with a Council approved Clearing Plan incorporating all conditions of approval and addressing all legal requirements. The Clearing Plan will include:
 - clearing to be in line with development of the site. No broad scale clearing of development lots will be permitted until all agreements between third party/investors and Council are in place.
 - development lots shall be surveyed and flagged to indicate the boundary of clearing works. Where development lots are within 50 m of buffer areas

separate flagging and delineation shall be installed identifying these as no go areas.

- a fauna spotter/catcher shall be engaged for the duration of all clearing activities.
- conduct pre-clearing survey (e.g. using a fauna spotter/catcher) of trees and surrounds to be undertaken to determine presence of nests and tree hollows.
- active nests are to be retained until occupants vacate.
- breeding places (i.e. tree hollows) are to be conserved where possible.
- Species Management Programs (generic and/or species-specific) conditions shall be implemented.

Acronyms and abbreviations

Acronym	Definition
CEMP	construction environment management plan
DNRME	Department of Natural Resources, Mines and Energy
DSDMIP	Department of State Development, Manufacturing, Infrastructure and Planning
FSC	Flinders Shire Council
FTE	full-time equivalent
GAB	Great Artesian Basin
ha	hectare
IAR	impact assessment report
IAS	initial advice statement
km	kilometre
km²	square kilometres
MCU	material change of use
ML	million litres
MSES	matters of state environmental significance
OW	operational works
RE	regional ecosystem
ROL	reconfiguration of a lot
SARA	State Assessment Referral Agency
SDPWO Act	State Development and Public Works Organisation Act 1971 (Qld)
VM Act	Vegetation Management Act 1999 (Qld)

Glossary

Term	Definition
alluvial aquifer	Shallow groundwater associated with unconsolidated material deposited by water (clay, silt, sand and gravel), typically occurring adjacent to a river
assessment manager	For an application for a development approval, means the assessment manager under the <i>Sustainable Planning Act 2009</i> (Qld).
construction areas	The construction worksites, construction car parks, and any areas licensed for construction or on which construction works are carried out.
coordinated project	A project declared as a ' coordinated project' under section 26 of the SDPWO Act. Formerly referred to as a 'significant project'.
Coordinator-General	The corporation sole constituted under section 8A of the <i>State</i> <i>Development and Public Works Organisation Act 1938</i> and preserved, continued in existence and constituted under section 8 of the SDPWO Act.
environment	As defined in Schedule 2 of the SDPWO Act, includes:
	 a) ecosystems and their constituent parts, including people and communities
	b) all natural and physical resources
	 c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community
	d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).
Great Artesian Basin (GAB)	The Great Artesian Basin contains about 65 million gigalitres of water, or the equivalent of 130,000 Sydney Harbours. The water is contained within layers of porous rock (aquifers), held in place under pressure by layers of impermeable rock, users take about 315,000 megalitres (ML) per year from the basin in Queensland.
initial advice statement (IAS)	A scoping document, prepared by a proponent, that the Coordinator- General considers in declaring a coordinated project under Part 4 of the SDPWO Act. An IAS provides information about:
	the proposed development
	 the current environment in the vicinity of the proposed project location
	 the anticipated effects of the proposed development on the existing environment
	 possible measures to mitigate adverse effects.
proponent	The entity or person who proposes a coordinated project. It includes a person who, under an agreement or other arrangement with the person who is the existing proponent of the project, later proposes the project.
Significant project	A project declared (prior to 21 December 2012) as a 'significant project' under section 26 of the SDPWO Act. Projects declared after 21 December 2012 are referred to as 'coordinated projects'.

Term	Definition
stated condition	Conditions stated (but not enforced by) the Coordinator-General under sections 39, 45, 47C, 49, 49B and 49E of the SDPWO Act. The Coordinator-General may state conditions that must be attached to a:
	• development approval under the Sustainable Planning Act 2009
	 proposed mining lease under the Mineral Resources Act 1989
	 draft environmental authority (mining lease) under Chapter 5 of the Environmental Protection Act 1994 (EPA)
	 proposed petroleum lease, pipeline licence or petroleum facility licence under the Petroleum and Gas (Production and Safety) Act 2004
	 non-code compliant environmental authority (petroleum activities) under Chapter 4A of the EP Act.
works	Defined under the SDPWO Act as the whole and every part of any work, project, service, utility, undertaking or function that:
	 a) the Crown, the Coordinator-General or other person or body who represents the Crown, or any local body is or may be authorised under any Act to undertake, or
	 b) is or has been (before or after the date of commencement of this Act) undertaken by the Crown, the Coordinator-General or other person or body who represents the Crown, or any local body under any Act, or
	 c) is included or is proposed to be included by the Coordinator- General as works in a program of works, or that is classified by the holder of the office of Coordinator-General as works.
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