Member of the Surbana Jurong Group

Preliminary Environmental Assessment

Bathurst Second Circuit

Prepared for: Bathurst Regional Council
Reference No: BTH-EN-01-REP-03
16/10/2018

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1. Introduction

1.1. Overview of the project

Bathurst Regional Council is proposing to develop a second circuit for motor vehicle racing at Mount Panorama, Bathurst, (the site), and associated facilities and infrastructure (the project).

It is proposed to lodge a development application (DA) for the project under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The project is regarded as State significant development (SSD) through the effect of schedule 1, clause 13(1)(e) of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), being development with a capital investment value of more than $30 million for a major recreation facility.

Further detailed DAs would be lodged for future stages of the project.

The indicative location of the project boundary is shown in Figure 2-1. The site is located to the west of the existing Mount Panorama circuit in a valley offering potential to introduce significant elevation changes into the circuit design.

The project would achieve a FIA[1] Grade 2 and FIM[2] Grade A certifications and include additional support facilities including primary pit building and paddock, and provision for a future cart circuit and hotel. Key features of the project are shown in Figure 3-2.

1.2. Purpose of the Preliminary Environmental Assessment

This report supports an application to the Department of Planning and Environment (DP&E) requesting the project be assessed as SSD under the provisions of the SRD SEPP and that the Secretary's Environmental Assessment Requirements (SEARs) be issued under section 4.12 of the EP&A Act and clause 3 of schedule 2 of the *Environmental Planning and Assessment Regulation 2000* for preparation of an Environmental Impact Statement (EIS) for the project.

This report:

- Describes the project
- Discusses the potential environmental issues for the project
- Identifies key environmental issues and other issues relating to the project
- Provides a scope of the assessments to be prepared for the EIS.

1.3. Project justification and public benefits

Mount Panorama is an important and historic road racing circuit located outside of Bathurst in western NSW. The first races were run in 1930 and except for World War 2, they have been held ever since. For over 50 years Mount Panorama has been considered as one of the most challenging race tracks in the world. It is a tight mountainous track that in the past has been used for a wide variety of racing categories. The circuit currently is certified to FIA Grade 3 for motorcar racing, however does not meet current motorcycle standards for racing.

It is currently the location for four full track events over the course of the year. It is best known as the home of the Virgin Australia Supercars Bathurst 1000 motor race held each October, and the Bathurst 12 Hour event held each February. However, up until 2000 the circuit hosted four days of motorbike racing held over the Easter long weekend. As a result, there has been a strong push to

[1] Fédération Internationale de l'Automobile / International Automobile Federation
[2] Fédération Internationale de Motocyclism / International Motorcycling Federation

bring motorbike racing back to the Mountain in order to maintain the place of Bathurst in Australian motorbike racing history.

The 6.213 km long track is technically a street circuit, and is a public road with normal speed restrictions when no racing events are being run. There are many residences which can only be accessed from the circuit. As a public road, on non-race days and when it is not closed off during the day as part of a racing event, Mount Panorama is open to the public. Cars can drive in both directions around the circuit for no charge. However, a strict speed limit of 60 km/h is enforced, and police regularly patrol the circuit.

Over the years of operation, the recreational and tourist facilities at the site have diversified to accommodate uses other than motor racing including archery, shooting and motor cross as well as the National Motor Racing Museum. These serve as local attractors for visitors and tourists. Additional investment has been made to develop a hotel on the site, operated by Mercure, that includes a conference centre.

Council has identified an opportunity to develop further infrastructure at Mount Panorama, and to extend the profile and utilisation of the facility. It is intended that the second circuit would be designed to accommodate motorbikes, which cannot use the current circuit due to safety requirements. The proposed second circuit would be a dedicated race facility and available year round for motorsport and auto industry use. Several major international/national race events would be held each year and would underpin the day-to-day operations associated with state and club level racing and tourism.

The design of the second circuit would allow for a number of configurations including a full international standard circuit and shorter national and club circuits. The full course is envisaged for high profile international events such as a round of the World Superbike Championship, with smaller national and club level events. The site would be accessible via the State highway network and would be unencumbered by private land use restrictions. The second circuit would be able to be operated concurrently with the adjacent Mount Panorama circuit.

Key justifications for the project include the following:

- While the existing Mount Panorama circuit is one of the most famous circuits in the world, it is no longer suitable for the safety requirements associated with modern motorbike racing
- The operator (Bathurst Regional Council) needs to ensure that the venue remains viable into the future, and capable of hosting the best motorsport the world has to offer
- The operator wishes to develop a facility that can deliver a larger number of events in a variety of race formats, and that would deliver the accompanying economic benefits to Bathurst and the Central West region all year round
- The Bathurst 1000 race injects tens of millions of dollars into the economy of the Central West, with accommodation booked out from the upper Blue Mountains to as far west as Cowra. There is the potential to significantly increase the regional economic benefits through a second circuit.
- A new circuit could host several major meetings each year as well as bike/car club days and private hire for car and bike manufacturers, media release track days and/or functions
- The location of the new circuit extension and the infrastructure planned around it also offers an opportunity to bring other sporting facilities to the immediate area and surrounds
- The potential for year-round use of the facility would enable additional sporting activities, technical education and industry development, and enhance the tourism focus of the local and wider region
- The proposed masterplan for the site would provide for additional future development such as a new hotel, which would provide further opportunities for regional economic benefits.

2. Site details

2.1. Site location

The site is located about 5 km south west of the regional City of Bathurst, about 200 km north west of Sydney, New South Wales. The project boundary being considered for this project includes the preliminary location for the second circuit track, pit and three site access points. The project boundary is demonstrated in Figure 2-1.

The project boundary is centred around Mount Panorama, which is culturally important to the local Aboriginal community, particularly in association with the major men's initiation place 'Wahluu'. Mt Panorama Wahluu was likely a place of mythological and spiritual importance to Wiradjuri people prior to contact, as with other similar prominent topographic features across Wiradjuri country. It has contemporary cultural values to the local Aboriginal community due to these traditional associations, and also as part of a movement of cultural revitalisation and reconnection currently underway across Wiradjuri country. The importance of this location to Aboriginal cultural values has been recognised in the dual naming process and is discussed further in Section 5.2.4.

Mount Panorama is also historically important, associated with construction of a racing track during the Depression, with motorcar racing dating back to the 1930s. Racing continues to be an important contributor to the local Bathurst economy, and is a regional tourist attraction.

Land use within the project boundary is characterised as low density agriculture and primary production. To the north of the project boundary is the rural residential suburb of Robin Hill. To the east of the project boundary is the existing Mount Panorama Motor Racing Circuit. To the south and west of the project boundary are cleared pastures and the rural district of Evans Plains.

2.2. Description of the site

The site is about 300 ha in area comprising gently undulating topography in a semi-rural landscape, extending about 2.6 km north to south and 2.3 km east to west. The site has been subject to past disturbance from various activities including farming, land clearance, ploughing, construction of dams and contour banks, general cultivation and animal grazing. Evidence of human disturbance is also evident by the installation of electricity supply across the south western extent of the site.

A sparse mid and tall storey mixture of native vegetation is present within the project boundary, predominately to the north-east and along an ephemeral creek line. The ephemeral creek line traverses the site from south east to north west. Mature vegetation within the project boundary may be associated with selective clearing to provide functional wind breaks and shade for livestock in pastures, as are the small artificial dams dotted throughout the project site.

The elevation of the site rises and falls along the north/south extent, from 760 m AHD[3] at the Mid Western Highway (A41) intersection to a peak of about 800 m AHD 500 m south of the intersection, and then falling again to about 760 m at the southern boundary. The gradient of the elevation change is about 9.5%.

[3] Australian Height Datum

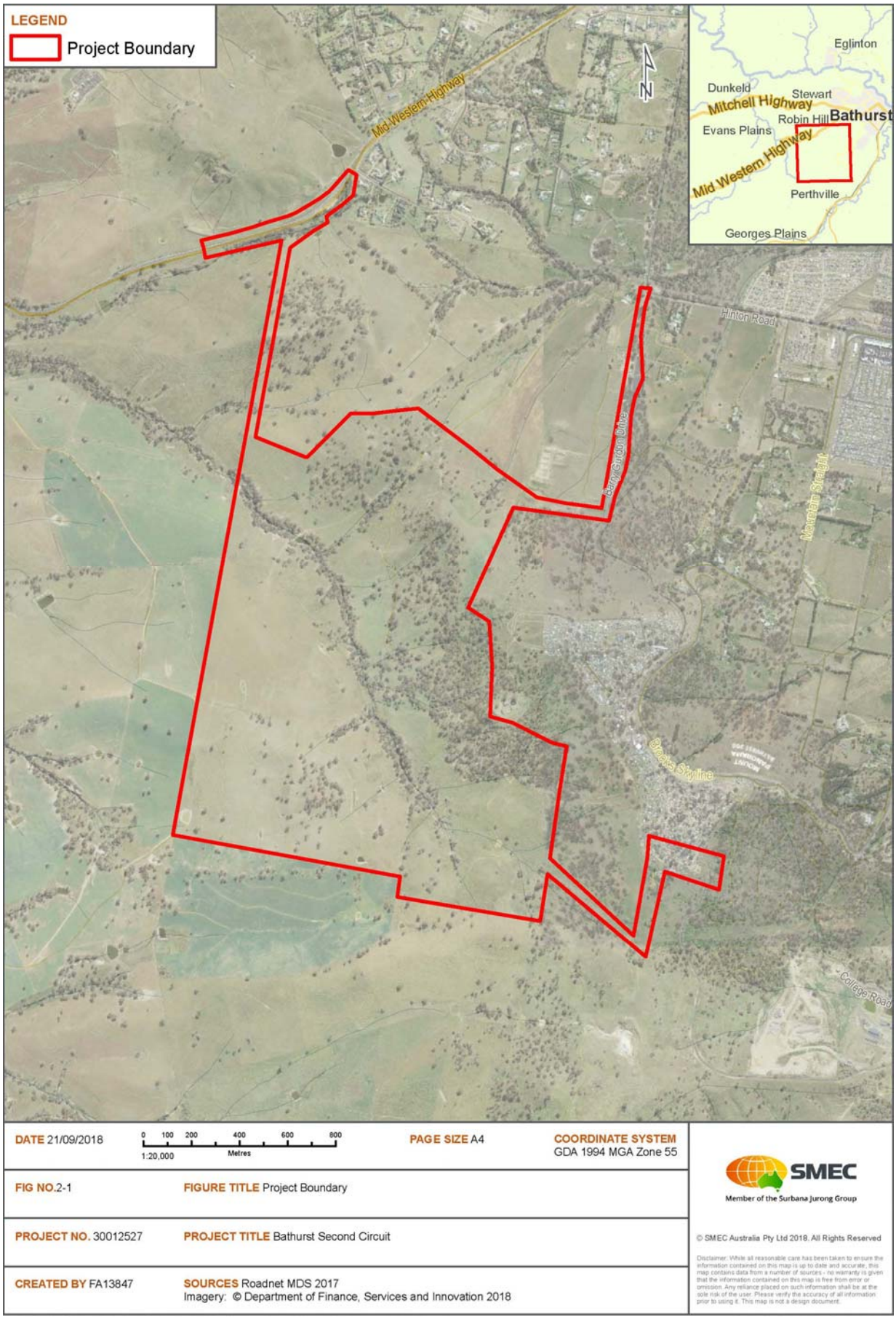

Figure 2-1: Project boundary

3. Description of the proposed development

3.1. Project overview

	Project detail
Address	Mid Western Highway about 200 m south west from McLennan Close, Robin Hill
Site description	The following lots are located within the project boundary (refer to Figure 3-1): • Lot 1 DP986862 • Lot 40 DP1056379 • Lot 1 DP634401 • Lot 2 DP634401 • Lot 9 DP1047248 • Lot 31 DP871410 • Lot 4 DP811653 • Lot 1511 DP135112 • Lot 1 DP154855 • Lot 5 DP864272 • Lot 30 DP871410 • Lot 148 DP750357 • Lot 1 DP1188058 • Lot 44 DP1018476 • Lot 1 DP1216175 • Lot 10 DP1047248 • Lot 1 DP700629 • Lot 3 DP700629 However, the project is likely to only impact on the following lots: • Lot 1 DP986862 • Lot 40 DP1056379 • Lot 1 DP634401 • Lot 2 DP634401 • Lot 9 DP1047248 • Lot 31 DP871410
Ownership	Bathurst Regional Council owns the following lots: • Lot 1 DP986862 • Lot 40 DP1056379 • Lot 1 DP634401 • Lot 2 DP634401 • Lot 9 DP1047248 Bathurst Regional Council has negotiated to partially acquire the following lot (formal lot and DP amendments would be provided in due course):

	Project detail
	• Lot 31 DP871410
LGA	Bathurst Regional Council
Zoning	The site is zoned: • SP3 Tourist • RU1 Primary Production • RU2 Rural Landscape • SP2 Infrastructure
Permissibility	The project is permitted with consent in all four zones.
Project	The project would involve the construction of a second motor racing circuit, spectator zone, flexible event space, automotive facilities (including a driver experience centre) and provisions for a future hotel.
Capital investment value	$50 - 55 million

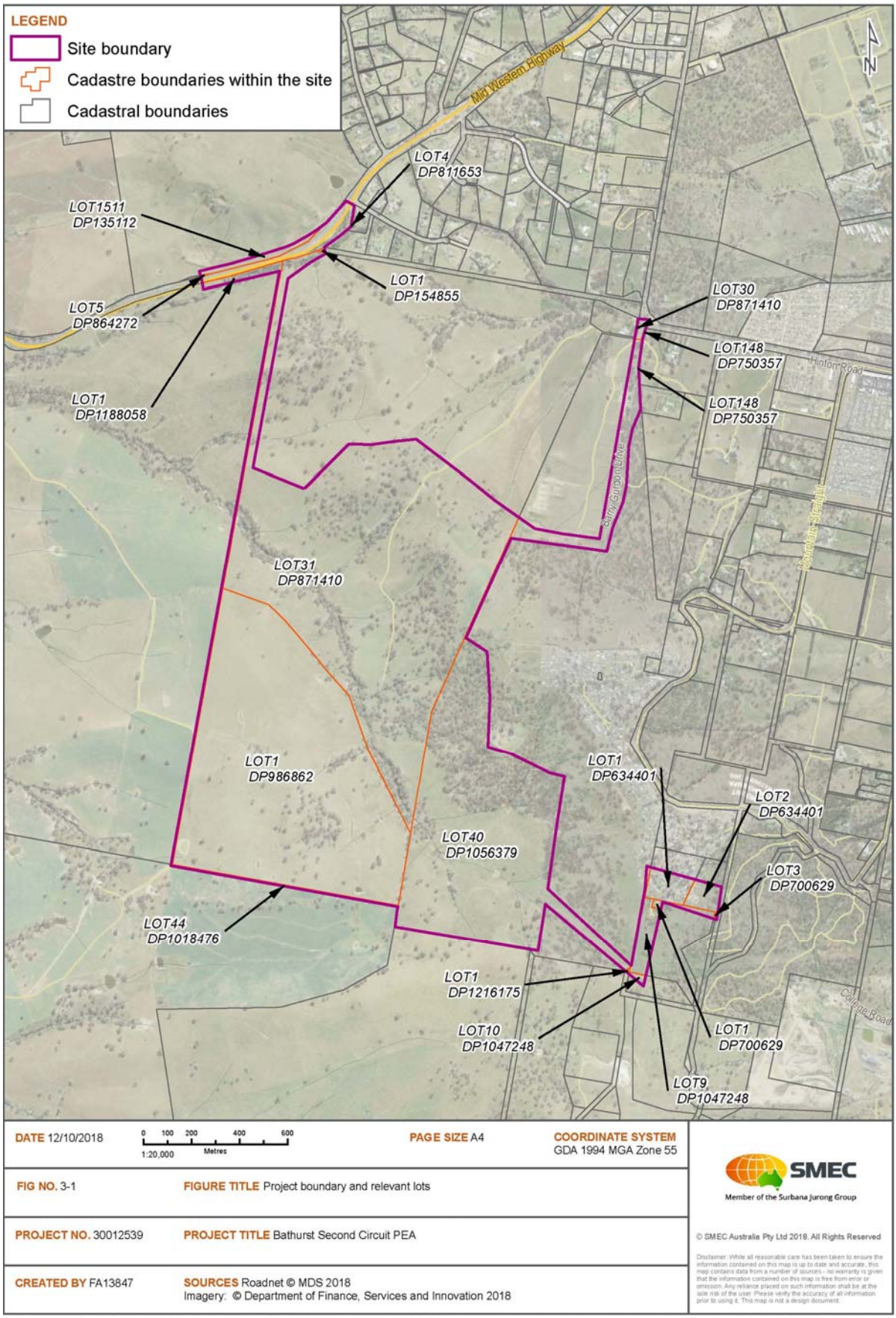

Figure 3-1: Project boundary and relevant lots

3.2. Proposed infrastructure

The project for the Bathurst Second Circuit comprises the following key components:

- FIA Grade 2 / FIM Grade A Circuit
  - National Circuit (around 4 km)
  - Club Circuit (around 2km)
  - Primary Pit building and Paddock, incorporating ancillary facilities (medical, amenities blocks, marshalling areas, refuelling bays, scrutineering compound and the like)
  - Spectator Zone / Flexible event space
  - Public vehicular and pedestrian entrances and carpark areas
  - Competitor access and carpark arrangements
  - Track safety structures including walls, runoff areas, debris fencing, flag marshalling structures
  - Burnout pad (to be incorporated in the main straight)
  - Ticketing / entry structure in the form of a gatehouse
  - Entry statement at the primary access location
  - Site lighting
  - Helipad
  - Site servicing (communications, sewer, water, power).

The project would involve construction of direct road access from the Mid Western Highway. A secondary access road (near the north-eastern boundary) is proposed off Barry Gurdon Drive. A tertiary access road (near the south-eastern boundary) is proposed off Brocks Skyline (which also connects to an existing access road to the top of Mount Panorama via College Road).

The land proposed to be used for the project and their specific uses are described as follows:

- Primary site access and track infrastructure on Lot 1 – DP986862
- Primary and secondary site access and track infrastructure through Lot 31 – DP871410
- Secondary site access and track infrastructure on Lot 40 – DP1056379
- Tertiary site access through Lot 9 – DP1047248
- Tertiary site access through Lot 1 and 2 – DP634401.

Key features of the project are demonstrated in Figure 3-2 however these elements are only in concept stage and are still being further developed.

Future additional facilities and infrastructure may be proposed for the site, however at this stage, these do not form part of the project to be assessed as SSD. These future provisions may include:

- Automotive facilities including:
  - Kart Circuit
  - Driver Experience Centre
- Hotel.

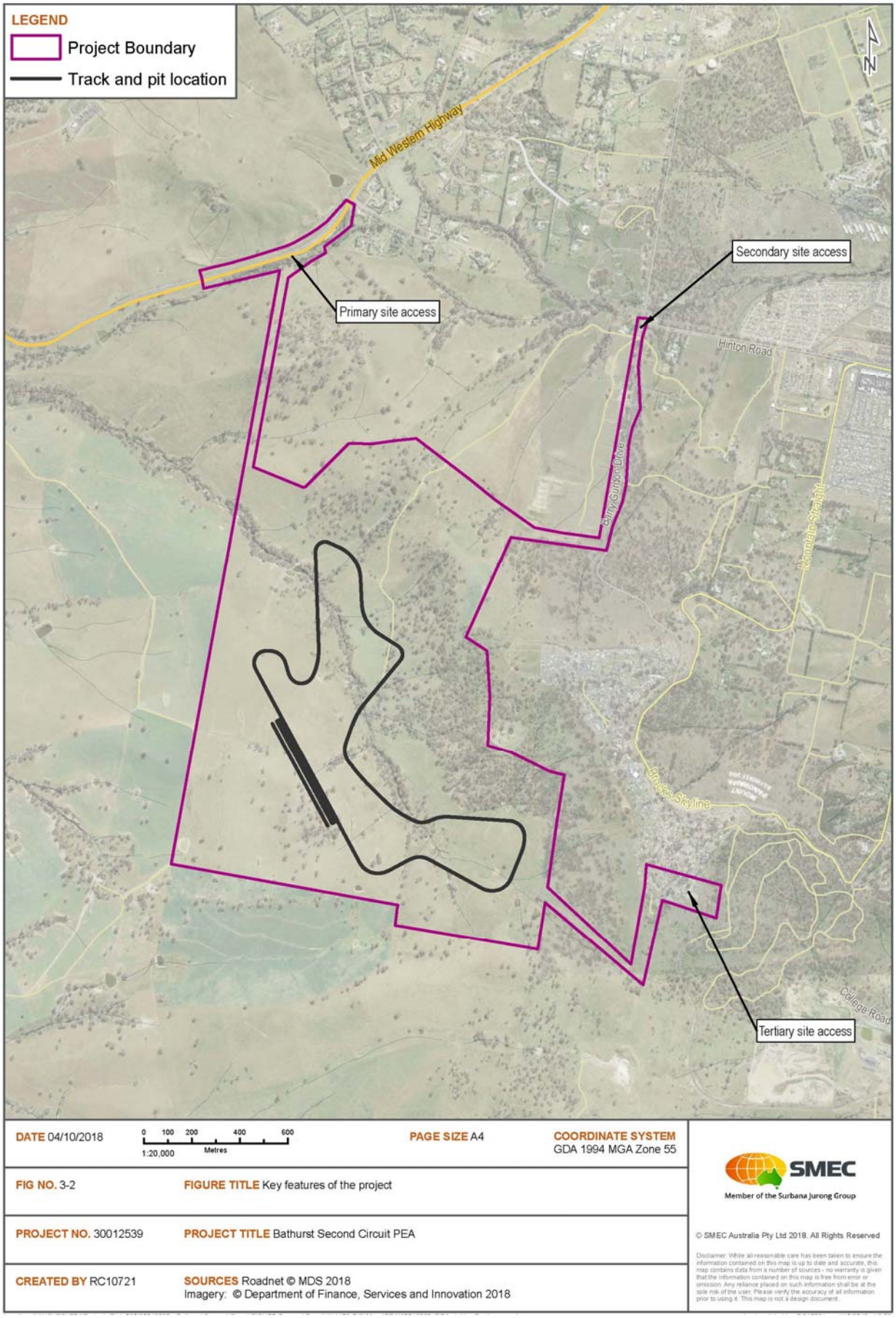

Figure 3-2: Key features of the project

3.3. Project timeframes

The proposed Bathurst Second Circuit would be delivered through the phased approach detailed in Table 3-1.

Table 3-1: Key stages and indicative timeframes

Key stage	Indicative timeframes
Master Plan	Aug 2018 – Jan 2019
Planning Approval (EIS)	Nov 2018 – Nov 2019
Circuit Homologation (FIA / FIM Approvals)	Jan 2019 – Aug 2019
Detail Design	Nov 2019 – Mar 2020
Commence Stage 1 construction	Nov 2020

3.4. Construction and operation

Construction is likely to occur over a period of 18 to 24 months, commencing in late-2020 subject to the timing of development consent and finalisation of project funding.

It is intended that the facility would have capacity to operate year round, with several major events each year attracting around 40,000 to 50,000 people, with lower numbers at other smaller events.

3.5. Consultation

A range of consultation activities have been conducted to date to inform the development of a future plan for options for Mount Panorama. The following sections summarise the consultation undertaken to date in relation to community and stakeholder engagement.

3.5.1. Community and stakeholder consultation

Previous consultation has been conducted as part of the Mount Panorama Regional Tourism and Recreation Strategy (Kellogg Brown and Root Pty Ltd, 2003), the Mount Panorama Second Circuit Feasibility Study (AECOM, 2010) and preliminary consultation with Aboriginal groups as part of the development of the ACHAR to support this assessment.

Consultation with various community and stakeholder groups has assisted in gaining an understanding of the community's association with Mount Panorama and their desired future character for the area.

Stakeholders consulted include, but are not limited to:

- Mount Panorama Second Circuit Action Group
- Events NSW
- Confederation of Australian Motorsport
- Citigate Mount Panorama (Rydges)
- Bathurst Business Chamber and local business representatives
- Supercars
- Tourism operators
- Media
- Public services

- Emergency service providers
- Other recreational groups.

Stakeholders and the community were generally supportive of the concept of a second circuit and did not want to change the existing circuit layout, however there were concerns raised relating to residential amenity due to access and noise generation. Based on consultation with stakeholders and interest groups there appears to be unmet demand for a range of uses for a second circuit, but there is little evidence of unmet demand for international motor racing events.

A number of other key themes emerged during consultation, including:

- There is a high demand for motor racing track time in NSW following the closure of the Oran Park circuit
- The existing facilities at Mount Panorama particularly the pit complex should be better utilised
- There is strong support for a wider range of uses to be undertaken at Mount Panorama including driver training, club racing and cycling events all of which could be held on a second circuit
- The second circuit has the potential to advance the economy of Central West NSW and Bathurst in particular by $15 to 20 million as a result of events on the national circuit and $50 million as a result of events on the international circuit per annum.

3.5.2. Aboriginal community involvement

Consultation with Aboriginal stakeholders with regard to the project commenced in November 2017 and was carried out by Extent Heritage, as part of preparation of an Aboriginal cultural heritage assessment report (ACHAR) for the project. Aboriginal consultation for the project has been undertaken in accordance with procedures set out in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW 2010a).

The consultation process identified 25 Aboriginal stakeholders in the region, with 16 organisations and individuals registering an interest in the project.

Due to the number of Registered Aboriginal Parties (RAP) and the small scale of the proposed initial archaeological survey, four groups based locally at Bathurst were engaged to participate in the fieldwork. These were:

- Bathurst Local Aboriginal Land Council
- Dhuuluu-Yala Enterprises
- Wiradjuri Traditional Owners Central West Aboriginal Corporation
- Bathurst Wiradyuri and Aboriginal Community Elders.

These parties and any others identified through consultation and public advertising would be invited to register as participants in further consultation relating to Aboriginal cultural heritage issues.

Results from consultation conducted to date indicate that some of the local Aboriginal groups have an ongoing connection to Wahluu and indicated that contemporary ceremonies are still performed there. Some Aboriginal community members also hold that Mount Panorama Wahluu is a sacred place, having intangible cultural heritage values associated with male initiation and the learning of law. However, there is disagreement and divergence of opinion on the specifics about the type of ceremonial activity that occurred and exactly where it was located.

Once a final design has been developed, the ACHAR would be updated to identify potential heritage impacts and appropriate mitigation measures. During this process, Aboriginal community consultation would be maintained, and copies of the updated report provided to the RAPs, for the 28 day review and feedback period.

If development impacts are anticipated within areas identified as having intangible cultural values, further consultation would be required with the RAPs in order to better characterise the nature of impacts and associated issues, and to develop appropriate mitigation measures.

4. Permissibility and strategic planning

4.1. NSW legislation

4.1.1. Environmental Planning and Assessment Act 1979

The EP&A Act provides the statutory framework for planning in NSW. Division 4.7 of the EP&A Act provides for certain developments to be declared SSD by means of a State Environmental Planning Policy (SEPP) or by order of the Minister for Planning. The project is considered to comprise SSD under *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). This is elaborated on in section 4.1.2 of this report.

SSD requires a proponent to apply to DP&E for development consent, supported by an Environmental Impact Statement (EIS). The EIS must take into account all State and Commonwealth legislative requirements and any additional environmental assessment requirements issued by the Secretary.

As SSD, the project would be assessed under Part 4 Division 4.7 section 4.36 of the EP&A Act. The Minister for Planning is the consent authority for SSD. The Minister (or the Minister's delegate) is required to take into consideration the matters listed under section 4.15 of the EP&A Act when determining the development application.

Under Division 4.4 section 4.39 an EIS is required to accompany a DA in respect of SSD.

This report supports an application for the issue of the SEARs for the project under section 4.12 of the EP&A Act and clause 3 of schedule 2 to the Environmental Planning & Assessment Regulation 2000.

4.1.2. State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP declares certain types of development and infrastructure to be of State and regional significance. Clause 8 of the SRD SEPP declares a development to be SSD where a development is not permitted without consent and is listed in schedule 1 or 2 to the SRD SEPP.

Schedule 1 of the SRD SEPP provides:

13 Cultural, recreation and tourist facilities

(1) Development that has a capital investment value of more than $30 million for any of the following purposes:

(a film production, the television industry or digital or recorded media,

(b) convention centres and exhibition centres,

(c) entertainment facilities,

(d) information and education facilities, including museums and art galleries,

(e) recreation facilities [major],

(f) zoos, including animal enclosures, administration and maintenance buildings, and associated facilities

The Standard Instrument – Principal Local Environmental Plan defines 'recreation facility (major)'

as a building or place used for large-scale sporting or recreation activities that are attended by large numbers of people whether regularly or periodically, and includes theme parks, sports stadiums, showgrounds, racecourses and motor racing tracks.

The proposed second circuit racetrack would have a capital investment value of over $30 million and is a recreation facility (major), as defined in the Standard Instrument – Principal Local Environmental Plan.

The project is considered to meet these two criteria for designation as SSD.

4.1.3. State Environmental Planning Policy (Infrastructure) 2007

Under Division 17, clause 104 of *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) development that has direct vehicular or pedestrian access to a classified road, such as the Mid Western Highway, must consider any potential traffic safety, road congestion or parking implications of the development.

Projects that are adjacent to road corridors must notify Roads and Maritime Services and take into consideration any response to the notice within 21 days.

The project would comprise a racetrack facility with capacity for 200 or more vehicles with access to any road and therefore require referral to Roads and Maritime Services in accordance with the ISEPP.

4.1.4. State Environmental Planning Policy No 55- Remediation of Land

State Environmental Planning Policy No 55—Remediation of Land aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

The site could potentially contain areas of contamination from past activities such as sheep dips or fuel spills. The EIS would consider the potential for contamination as part of the assessment.

4.1.5. State Environmental Planning Policy (Rural Lands) 2008

State Environmental Planning Policy (Rural Lands) 2008 aims to facilitate the orderly and economic use and development of rural lands for rural and related purposes. The SEPP requires that before granting consent the consent authority must consider any impacts the development will have on other uses in the locality.

The proposal would result in the reduction of land available for rural activities, and this would be assessed in the EIS.

4.1.6. State Environmental Planning Policy No 33 - Hazardous and Offensive Development

State Environmental Planning Policy No 33 - Hazardous and Offensive Development applies to any proposals which fall under the policy's definition of 'potentially hazardous industry' or 'potentially offensive industry'. The aims and objectives of the SEPP include ensuring that any application to carry out potentially hazardous or offensive development takes into consideration any measures proposed to be employed to reduce the impact of the development are taken into account.

Certain activities may involve handling, storing or processing a range of substances which in the absence of locational, technical or operational controls may create an off-site risk or offence to people, property or the environment

Under SEPP 33, the following definitions have been established:

- "hazardous industry" means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would pose a significant risk in relation to the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment.

- "hazardous storage establishment" means any establishment where goods, materials or products are stored which, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the establishment from existing or likely future development on the other land in the locality), would pose a significant risk in relation to the locality:
  - (a) to human health, life or property, or
  - (b) to the biophysical environment;
- "offensive industry" means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.

The EIS would consider the proposal in the context of the above definitions.

4.1.7. State Environmental Planning Policy No 44 - Koala Habitat Protection

State Environmental Planning Policy 44 Koala Habitat Protection (SEPP 44) seeks to encourage the proper conservation and management of areas that provide habitat for koalas, for LGAs listed in Schedule 1 of the SEPP, including Bathurst LGA.

Based on a preliminary site investigation there is potential for vegetation within the project boundary to be classified as 'koala habitat', this includes 'potential koala habitat' based on identification of feed tree species in accordance with State Environmental Planning Policy No 44 – Koala Habitat Protection. The potential impacts on koala habitat would be assessed as part of the BDAR.

4.1.8. Roads Act 1993

The objective of the *Roads Act 1993* (Roads Act) is to govern the use and access to public roads, manage opening and closing of public roads as well as providing classification of roads and identifying the functions of road authorities.

Classified roads fall into two major categories, state roads and regional roads, and include freeways, state highways, main roads, tourist roads and secondary roads.

While it is not proposed that the race circuits be classified as public roads, the access roads that are proposed as part of the project would be classified under the Roads Act. As there would be a connection to the Mid Western Highway, which is under the operation of NSW Roads and Maritime Services, Council would consult with Roads and Maritime Services regarding the project.

A road occupancy licence (ROL) would be required for construction of the intersection with the Mid Western Highway.

4.1.9. Biodiversity Conservation Act 2016

In 2016, the NSW Government made legislative changes to the way biodiversity impacts are assessed and approved in NSW. The *Native Vegetation Act 2003*, *Threatened Species Conservation Act 1995*, *Nature Conservation Trust Act 2001* and Part 6 of the *National Parks and Wildlife Act 1974* have been repealed, and replaced by the *Biodiversity Conservation Act 2016* (BC Act) and *Local Land Services Act 2016*.

The BC Act seeks to conserve biological diversity at bioregional and State scales; to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations; to assess the extinction risk of species and ecological communities and identify key threatening processes through an independent and rigorous scientific process; and to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity.

An assessment of the potential impacts of the project on threatened species, populations, ecological communities and critical habitat listed under the BC Act would be undertaken to inform the EIS.

Biodiversity impacts related to the proposal would be assessed in accordance with section 7.9 of the BC Act, the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR).

4.1.10. Fisheries Management Act 1994

The *Fisheries Management Act 1994* (FM Act) is the primary Act governing the management of fish and their habitat in NSW. The Act aims to conserve, develop and share the fishery resources of the State for the benefit of present and future generations.

This Act includes permanent and intermittent freshwater areas and 'water land' below the highest astronomical tide in tidal areas. 'Water land' is defined under the FM Act as land submerged by water, whether permanently or intermittently or whether forming an artificial or natural body of water and includes wetlands and any other land prescribed by the regulations as water land.

The ephemeral creek that traverses the project boundary is listed as ‘Key Fish Habitat’ of the NSW Department of Primary Industries (DPI) website. As such, any works requiring dredging or reclamation of water land would require a Section 201 permit and works involving obstruction of fish passage require a Section 219 permit from NSW DPI. There is the potential for the project to require one or both of these permits. The EIS would assess the potential impacts on fish habitat and include appropriate mitigation measures where possible.

4.1.11. National Parks and Wildlife Act 1974

Under the *National Parks and Wildlife Act 1974* (NPW Act), all Aboriginal objects and places are protected, irrespective of their level of significance or matters of land tenure. The Act sets up ‘strict liability’ offences for harming or desecrating Aboriginal objects and Aboriginal places (this type of offence may apply even if a person is unaware that they are harming an Aboriginal object). All persons are therefore responsible for taking reasonable precautions and exercising their due diligence to ensure that their actions would not harm Aboriginal objects. A person who exercises their due diligence has a defence against prosecution if they later unknowingly harm an object.

A number of Aboriginal objects have been recorded within the study area. Therefore, if development impact on an Aboriginal object is proposed, an Aboriginal Heritage Impact Permit (AHIP) must be issued by the Chief Executive of the Office of Environment and Heritage (OEH) under section 90 of the Act where harm to an Aboriginal object or gazetted Aboriginal Place cannot be avoided.

There are no gazetted Aboriginal Places within the Bathurst LGA. However, it is understood Mount Panorama Wahluu has been nominated by some of the Aboriginal stakeholders. If the Minister were to declare Mount Panorama Wahluu an Aboriginal Place, it would be provided with statutory protection under the NPW Act. The protection would apply to those heritage values and significant items for which the Place is listed.

The implications of the declaration of Mt Panorama Wahluu as an Aboriginal Place in the context of this project would be discussed in the ACHAR.

Further details regarding impacts on land reserved as a National Park, biological diversity and Aboriginal cultural heritage would be provided as part of the ACHAR and the EIS.

4.1.12. Rural Fires Act 1997

Sections 63(1) and 63(2) of the *Rural Fires Act 1997* require public authorities and owners/occupiers of land to take all practicable steps to prevent the occurrence of bushfires on, and to minimise the danger of the spread of bushfires on or from, that land.

Parts of the site are mapped as bush fire prone. This is discussed further in section 5.3.5.

4.1.13. Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) aims to protect environmental quality and prevent the degradation of the environment, reduce risk to human health and prevent the degradation of the environment. The POEO Act administers the regulation and authorisation of discharges into the environment through the issuing of Environment Protection Licences (EPLs) for activities listed under schedule 1 of the Act.

Part 3.2 of the POEO Act requires an EPL for scheduled development work and the carrying out of scheduled activities. The project would involve extensive earthworks that may involve the extraction or processing of more than 30,000 tonnes of materials in total over the construction period, and therefore most likely would trigger the need for an EPL.

Under the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), it is permissible for Council to use excavated (natural) material under a resource recovery exemption as engineering fill instead of disposing it. The soils and contamination assessment prepared to inform the EIS would include consideration of opportunities for resource recovery exemptions.

4.1.14. Mount Panorama Motor Racing Act 1989

The *Mount Panorama Motor Racing Act 1989* was enacted to facilitate and regulate major motor racing meetings at Mount Panorama near Bathurst. It applies to the current operations at the existing track on Mount Panorama and allows for a maximum of five major events to be held per year, during which, certain provisions of legislation may be temporarily suspended, these being:

- Section 40 of the *Road Transport (Safety and Traffic Management) Act 1999*
- Part of the *Protection of the Environment Operations Act 1997* that relate to noise
- *Roads Act 1993*.

Council is not seeking to amend the Mount Panorama Motor Racing Act to accommodate the proposed activities at the Bathurst Second Circuit and consequently this Act would not be applicable to the project. This would be confirmed in the EIS.

4.1.15. Draft Aboriginal Cultural Heritage Bill 2018

In February 2018, the NSW Government released the Draft Aboriginal Cultural Heritage Bill 2018, which proposed a new system for managing and conserving Aboriginal cultural heritage in New South Wales. The proposed new system aims to fulfil the NSW Government's commitment to deliver stand-alone legislation that respects and conserves Aboriginal cultural heritage for current and future generations. The bill also aims to recognise Aboriginal custodianship and ensure Aboriginal people have the authority to make decisions about Aboriginal cultural heritage, while providing clear and consistent processes for economic and social development in New South Wales.

Public consultation for the Draft Aboriginal Cultural Heritage Bill 2018 closed in April 2018. Feedback is currently being considered as the draft Bill is finalised.

The assessment would consider the relevance and implications of the new Bill to the project.

4.1.16. Bathurst Regional Local Environmental Plan 2014

The site is located on land mapped within the *Bathurst Regional Local Environment Plan 2014* (LEP), and is located within the following zones:

- RU1 – Primary Production
- SP3 – Tourist
- SP2 – Infrastructure
- RU2 – Rural Landscape.

The majority of the site is located on land zoned as RU1 and SP3. However, where the project boundary intercepts the Mid Western Highway, this area is zoned as SP2. The project would not impact on SP2 zoned land.

The objectives of zone SP3 are to complement the existing motor racing and associated activities, sports or recreation, while protecting and conserving the environmental characteristics of the land, particularly the scenic value of the locality. This zone also encourages the development of Mount Panorama as a regional recreation and tourist facility and as an international motor racing circuit.

The objectives of zone RU1 is to encourage diverse and sustainable primary industry production and enterprises, whilst maintaining the rural and scenic character of the land. This zone also aims to minimise conflict between land uses within and adjoining this zone and prevent the fragmentation and alienation of resource lands.

The objectives of zone RU2 are to encourage development that enhances Mount Panorama as an international motor racing circuit as well as providing for a range of compatible land uses. This zone also encourages primary industry production and seeks to maintain the rural landscape of the land.

The project is consistent with the objectives of zone SP3 and RU2 in complementing existing motor racing activities and in reducing fragmentation and conflict between adjoining land uses as part of zone RU1.

As a major recreation facility, the project is permitted with consent under SP3, RU1 and RU2. Roads are permitted without consent in all zones.

The Bathurst Regional LEP currently prohibits commercial activities in zone SP3 and zone RU1. This may preclude the proposed ancillary facilities unless amendments to the LEP are introduced.

4.2. Commonwealth legislation

4.2.1. Environment Protection and Biodiversity Conservation Act 1999

Matters of National Environmental Significance (MNES) are protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Council must not take an action that has, would have or is likely to have a significant impact on any MNES without approval from the Commonwealth Minister for the Environment.

Under the EPBC Act, an action is a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things.

Preliminary consideration has been given to the provisions of the EPBC Act. A search of the EPBC Act Online Protected Matters Search Tool has been conducted and it is considered unlikely that the project would have a significant impact on a matter of National Environmental Significance. Based on the preliminary site investigation, there is a high likelihood that vegetation within the north east of the project boundary aligns with *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Critically* Endangered Ecological Community (CEEC) listed under the EPBC

Act however grazing pressure appears to have impacted the groundcover species. The classification of vegetation within the project boundary with EPBC-listed communities would be confirmed as part of the EIS following detailed surveys.

Furthermore, the EIS would also consider land ownership details and the potential to impact on Commonwealth owned or leased land once the project footprint has been finalised.

5. Preliminary assessment of impacts

5.1. Methodology

This chapter provides an overview of the key environmental aspects and identification of the further detailed assessment that would be undertaken as part of the EIS process.

A desktop assessment has been undertaken to provide high level qualitative environmental risk profile for the project. The level of environmental risk was assessed through a consideration of the likely and potential environmental impacts of the project and the effective management of the identified impacts to minimise material harm to the environment.

While the approach to environmental risk review is qualitative, it provides an important step in the process of project planning and assessment of the environmental impacts. In particular, it is used to guide scoping of environmental investigations and assessments for the project and also to guide project design, and assist in identifying appropriate mitigation measures and management responses.

Key issues are those that may have high or moderate impacts (actual or perceived) and detailed assessment would be required to determine the level of potential impact and to develop appropriate measures to mitigate and manage impacts. Non-key issues are those that may have low to moderate impacts. Impacts can be mitigated by the application of standard environmental management measures. These issues are presented in Table 5-1 below.

Table 5-1: Identification of key issues

Environmental aspect	Issue category
Traffic and parking	Key
Noise and vibration	Key
Biodiversity	Key
Aboriginal heritage	Key
Visual amenity and landscape character	Key
Socio-economic	Key
Land use	Key
Historic heritage	Non-key
Air quality	Non-key
Soils and contamination	Non-key
Hydrology and water resources	Non-key
Bushfire, hazards and other risks	Non-key
Greenhouse gas and climate change	Non-key
Resources and waste management	Non-key

The study area relating to each environmental aspect is largely centred around the project boundary and the City of Bathurst. Some environmental aspects, such as biodiversity, would consider a larger study area to more appropriately anticipate potential impacts associated with the project. The extent of the study area relating to each environmental aspect would be clearly defined in the EIS.

5.2. Key issues

5.2.1. Traffic and parking

Overview

The project boundary connects to the Mid Western Highway to the north, Barry Gurdon Drive to the north east and an unnamed paved road off College Road to the southeast. The Bathurst railway station is located 3.5 km to the east of the project boundary and Bathurst Regional Airport is over 10 km to the north east of the site.

The Mid Western Highway is a 522 km state highway that services rural communities and links the Great Western, Mitchell, Olympic, Newell, Cobb and Sturt highways. The Mid Western Highway forms part of the most direct route road link between Sydney and Adelaide, with its eastern terminus in Bathurst and western terminus in Hay.

In 2003, traffic counts presented in Council's *Mount Panorama Regional Tourism and Recreation Strategy* identified that 1,441 cars were counted (seven day average) utilising the existing circuit. Allowing for double counting, resident movements and construction vehicles, it is likely that well over 300,000 people use the circuit every year for general recreational driving (Kellogg Brown and Root Pty Ltd, 2003).

The specific location and design of the track and associated facilities and access roads is yet to be determined, however the project would not impact on access to existing properties.

The site would be primarily accessed from the Mid Western Highway about 200 m south west of McLennan Close, Robin Hill. The project would involve construction of direct road access to the highway. A secondary access road (near the north eastern boundary) is proposed off Barry Gurdon Drive. A tertiary access road (near the south eastern boundary) is proposed off Brocks Skyline (which also connects to an existing access road to the top of Mount Panorama via College Road).

Final primary, secondary and tertiary access routes would be designed as part of the project for inclusion in the EIS. The preliminary locations of the access routes are demonstrated in Figure 3-2.

Summary of issues

In 2010, a public meeting jointly run by AECOM and the Mount Panorama Second Circuit Action Group (MPSCAG) identified traffic as a key issue in the development of the second circuit. Traffic impacts were also raised as a concern in individual submissions from the Feasibility Study exhibition.

Traffic concerns were largely centred around the previous proposed locations for the second circuit, east of the existing circuit. The new location proposed, west of the existing circuit, is anticipated to address some of the traffic concerns that have previously been raised during consultation.

Construction

The majority of the project would be constructed offline and construction impacts would be limited to construction traffic travelling along the highway and turning into and out of the site.

Temporary delays may occur during the construction of the new access road connections to the highway and local roads.

All construction parking would be contained within the project boundary.

Operation

The project has the following potential traffic and parking related operational impacts:

- There would be permanent changes to existing traffic movements on the Mid Western Highway and main road network in Bathurst as a consequence of the development of a new regional attraction that would be accessed primarily by private vehicles
- Increased volume of heavy vehicle traffic on the local road network, resulting in degradation, congestion and the potential for increased accidents
- Increased visitation to the surrounding locality during race events
- Potential influx of high numbers of visitor vehicles during race events that need to be accommodated within the site
- Potential impacts on traffic flows on the highway at peak times during race events.

Scope of the assessment for the EIS

Traffic is anticipated to be a key issue for the project and a specialist traffic and transport study would be prepared to inform the EIS. The specialist study would identify potential traffic-related impacts associated with the project and nominate mitigation measures to minimise identified impacts.

The specialist study would assess the following construction traffic (vehicle, pedestrian and cyclists) impacts:

- A considered approach to route identification and scheduling of transport movements (spreadsheet analysis)
- The number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements) (spreadsheet model)
- Construction worker parking
- The nature of existing traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users and parking arrangements)
- Transportation of materials and equipment to site
- Access constraints and impacts on public transport, pedestrians and cyclists
- Access arrangements to the proposed works areas as well as any temporary access points
- The need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project.

The specialist study would assess (and model) the following operational traffic impacts of the project:

- Forecast travel demand and traffic volumes for the project and the surrounding road, cycle and public transport network (spreadsheet model)
- Travel time analysis (spreadsheet model)
- Performance of the primary access intersections by undertaking a level of service assessment
- Wider transport interactions (local and regional roads, cycling, public and freight transport)
- Induced traffic and operational implications for public transport (particularly with respect to strategic bus corridors and bus routes) and consideration of opportunities to improve public transport
- Impacts on cyclists and pedestrian access and safety
- Opportunities to integrate cycling and pedestrian elements with surrounding networks and in the project.

5.2.2. Noise and vibration

Overview

Land uses surrounding the project boundary comprises a variety of uses, including Mid Western Highway and low density residential areas to the north, agricultural land to the south and west, and the existing Mount Panorama circuit to the east.

The existing circuit is currently used for four major events annually:

- Virgin Australia Supercars Event is conducted over four days in October. The event utilises the full circuit, with supercars being the main category comprised of 32 vehicle entries in the main class, with over 120 support category entries
- Liqui Moly Bathurst 12 Hour event is conducted over four days the festival utilises the full circuit with the 12 Hour Race being the main event comprised of 47 entries and over 220 support entries
- Bathurst 6 Hour event is conducted over four days at Easter the festival utilises the full circuit. The event caters for historic sports and touring cars, marquee and production sports cars with in excess of 500 entries, with the main event a 6 Hour Race
- Challenge Bathurst is conducted over five days the event utilises the full circuit and is by invitation only. The event has two categories, one for racing and one for driver training. This is a non-spectator event, resulting in lower impacts on surrounding land uses.

In addition to the four major events, a number of smaller events are held both on the circuit and within the surrounding area such as:

- Motocross events located at the top of the mountain. The motocross events are conducted mostly in the winter months, with seven events annually comprised of one day per event. Entries range from 80 to 170 depending on whether the event has national, state or club status
- Hill Climb events are held six times annually and mostly consist of two day events utilising five different variations of the circuit. Entries can vary between 50 to over 200 depending on whether it is a national, state or club event. About 10 generators located mainly around the lower part of the circuit, pit complex and corporate viewing areas are typically required
- Valvoline Autofest, held typically in March each year, including Go To Whoa, AutoKana, Burnout competition, Dynocomp, Supersprints, trade shows and Show and Shine
- Additionally, an archery club, pistol club and rifle and shotgun club operate ranges in the area surrounding the circuit.

These events typically generate a high level of noise, however the *Mount Panorama Motor Racing Act 1989* provides an exemption for the listed ***full track*** events on the track each year. An initial review of the Act suggests these provisions would not apply to the project, and this would be confirmed in the EIS.

Summary of issues

Construction

Construction activities would involve the operation of plant and machinery that would have associated noise and vibration emissions which could impact on nearby receivers, both in relation to amenity and impacts to other sensitive structures.

Recommended noise guidelines for construction are set out in the *Interim Construction Noise Guideline* (ICNG) (DECC, 2009). The guidelines for construction noise are based on the anticipated length of the proposed construction period. As the construction would be longer than three weeks, it would be classified as a major construction project.

Operation

The proximity to the Mount Panorama ridge, and the distance from the suburban residential developments to the north and north east would minimise adverse noise impacts for surrounding residents. Sensitive receivers located along McLennan Close are already affected by existing traffic noise from the Mid Western Highway, however it is noted that the operation of the second circuit would generate a different type of noise to existing traffic.

A previous study (iEDM, 2016) estimated that adverse noise impacts for neighbouring properties would be 50 dB(A) or less for the type of track operations deemed feasible for the project, however this would be assessed as part of the noise and vibration assessment for the project.

Criteria for assessment of road traffic noise are set out in the NSW Government's Road Noise Policy (RNP) (DECCW, 2011). Although the project would not involve the construction of a 'new road' it would bring extra traffic to local roads during events. Road noise associated with the use of the proposed site access roads would need to be considered as part of the project.

Monitoring and regulation may lead to the number of events being modified depending on the actual noise levels recorded.

Scope of the assessment for the EIS

Noise and vibration would be a key issue for the assessment and a detailed noise and vibration impact assessment working paper would accompany the EIS. This assessment would identify potential impacts and nominate mitigation measures to minimise impacts.

Further noise and vibration assessment of the project would include the following, as relevant:

- A detailed assessment of construction and operation noise and vibration impacts, including the consideration of areas where out of hours or night-time works can be undertaken within minimal impacts, would be included in a noise and vibration report. This assessment would include monitoring and measuring existing noise levels, predicting future traffic noise levels (modelling), and development of appropriate noise mitigation/attenuation measures
- The noise and vibration assessment would consider potential vibration impacts on sensitive or potentially sensitive heritage items (this would need to be informed by the recommended historic heritage and Aboriginal heritage investigations).

The assessment of noise and vibration impacts for construction and operation would be undertaken with the following guidelines as relevant:

- Department of Environment, Climate Change and Water (DECCW) (2011) NSW Road Noise Policy
- Department of Environment and Climate Change (DECC) (2006) Assessing Vibration – a technical guideline
- DECC (2009) Interim Construction Noise Guideline
- Standards Australia (1997) Australian Standard AS2670.2 Evaluation of human exposure to whole-body vibration
- British Standards Institution (2009) BS5228:2009 Part 2 Code of Practice for noise and vibration control on construction and open sites - Vibration
- Deutsches Institut für Normung (1999) DIN 4150: Part 3 – 1999 Effects of vibration on structures.

5.2.3. Biodiversity

Overview

The site is approximately 300 ha and is approximately 5 km south west from Bathurst's central business district (CBD). The site is adjacent to Mount Panorama and contains undulating slopes, drainage lines and small crests.

A review of regional vegetation mapping for the site identified 'BVT 4 Mountain Gum - Red Stringybark open-forest' at high altitudes and 'BVT 43 Scribbly Gum - Brittle Gum - Box woodland' along the lower slopes and drainage line (DEC, 2006[4]). Whilst, most of the site is grassland; the grassland has not been mapped in the regional vegetation mapping.

Regional vegetation mapping is broad-scale and does not necessary accurately reflect the vegetation communities present at the site. A preliminary site inspection of the site was undertaken in September 2018 to ground-truth the regional mapping and gain a basic understanding of the biodiversity features of the site to inform the detailed design of future surveys.

The site inspection revealed that the lower slopes and flatter parts of the site have been extensively cleared, with remnant native vegetation limited to paddock trees or semi-intact woodland patches. However, patches of vegetation exist along the drainage lines, as well as on the mid to upper slopes and crests. The site has been extensively grazed by kangaroos and livestock. Consequently, native understorey and ground storey species are limited.

The site inspection revealed that vegetation communities within the project boundary are broadly consistent with the regional vegetation mapping. Vegetation within the north east of the project boundary appears to align with *White Box Yellow Box Blakely's Red Gum Woodland* Endangered Ecological Community (EEC) listed under the BC Act. There is also a high likelihood that parts of the vegetation within the project boundary also align with *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* Critically Endangered Ecological Community (CEEC) listed under the EPBC Act; however grazing pressure appears to have impacted the groundcover species. More detailed surveys would be required to determine whether the vegetation and any associated grassland meets the minimum condition requirements as per the Listing and Conservation Advice (TSSC, 2006[5]).

Priority weeds listed under the NSW *Biosecurity Act 2015*, including Blackberry (*Rubus fruticosus* species aggregate) and Serrated Tussock (*Nassella trichotoma*), were also observed within the project boundary.

A database search for the site identified 11 threatened flora species, 33 threatened fauna species and 12 migratory species with a known occurrence or potential occurrence within 10 km of the site.

Whilst no threatened flora species were recorded during the preliminary site inspection, the following threatened flora species are considered to have a moderate to high potential to occur within the site:

- Aromatic Peppercress (*Lepidium hyssopifolium*) (Endangered, BC Act and EPBC Act)
- Black Gum (*Eucalyptus aggregata*) (Vulnerable, BC Act and EPBC Act)
- *Zieria obcordata* (Endangered, BC Act and EPBC Act)
- *Leucochrysum albicans var. tricolor* (Endangered, EPBC Act)
- Silver-leafed Gum (*Eucalyptus pulverulenta*) (Vulnerable, BC Act and EPBC Act)

Two threatened fauna species were observed in the site during the site inspection; the Dusky Woodswallow (*Artamus cyanopterus cyanopterus*) and Little Eagle (*Hieraaetus morphnoides*).

[4] DEC (2006) 'Reconstructed and extant distribution of native vegetation in the Central West Catchment.' NSW Department of Environment and Conservation, Dubbo.

[5] Threatened Species Scientific Committee (TSSC) (2006). 'Commonwealth Listing Advice on White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.' Available from: http://www.environment.gov.au/biodiversity/threatened/communities/box-gum.html. In effect under the EPBC Act from 18-May-2006. Accessed: 3 October 2018.

Preliminary site investigations identified hollow-bearing trees in the riparian and woodland habitats at the site. It is expected that suitable foraging and breeding habitat for an additional 22 threatened species occurs within the project boundary.

There is also potential for vegetation within the site to be classified as koala habitat, including 'potential koala habitat' based on identification of feed tree species in accordance with *State Environmental Planning Policy No 44 – Koala Habitat Protection*.

A broader suite of species would be considered as part of the detailed biodiversity investigations for the EIS.

Summary of key issues

The project would potentially impact on BC Act listed *White Box Yellow Box Blakely's Red Gum Woodland* EEC and EPBC Act listed *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* CEEC. The derived native grassland components of these communities may also be impacted should the vegetation meet the minimum condition thresholds. Vegetation removal for the project would likely contribute to loss of parts of this TEC affecting habitat and resulting in further fragmentation of this community within the locality.

Hollow-bearing trees provide habitat for threatened species such as forest owls, woodland birds and microbats, which may occur within the investigation area. As such, the project has the potential to have both direct and indirect impacts on threatened species and their habitat present within the project boundary.

Priority weeds are known to occur in parts of the site. Continued weed invasion and encroachment could have potentially severe consequences for habitat of flora and fauna occurring in the area. This, however, is largely a management issue for construction rather than design development.

Construction and operation of the project has the potential for the following biodiversity related impacts:

- Clearing of TSC Act listed *White Box Yellow Box Blakely's Red Gum Woodland* EEC and potentially EPBC Act listed *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* CEEC
- Clearing of vegetation and associated habitat for native fauna
- Potential impacts on habitat corridor and wildlife connectivity within the locality
- Possible introduction or spread of environmental weeds or diseases
- Possible increase in mortality/injury to fauna species during proposal operation
- Potential sediment, nutrient and pollutant run-off into adjacent vegetation and animal habitats
- Noise and vibration disturbances to fauna
- Light disturbance to fauna.

Scope of the assessment for the EIS

Biodiversity is considered a key issue for the SEARs and a detailed biodiversity impact assessment would accompany the EIS.

Biodiversity impacts related to the proposal would be assessed in accordance with section 7.9 of the BC Act, the BAM and documented in a BDAR. The BDAR must include information in the form detailed in the BC Act (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and BAM, unless OEH and the DP&E determine that the proposed development is not likely to have any significant impacts on biodiversity values. A referral to the Commonwealth Department of Environment and Energy may be required to satisfy assessment obligations under the EPBC Act.

The detailed biodiversity assessment would provide the following:

- Detailed impact assessment as required under the BC Act and the EPBC Act for any threatened species, populations and ecological communities considered likely to be present in the site. It is important to note that there is currently no bilateral agreement for biodiversity assessments that meet the requirements under both the BC Act and EPBC Act. As such, a separate assessment to satisfy EPBC assessment requirements may be needed
- Investigations for design to avoid impacts on TECs and any other threatened biota (or their habitat), as far as practicable
- Identification of PCTs requiring offsetting
- Measures of the impact to ecosystem credits and species credits of the project on biodiversity values at the development site
- Credit profiles for ecosystem credits and species credits at the development site
- A credit price for payment to the Biodiversity Conservation Trust (BCT) as an indication of offset costs.

5.2.4. Aboriginal heritage

Overview

Mount Panorama Wahluu has intangible cultural heritage values to the local Aboriginal community. Mount Panorama Wahluu was likely a place of mythological and spiritual importance to Wiradjuri people prior to contact, as with other similar prominent topographic features across Wiradjuri country. It has contemporary cultural values to the local Aboriginal community due to these traditional associations, and also as part of a movement of cultural revitalisation and reconnection currently underway across Wiradjuri country.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) is currently being prepared for the project to ensure the Aboriginal heritage objects, sites and values are understood and appropriately managed within the second circuit study area.

The key findings of the archaeological assessment were as follows:

- The study area contains four registered sites Aboriginal sites. Of these registered sites:
  - further investigation indicates a potential scarred tree, is not Aboriginal in origin
  - one site comprises a stone arrangement already recorded as destroyed and no longer exists
  - a scarred tree has already been subject to previous impact and is in a poor state of condition, sawn in half through the scar
  - one site relates to Aboriginal Ceremony and Dreaming and is considered by the Aboriginal groups to have intangible cultural values. No Aboriginal objects have been identified within the site.
- Six newly identified sites were recorded within the draft ACHAR study area during the on-ground survey work
- Archaeologically sensitive areas were identified within the study area including relatively undisturbed areas situated on ridgelines, hillcrests, creek lines and creek flats. Discrete artefacts scatters were found along the creek line and it is considered likely that buried sub-surface archaeological deposits could be present in these locations.

Summary of issues

Currently, specific details of the potential heritage impacts within the study area are unknown, given that a design plan for the track has not yet been finalised. However, the following indicative impacts have been identified:

- Based on other ongoing investigations, part of the study area associated with Mount Panorama Wahluu has been nominated by some members of the local Aboriginal community as an

Aboriginal Place, but is not currently gazetted. If the Minister were to declare Mount Panorama Wahluu an Aboriginal Place, the Place would be provided with statutory protection under the NPW Act. The protection would apply to those heritage values and significant items for which the Place is listed

- Development of the circuit would entail substantial earthworks designed to modify current ground levels across the study area and prepare the site for construction. It is considered that the project would be a high impact activity that would affect multiple landforms within the study area
- Currently details of the potential heritage impacts within the study area are unknown, given that a design plan for the track has not yet been finalised. However, sensitivity zones within the study area have been identified
- Development undertaken within areas of high sensitivity is considered likely to cause harm to Aboriginal objects and impact upon intangible cultural heritage values. Areas identified as having high sensitivity include registered archaeological sites and newly identified sites known to feature Aboriginal objects.

Scope of the assessment for the EIS

Impacts on Aboriginal cultural heritage would be a key issue for the assessment and an updated finalised ACHAR would be prepared to identify potential impacts and nominate mitigation measures to minimise impacts.

Once a concept design has been developed, potential heritage impacts would be assessed in the ACHAR, with additional investigation where required (e.g. a test excavation program) and appropriate mitigation measures can be developed.

The ACHAR for the project would be prepared in accordance with the following policy documents and heritage guidelines:

- DECCW (2010) Aboriginal Cultural Heritage Consultation Requirements for Proponents
- DECCW (2010) Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW
- OEH (2011) Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.

The ACHAR would also fulfil the requirements of the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2010). This assessment would also address:

- Ongoing consultation with OEH and the local Aboriginal community throughout the environmental impact assessment process
- The development of management measures to identify opportunities to minimise impacts on Aboriginal heritage.

Once a final design has been developed, the ACHAR would be updated as it may be required to support an application for an AHIP. During this process, Aboriginal community consultation would be maintained, and copies of the updated report provided to the RAPs.

Sites cards for the newly identified sites would be submitted to OEH for inclusion on the Aboriginal Heritage Information Management System (AHIMS) database.

5.2.5. Visual amenity and landscape character

Overview

The principle feature of the site is a valley formed by the Mount Panorama ridgeline to the east and the parallel lower ridgeline to the west. The site is situated on a relatively high point in the landscape

comprising an east west trending ridgeline/plateau. To the north east, the topography descends down to the general locality of Bathurst.

The majority of residential development is located north east of the site. The closest suburbs are Mount Panorama and Robin Hill which are suburbs on the western edge of the regional centre of Bathurst. The site is visually hidden from the western plains and the Bathurst township to the east by the shielding ridgelines. The most evident line of sight to the site is from the Mid Western Highway.

The overall site within the project boundary can be defined by a series of grassy rolling hills, with vegetation covering the slopes of Mount Panorama. The site exhibits beautiful vistas to the west that creates a different and unique aesthetic when compared to other areas of the Bathurst Plains.

The east west extent of the project boundary is about 2.3 km and the north south extent about 2.6 km. The site encompasses large parts of undeveloped farm land that has been subjected to some form of previous land use or disturbance including farming, land clearance, ploughing, construction of dams and contour banks, general cultivation, animal grazing, quarrying of basalt and topsoil. Previous disturbance is also evident by the construction of a rifle range club and motorbike track along the ridgeline and western slopes of Mount Panorama.

Large areas of vegetation are present within the project boundary, particularly along the eastern boundary and along an ephemeral creek line that traverses the site. Vegetation along the creek line extends to the north west connecting to Evans Plains Creek.

A high voltage electrical supply traverses the project boundary in a north west to south east direction. This connects to a major substation off the Mid Western Highway, immediately to the north east of the site.

The site within the project boundary is largely defined by broad land use types, including:

- Modified grazing pastures
- Remnant stands of native vegetation
- Ephemeral creek.

Summary of issues

Construction

Construction of the project has the potential for the following visual amenity and landscape character assessment related impacts, particularly to the adjoining visual catchment:

- Visual impacts associated with construction activities, sites/compounds including machinery, temporary structures and physical impacts. Given the location of the proposed facilities on the western slopes of Mount Panorama, works may be visible over a wider regional catchment
- Removal of vegetation within the site to facilitate construction may cause negative visual impacts to motorists and adjoining residents.

Operation

Operation of the project has the potential for the following visual amenity and landscape character assessment related impacts:

- Visual impacts relate primarily to design and as such, design development should provide for consideration of opportunities to ‘design out’ or minimise visual impacts where practicable and cost effective
- Additional road infrastructure in the site would make the road more visually dominant in the landscape
- Removal of vegetation would potentially reduce the level of screening of views, particularly near residential receivers along McLennan Close to the north

- Mitigation of noise from motor racing activities could require some form of noise barrier which would introduce a new built element into the local landscape. Design considerations would be integrated into the overall design development process and be consistent with the mitigation strategy developed for the project.

Scope of the assessment for the EIS

Visual amenity and landscape character is considered a key issue for the assessment. The assessment would focus principally on the long term impacts of the project (including mitigation provided through landscaping and plantings) but would also provide consideration of shorter term impacts associated principally with construction. The assessment would include identification of key view points and sensitive receptors, and impacts upon these. The EIS would also report how design development has sought to minimise the removal of vegetation where practicable.

Architectural plans and a landscape strategy would be prepared as part of the supporting information for the DA and included in the EIS.

5.2.6. Socio-economic

At the PEA level, the key demographics for the site have been assessed in comparison to Bathurst LGA and Regional NSW to provide local and regional context.

The site is located in the Mitchell-Robin Hill-Mount Panorama region[6] of the Bathurst local government area (LGA). Bathurst is a major regional centre in the Central Tablelands of north western NSW. The region is generally valued by the local community and wider NSW residents for its significant agricultural productivity.

In 2016, the suburb of Mitchell – Robin Hill, Mount Panorama had a population of 2,453. The 2017 estimated residential population (ERP) for the Bathurst LGA is 42,779.

In 2016/2017 the Bathurst Regional Council area received 932,330 domestic visitor nights and 541,621 domestic daytrips. International visitor nights in 2015/16 (latest available) were 146,272.[7]

Mount Panorama is a recognised regional tourist destination. Current visitor numbers who potentially could utilise attractions at Mount Panorama can be estimated using a number of sources. The Bathurst Visitor Information Centre received 74,500 people through its doors in 2009 which was similar to the numbers recorded in 2004 when it relocated to a more prominent highway frontage. In 2009 the National Motor Racing Museum had 30,500 visitors (AECOM, 2010).

The Gross Regional Product (GRP) of the Bathurst Regional LGA in 2016/2017 was $2.12 billion, growing 0.8% from the previous year. The major economic drivers of the Bathurst LGA are manufacturing (16.4%), construction (13.4%) and rental, hiring and real estate services (9.3%)[8]. In 2015/16, the total value of agricultural output in Bathurst Regional Council area was $58 million. The largest commodity produced was Livestock slaughtering, which accounted for 47.4% of Bathurst Regional Council area's total agricultural output in value terms.[9]

Other attractions and facilities located at Mount Panorama are:

- National Motor Racing Museum
- Bathurst Clay Target Club
- Bathurst Pistol Club
- Bathurst Sports Shooters Association of Australia

[6] (Mitchell -Robin Hill – Mount Panorama region from Population ID), https://profile.id.com.au/bathurst/about?WebID=150 21092018
[7] https://economy.id.com.au/bathurst/tourism-visitor-summary
[8] https://economy.id.com.au/bathurst/gross-regional-product 21092018
[9] https://economy.id.com.au/bathurst/value-of-agriculture?WebID=15 accessed 190918

- Bathurst Light Car Club
- Bathurst Goldfields Motel
- Rydges Hotel.

Summary of issues

Construction

- There may be an opportunity for employment of local residents at the new second circuit during the construction stage of the project
- Concerns about the impact of construction plant/facility and increased traffic on neighbourhood amenity
- Issues around traffic and access in the Mount Panorama area, and also local access to the Bathurst regional centre
- Accommodation and services are leading industries in Mitchell-Mount Panorama-Robin Hill. There may be high patronage of local accommodation and services to house staff and support crews during the construction stage of the works.

Operation

- There may be an opportunity for employment of local residents at the new second circuit during the operation of the project
- The amenity of residents is likely to be affected by increased road traffic during race events, particularly as the facility is proposed to be utilised 365 days per year
- Local business may experience increased patronage during events held at the second circuit
- The project may provide additional economic growth opportunities across the broader region.

Scope of the assessment for the EIS

A socio-economic impact assessment would be conducted to assess the socio-economic impacts of the project on the local and regional community. This assessment would identify potential impacts and nominate mitigation measures to minimise impacts.

The socio-economic impact assessment would assess the whole of life potential impacts of the project, including positive and negative direct and indirect impacts, and would address:

- A description of the socio-economic profile for the communities and businesses surrounding the project including, but not limited to:
  - Social characteristics, including population and demography; families and housing; travel behaviour; socio-economic indicators for areas; and need for assistance
  - Economic characteristics, including labour force, income and employment; and business and industry
- Identification of community values that may be affected by the project, such as population and demography community services and facilities, local access and connectivity, amenity and character, and business and industry
- Detailed assessment of the potential impacts (positive and negative) of the project on the socio-economic values of the study area for both construction and operation
- Identification of appropriate management and safeguard measures, including measures to enhance the project's benefits to avoid, manage or mitigate its potential impacts.

5.2.7. Land use

Overview

As previously discussed in section 2.1, the site is located about 5 km south west from the City of Bathurst and is located within the Bathurst local government area (LGA). The Bathurst LGA has a total area of 381,069 ha and is a rural and expanding residential area with a vibrant history.

Bathurst was first settled in the early 1800s. The Bathurst population increased dramatically during the next hundred years due to the discovery of gold alluvial and karst deposits in the region. Contemporary land use within the LGA centres around rural land use primarily for timber production and agriculture, particularly sheep and cattle grazing, with some orchards, crop farming and market gardening. Other land uses include forestry, National Parks and manufacturing, as well as general commercial and residential areas near town centres.

The Arnold family currently owns Lot 31 DP 871410 and Council owns the surrounding pastoral properties, Lot 1 DP986862 and Lot 40 DP1056379. The majority of the site is currently comprised of open, rolling cultivation paddocks used for cattle and sheep grazing. Development and infrastructure within the project boundary is largely limited to stock fencing, vehicle and stock tracks, erosion berms and small dams. Evidence of previous quarry activities are evident in the north west of the project boundary.

As discussed in section 4.1.11, the site is predominately mapped under the Bathurst LEP as SP3 Tourism and RU1 Primary Production. Areas within the project boundary are also mapped as RU2 Rural Landscape (to the south east) and the Mid Western Highway (to the north) is zoned as SP2 Infrastructure.

There are a number of residential receivers in close proximity to the project boundary located in areas zoned as low density residential, particularly along McLennan Close, Barry Gurdon Drive and Denver Place. Higher density residential areas are located to the north, east and north west in Bathurst, South Bathurst, West Bathurst, Mitchell and Robin Hill. A major higher education facility, Charles Sturt University, is also located in close proximity to the project boundary on Panorama Avenue, Mitchell.

Based on preliminary designs, the land proposed to be used for the project and their specific uses are described as follows:

- Primary site access and track infrastructure on Lot 1 – DP986862
- Primary and secondary site access and track infrastructure through Lot 31 – DP871410
- Secondary site access and track infrastructure on Lot 40 – DP1056379
- Tertiary site access through Lot 9 – DP1047248
- Tertiary site access through Lot 1 and 2 – DP634401.

Bathurst Regional Council owns all the lots listed above with the exception of Lot 31 DP871410. Bathurst Regional Council has negotiated to partially acquire this lot (formal lot and DP amendments would be provided in due course).

Utilities

A high voltage electrical supply traverses the project boundary in a north west to south east direction. This connects to a major substation off the Mid Western Highway, immediately to the north east of the site.

An optic fibre cable also traverses the project boundary in a north west to south east direction.

Several other utilities are present near the primary access point off the Mid Western Hwy including electrical and communications assets.

New service connections including Potable Water and Sewer will be required to service the site. The precise location of these new service connections is yet to be determined, but will most likely be via a utility corridor adjacent the primary access route.

Summary of issues

The project has the potential to conflict with surrounding rural residential areas and agricultural activities. The project and EIS would also need to consider surrounding conflicts and exclusions zones surrounding rifle range and pistol clubs.

Specific issues relating to construction and operation are presented below.

Construction

- Impacts on productive lands which may be either partially or fully acquired during the construction phase of the works
- Temporary and potentially permanent relocations of utilities within the project boundary, including potential impacts on easements
- Installation of electricity connections for the site
- Connection of infrastructure to town services for water and sewerage.

Operation

Once established, the presence of the new second circuit race track and associated facilities would change the character of the area which may influence decisions around future development in the area.

Scope of the assessment for the EIS

A desktop assessment on the land use and property values of the area would be undertaken in order to explore the potential issues associated with the project. This desktop assessment would address:

- The identification of the local land uses, existing access arrangements and potential property acquisition for both public and private land adjacent to the project
- Identification of property (Lot/DP) which may be affected by the project, including property acquisition, construction program and timing, the potential for compensation arrangement and consideration of short and long term impacts of the project on surrounding properties
- Assessment of the potential impacts of the project on the property and land use arrangements during construction and operation of the project
- Identification of reasonable and feasible project-specific management and safeguard measures to avoid, manage or minimise these impacts and to maximise benefits
- Management and safeguard measures to be implemented to avoid, minimise or manage disruptions to utilities.

5.3. Other issues

5.3.1. Historical heritage

Overview

The broader Mount Pleasant (Evans Plains) area holds an important conservation area and heritage items of local significance. These places are important as sites demonstrating historic themes and archaeological potential relating to early pastoral development and the development of villages and towns outside Bathurst.

A European Archaeological Management Plan (EAMP) has been prepared for the project to identify, assess and propose management recommendations for European archaeology within the project boundary.

On the available evidence it would appear that the site represents one of the least developed areas within reach of Bathurst and that this has always been its defining feature.

No listed heritage items are currently found within the study area. Two late 19th to early 20th century basalt quarrying locations have been identified on the north western summit of Mount Panorama. Both quarry locations hold a very low level of archaeological sensitivity and little cultural heritage significance as per the NSW Heritage Office guidelines.

A basalt rubble site within Lot 31 DP 871410 is the only identified location of archaeological potential within the project boundary. This may be the site of a former structure and is a possible source of information on the history of the study area that may not be available from any other source. However, an absence of historical information restricts the assessment of archaeological potential of the site, which lacks clear evidence of structural remains or occupational evidence, to low. This, combined with the relatively commonplace nature of the context of occupation for the Mount Pleasant Estate farms, restricts the likely significance grading of the site to one of little significance as per the criteria outlined in the NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning 1996) and Assessing Heritage Significance (NSW Heritage Office and Department of Urban Affairs and Planning 2000).

On current evidence no part of the study area contains a site likely to hold archaeological resources that would meet the NSW Heritage Division guidelines for 'relics' with a sufficient level of significance to meet local or state heritage thresholds. However, given the absence of historical records for the study area, the exact nature of the identified site of historical archaeological potential at the basalt rubble site remains unknown, a cautionary approach is warranted.

Summary of issues

Construction

No heritage items listed under the Bathurst Regional LEP 2014 have been identified within the project boundary however one heritage item of local significance, Stone Cottage and Garage (Item I185), is located adjacent to the south east of the project boundary. This heritage item would not be impacted by the project.

The EAMP identified that the majority of the proposed works within the study area may proceed without risk of harming any identified or predicted historical archaeological relics or deposits. The only location identified within the study area of low archaeological potential is the basalt rubble site (Lot 31 DP 871410). Construction activities will aim to avoid impacts at this location.

Operation

The project is not expected to impact on historic heritage during operation.

Scope of the assessment for the EIS

If works are proposed at the identified basalt rubble site, an application for a Section 140 Excavation Permit for monitoring (and if necessary salvage) would be obtained from the NSW Heritage Council.

5.3.2. Air quality

Overview

Air quality in the Bathurst region is generally regarded as very good. Air quality is generally affected by:

- Natural sources such as bushfires, dust storms, sea salt and pollen
- Domestic activities such as burning wood fires, including using wood heaters, fuel-powered garden equipment, and portable fuel containers
- Commercial businesses such as spray painters, printers, quarries, service stations
- Industrial activities such as coal mining, oil refining and power generation
- On-road motor vehicles such as buses, cars and trucks
- Off-road vehicles and equipment such as dump trucks, bulldozers and marine vessels.

Trends in air quality in the Bathurst region can be inferred from Bathurst Regional Council air quality complaints data over the last five years demonstrated in Table 5-2. Seasonality plays a role in the air quality of the Bathurst region, which is impacted by a number of pollutant sources including wood heaters during winter, dust during dry and windy conditions and by industry within the city areas. Other seasonal influences such as drought, hazard reduction burning and bushfires also impact upon regional air quality.

Table 5-2: Air pollution complaints received by Bathurst Regional Council (2013-2017)[10]

Air Pollution Complaint Type	2013-2014	2014-2015	2015-2016	2016-2017	Trend
Burn offs	6	10	11	3	Decreasing
Odour	22	28	12	15	Decreasing
Smoky Chimney	6	2	16	8	Increasing
Dust	12	19	16	13	Increasing
Septic/Sewer Odour	4	5	5	13	Increasing
Other	1	1	0	0	Decreasing

Bathurst is one of the few regional areas to have OEH monitoring under the Air Quality Index for particulate matter (including dust, smoke, pollen and bacteria) in the air. During the 2016 to 2017 reporting year there were no days where particulate matter exceeded the National Environment Protection Measures (NEPM) standard. The average daily level of particulate matter in the atmosphere is classed as very good overall.

Summary of issues

The project has the potential to impact on local air quality during both construction and operational phases.

Construction

- Temporary, localised increases in dust (particulate matter) during clearing, earthworks and construction activities. The nature of any increase in dust would depend on the scale of activities and quantities of material handled

[10] Source: Bathurst Regional Council (2017) *State of the Environment.*

- Temporary, localised increases in air quality impacts from emissions, such as exhaust fumes, generated by the operation of machinery and other construction vehicles. The impact of these emissions would be limited to the construction phase.

Operation

- Potential increases in near roadside air pollutant concentrations due to changes in traffic volumes. The nature of any changes in concentrations would depend on the projected traffic volumes, mode of travel, road grade and mix of vehicles
- Temporary changes to air quality during racing events created by vehicle exhaust being raced and that created by spectator traffic.

Scope of the assessment for the EIS

A qualitative air quality impact assessment of the project would be undertaken, covering both construction and operational phases. The assessment would assist in the development of air emission management measures, where relevant would:

- Identify of best practice air quality management measures and practices for construction activities
- Identify of sensitive receivers for air quality and activities and weather conditions potentially impacting air quality
- Assess air quality impacts during construction and operation
- Identify feasible and reasonable management measures (particularly dust suppression measures) to be implemented during construction.

5.3.3. Soils and contamination

Overview

Soils

The site is about 300 ha of gently undulating topography in a semi-rural landscape, with the overall slope to the north east, towards the Macquarie River. The topography of the site within the project boundary is variable, traversing from relatively flat paddocks to areas of very steep gradient, however is dominated by the geographic features of Mount Panorama, which rises steeply in the southern corner of the project boundary to a total height of 870 m above sea level.

The elevation of the site within the project boundary rises and falls along the north/south extent, from 760 m AHD at the Mid Western Highway intersection to a peak of about 800 m AHD 500m south of the intersection, and then falling again to about 760 m at the southern boundary. The gradient of the elevation change is about 9.5%. Artificial erosion control management features, such as contour banking, are present within the project boundary, often associated with farming and agricultural activities.

The dominant geology across the Bathurst sub-region consists of Carboniferous granite with limited areas of Tertiary basalt caps and Quaternary sands along the Macquarie River. The region is drained by the Macquarie River and its tributaries. Soils in the region are generally shallow and well drained on steep slopes with frequent rock outcrops. Lower slopes and depressions generally contain deeper poorly-drained soils.

The site within the project boundary is predominately mapped as Bathurst soil landscape with a small extent to the east and south east mapped as Panorama soil landscape.

The Bathurst soil landscape occurs on the low, undulating to rolling hills and is comprised of non-calcic brown soils with yellow solodic soils on the lower slopes and in drainage lines. Sands and mottled yellow solodic soils also occur. The Panorama soil landscape is an erosional landscape that is

characterised by rolling to steep slopes and narrow level crests. Local relief is typically between 80 and 120 m with slopes averaging 20% but ranging from 1-5% on crests to more than 40% on slopes. Dominant soils comprise dark reddish-brown loam and black light clay topsoil usually 10 cm deep, over heavy clays and Tertiary basalt. Ploughing, residential development and major erosion generally have a moderate to high impact on the soil profile because often the natural top soil is removed or significantly disturbed during these processes.

It is noted that while geological and soil landscape mapping provides a useful insight into the expected conditions within the Bathurst LGA, but due to the scale of the mapping (1: 100,000-1: 250,000) it is not a reliable predictor of conditions on the ground at any given place.[11]

Contamination

Generally, activities recognised as having the potential to contaminate land include petrol stations, chemical storage and use, asbestos disposal, orchards, dry cleaners, sheep dips, pistol and rifle ranges, mines, landfills and gasworks. A search of the NSW Contaminated Sites notified to the EPA identified a number of sites within Bathurst, particularly old petrol stations. The nearest site to the project boundary is the Former Shell Depot in Bathurst, about 3 km to the east of the project boundary.

Council's Land Use Information System (LUIS) has identified that the existing rifle range to the north east of the site could potentially have contributed to contamination on the site (unexploded ordinances and lead).

A preliminary review of historic aerial photos and from the findings of the draft Cultural Heritage Management Strategy, there has been relatively little development on the site. The site has historically been used for agriculture, and consequently there may be remainders of associated activities such as sheep dips, or illegal dumping on the site. A drive-in cinema once operated to the east of the site before closing in the early 1980s.

Overall, any residual debris associated with the adjacent motor racing events and storage activities that may have occurred is expected to be minimal and located on the surface only. Consequently, it is considered that any such impacts could be easily identified and remediated if required during development and would not impact on the overall feasibility of the second circuit.

Summary of issues

Construction

Construction of the project has the potential for the following impacts:

- The project would require extensive excavation works, which may directly result in erosion impacts due to the exposure and mobilisation of soils during construction
- Although unlikely, the project works may result in the disturbance and exposure of contaminated soils and other materials with the potential to impact on both environmental and human health
- There is a general risk of the spill of hydrocarbons and other waste material generated from vehicles, plant and equipment at the project site
- Heavy metal contamination from steel and other structural materials associated with the construction of the new track
- Sewage/grey water and effluent generated from temporary on-site facilities
- Lime leaching from cement and other structural materials resulting in efflorescence
- Potential contamination from stockpiling, servicing and laydown areas for construction materials, plant and equipment.

[11] AECOM (2010) *Mount Panorama Second Circuit Feasibility Study*.

Operation

- Increase in sediment and pollution loads in stormwater due to the removal of existing paddock vegetation and installation of impervious surfaces (asphalt, paving, etc)
- Water quality through road runoff containing suspended solids, nutrients from atmospheric fallout and other pollutants from vehicle, tyre and pavement wear
- Hydrocarbon spills from operations at the track.

Scope of the assessment for the EIS

Assessment of potential impacts related to soil and contamination issues that the project presents would address:

- Consideration and interpretation of the geotechnical investigation findings
- Consideration of disposal of spoil and any associated management measures, including identification of opportunities to seek resource recovery exemptions
- Assessment of the risk of erosion and sedimentation in accordance with the appropriate erosion and sedimentation management procedures
- Assessment of any impacts associated with the disturbance of contaminated land, including management during construction and offsite disposal of contaminated material.

5.3.4. Hydrology and water resources

Overview

On a regional scale, the Bathurst LGA is situated within the Macquarie River catchment, which forms part of the wider Murray-Darling Basin. The Macquarie River is located about 4.8 km to the east of the site. Other creeks surrounding the site include Spring Creek (about 1.6 km to the west), Evans Plains Creek (about 2.7 km to the west) and Queen Charlottes Creek (about 2.4 km to the east).

There is limited formal drainage infrastructure at the project site due to the undeveloped nature of the existing environment. Drainage and overland flow of water within the project boundary is influenced by the topography of the project site.

An ephemeral creek traverses the site and runs in a south east to north west direction. The ephemeral creek is mapped as 'Key Fish Habitat' on the NSW DPI website. Based on aerial photographs reviewed, the tributary has been subject to damming for farming practices.

Based on rainfall data from the Bureau of Meteorology, the annual average rainfall in the Bathurst region is 638 mm. There are several small dams located within the project boundary to collect local surface runoff, presumably to support livestock and crops on local farming properties. The locations of these dams are indicative of the slope and overland surface flow paths within the site.

Flood risk with the project boundary is considered to be extremely low and the site is not located on 'flood prone' land mapped in the Bathurst LEP.

The groundwater source at the site is the Central West Highlands Water Source. Relevant hydrogeological units relevant to the site are:

- Fractured Rock (Paleozoic) (Coarse-grained, porphyritic biotite granite, porphyritic granite and granodiorite, aplite)
- Cainozoic Basalts and Instructives (Volcanic rocks, predominantly mafic; basalt, trachyte, trachybasalt, trachyandesite, leucitite, basanite, nephelinite, limburgite, rhyolite, tuff and high level intrusives; rare volcaniclastic sediments)
- Cainozoic Alluvium (Channel and flood plain alluvium; gravel, sand, silt, clay, locally calcreted).

However, there are no significant groundwater resources within the project boundary, reflecting its elevated position in the landscape.

The location of the proposed second circuit runs over both the open drainage areas and parts of the existing creek line. Culvert crossings would be required at the creek locations. Open channels located outside the required safety runoff areas, would be primarily employed adjacent the track to direct surface water to the creek line. Drainage modelling would be employed to ascertain likely flow rates for the required design rainfall event. Appropriate water quality management measures would be incorporated into the design.

Summary of issues

Construction

- Instream works within the ephemeral creek will require either a Section 201 and/or a Section 219 permit from DPI Fisheries
- Design of the proposed supporting road works would need to consider existing surface flow patterns and additional surface drainage capacity with any increased impervious surface area though in the context of the total impervious area in the catchment, the incremental increase is not likely to be significant
- Due to the location of the site and the existing topographical features, current design indicates there would be extensive bulk earthworks required as part of the project. Hydraulic modelling would also be required to be undertaken given the existing watercourse through the location
- Potential increase in erosion and sediment pollution loads from earthworks and construction activities
- Potential to encounter sub surface waters during excavation.

Operation

Operation of the project has the potential for the following soil and water quality related impacts:

- Increase in sediment and pollution loads in stormwater due to the removal of existing vegetation, increase in road surface and increase in patronage and associated traffic. This has the potential to impact on water quality through road runoff containing suspended solids, nutrients from atmospheric fallout and other pollutants from vehicle, tyre and pavement wear
- Potential reduction in the groundwater recharge area as a result of increased sealed areas, including roads and other site facilities
- Increased roadway and removal of vegetation could increase runoff resulting in larger stormwater flows downstream
- Downstream flooding behaviour could be modified as a result of road configuration and road furniture and features (culverts, bridges, batters, etc.).

Scope of the assessment for the EIS

From existing databases, mapping and reports, known hydrological and hydraulic issues such as flood behaviour and duration, surface water and groundwater including flows, quality and quantity, salinity, acidity, waterlogging and erosivity issues would be identified.

A desktop hydrology and flooding assessment would be prepared to inform the design of the project and the relevant findings included in the EIS.

5.3.5. Bushfire, hazards and other risks

Overview

The site is predominately cleared for agricultural use however areas of mature vegetation are present, particularly to the north east and along the ephemeral creek that traverses the site. Based on bush fire prone mapping the eastern part of the site within the project boundary is classified as 'Vegetation Category 2' (Rural Fire Services, 2002). This vegetation category has lower combustibility

and/or limited potential fire size due to the vegetation area shape and size, land geography and management practices.

The Department of Primary Industries has launched a Combined Drought Indicator (CDI) which utilises data from four main indexes; rainfall index, soil water index, plant growth index and drought direction index, to identify the drought risk of an area. Based on CDI the site is considered a 'drought' area. This is consistent with mapping for the central tablelands region with 79.3% of the region being considered a 'drought' area. In drought areas conditions may be very dry, or agronomic production is tight (low soil moisture or plant growth).

Hazards and risks arising from construction and operation of the project have the potential to impact the environment and human health. The key potential hazard to arise during construction would be impacts to environmental and human health resulting from accidental releases, or improper handling and storage of hazardous substances within the site. The quantities of hazardous substances that would be stored on the project are anticipated to be small.

Vehicle collisions and operation of the project could result in the accidental spill of dangerous goods and has the potential to adversely affect the quality of the local environment and impact human safety.

The site is not located in 'Airspace affected land' mapped in the Bathurst Regional LEP 2014.

Summary of issues

Construction

During construction, the following hazards and risks may be associated with the project:

- Environmental and human health impacts from accidental release of hazardous substances as a result of improper handling and storage within the site, or vehicle accident during transport to the site
- Occupational health and safety hazards, such as dangers to construction workers, road users and the general public
- Potential rupture or interference with underground utility services.

Operation

During operation, potential release of hazardous substances from vehicles transporting these substances along the project may occur. This would have the potential to adversely affect the quality of the local environment and impact human health.

Scope of the assessment for the EIS

Specific hazards and risks from construction and operation of the project would be considered as part of the assessment along with a project specific environmental risk analysis.

Management and safeguard measures would be implemented to avoid, minimise or manage hazard and risk, and address:

- Preparation and implementation of site specific Hazard and Risk Management Plans as part of the CEMP
- Preparation and implementation of an occupational health and safety plan to deal with occupational health and safety risks associated with construction activities
- The risks associated with the use and storage of hazardous substances during construction would be mitigated through appropriate design, and establishment of bunded areas in accordance with relevant legislation and codes of practice
- Any chemical storage areas would be located outside areas subject to a 1 in 100 flood event

- Transportation of all hazardous substances would be in accordance with relevant legislation and codes
- Consultation with relevant utility owners would be undertaken to identify necessary protection measures in the vicinity of utilities.

Bushfire, hazards and other risks associated with the project during operation are considered low and would be managed with the implementation of standard management and safeguard measures such as operational water quality control measures which would be designed to reduce the environmental effects of pollutant runoff from the road surface and to contain spills of chemicals and hazardous substances.

5.3.6. Greenhouse gases and climate change

Overview

Climate change refers to the warming temperatures and altered climatic conditions associated with the concentration of gases in the atmosphere, known as greenhouse gases. There is a need to understand how these potential changes can impact future climatic conditions and the effect they could have on the project.

In 2014 the NSW Government published the NSW and ACT Regional Climate Modelling (NARCliM). Bathurst is located in the Central West and Orana region. A summary of the climate change predictions identified by the NSW Government relating to the region are as follows:

- Increase in maximum and minimum temperatures
- Increase in the number of hot days and a decrease in the number of cold nights
- Rainfall is projected to decrease in the spring and increase in the autumn
- More frequent and severe fire weather in summer, spring and winter.

Fugitive emissions from landfill is one of the largest contributors to greenhouse gas (GHG) emissions arising in the greater region. Bathurst Regional Council has operated a methane flare at the Waste Management Centre continuously since 2009-10, reducing net emissions from the landfill. Three trials conducted during the reporting period by Run Energy demonstrated average flare flow rates of 161 m^3 per hour with a methane content of 52%. Other factors which influence emissions in the Bathurst region may be increased electricity consumption during high summer temperatures and low rainfall in the second half of the year.

Climate change

The Bathurst Region has a highly variable climate, with extremes of both hot and cold common throughout the year. The Bathurst Regional Council State of Environment Report has been used to infer the general climatic trends in the site[12].

Rainfall is generally unevenly distributed over the year with more than half of the rainfall received in the first three months, with flooding occurring in both July and August of 2016, resulting in natural disaster declarations for the LGA. This was followed by a significant rainfall deficit in the second half of the reporting period. Rainfall over summer was only 38% of average summer rainfall.

Based on long-term (1910–2011) observations, temperatures have been increasing in the Central West and Orana Region since about 1970, with highest temperatures experienced in recent decades (OEH, 2014). Current climate change projections for the Central West and Orana are for temperature to continue to warm during the near future (2020–2039) and far future (2060–2079), compared to recent years (1990–2009).

[12] Bathurst SOE 2017

The warming is projected to be on average about 0.7°C in the near future, increasing to about 2.1°C in the far future. The number of hot days is projected to increase and the number of cold nights is projected to decrease. The warming trend projected for the region is large compared to natural variability in temperature and is of a similar order to the rate of warming projected for other regions of NSW (OEH, 2014).

Summary of issues

Construction

Construction of the project has the potential for the following climate change related impacts:

- Direct generation of greenhouse gas emissions due to construction works such as the transport of materials, operation of plant and equipment
- Indirect generation of greenhouse gas emissions that are produced off-site such as the consumption of electricity for lighting and signage and the energy used to produce construction materials such as concrete, bitumen and steel
- Greenhouse gases generated through construction and operation of the project have the potential to contribute to altered climatic conditions.

As a general comment, it is anticipated that construction activities would have a relatively small impact on climate change, and vice versa.

Operation

Climate change has the potential to have the following impacts on the operation of the project:

- More frequent subsidence/geotechnical issues including erosion impacts, resulting in sediment loss from the site
- Due to the elevation of the site, it is unlikely that flooding, hydroplaning and other hydrological effects associated with increased precipitation and climate change would impact the project.

Operation of the project has the potential for the following climate change related impacts:

- Generation of greenhouse gas emissions due to the operation of the second circuit track. The nature of the project is construction of a motor sport outdoor racing complex. There would therefore be vehicle emissions generated during events held at the site.

Scope of the assessment for the EIS

The EIS would provide an assessment of greenhouse gas and climate change impacts for the project addressing:

- Identification of opportunities to improve efficiency and provide resilience against the impacts of climate change through design of the project
- Opportunities to use low greenhouse gas intensity materials where appropriate and where it meets engineering requirements
- Recycling opportunities, including partial replacement of cement with fly ash and using recycled aggregate and recycled content in steel
- Quantification of operational greenhouse gas emissions, including embodied emissions and compare against existing scenarios
- Quantification of construction greenhouse gas emissions
- Identification of opportunities to avoid and reduce emissions from both operation and construction of the project.

5.3.7. Resources and waste management

Overview

Raw and processed materials would be required for construction of the project. These materials would include concrete, steel, quarried aggregates, imported fill, fuel to power construction equipment and water. The quantity and types of materials required for construction would be further defined during detailed design.

For operations, only relatively small quantities of asphalt, concrete and other materials would be used to maintain the road.

Construction and operation of the project would see varying amounts of waste produced. Construction wastes generated would include fill material, general construction and demolition waste, vegetation waste, packaging materials and liquid wastes. Operational wastes (which would be much smaller in quantity) may include spills and leakages from vehicles, litter generated by road users and sediment from the water quality control basin.

Summary of issues

Construction

Construction of the project has the potential for the following resource use and waste management related impacts:

- Depletion of natural resources such as virgin quarried materials and sand required as construction materials
- Excavation wastes generated from land clearing, establishment of ancillary facilities site and lay down area, stock piling
- Vegetation waste, for example, from the removal of trees, shrubs and groundcovers as necessary
- Packaging materials such as crates, pallets, cartons, plastics and wrapping materials.
- General waste from construction sites (including office wastes, scrap materials and biodegradable wastes)
- Disposal of hazardous materials
- Generation of sediment, hydrocarbons (oils and greases) and gross pollutants
- Spill and leaks from vehicles used to transport staff around the site
- Litter generated by construction staff and contractors.

Operation

Impacts anticipated to be generated during the operational stage of the project are:

- Litter generated by operational staff and contractors associated with daily operations procedures at the facility
- Wastes generated from operational maintenance activities of the track and of ancillary facilities
- Periodic peaks of waste generation and demand on resources associated with patrons attending events hosted at the completed second circuit.

Scope of the assessment for the EIS

The EIS would provide an assessment of resource and waste management requirements addressing:

- Identification of the indicative resource requirements for the project and an assessment of the resource use impacts of the project
- Identifying opportunities to use recycled materials within pavements provided they are fit for purpose and meet engineering requirements
- Strategies for minimising the export of excavated materials off-site, maximising reuse opportunities and minimising the volume of excavated material disposal to landfill

- Identification of specific waste impacts of the project and the waste management approach, to be outlined within the CEMP
- Strategies for reducing waste would be discussed in the EIS such as the use of recycled materials, bulk delivery of good to minimise packaging and arrangements with suppliers to return any unused construction materials.
- Opportunities to relocate large timber and hollow bearing timber for habitat enhancement at other locations.

6. Summary

The project would involve the construction of a second motor racing circuit, spectator zone, flexible event space, automotive facilities (including a driver experience centre), additional site access paths and provisions for a future hotel. The project would have a capital investment value of over $30 million and is a recreation facility (major), as defined in the *Standard Instrument – Principal Local Environmental Plan*. Therefore, the project is considered to meet these two criteria for designation as SSD under SRD SEPP.

This report supports an application to the DP&E requesting SEARs be issued under section 4.12 of the EP&A Act and clause 3 of schedule 2 of the *Environmental Planning and Assessment Regulation 2000* for the preparation of an EIS for the project.

This PEA provides the background and strategic justification for the project and a description of the proposed infrastructure. The report outlines the key environmental issues (traffic and parking, noise and vibration, biodiversity, Aboriginal heritage, visual amenity and landscape character and socio-economic, land use) and other issues (historical heritage, air quality, soils and contamination, hydrology and water resources, bushfire, hazards and other risks, greenhouse gases and climate change and resources and waste management) relating to the project and provides a scope of the assessment to be prepared for the EIS.

All potential environmental impacts of the project, both at the construction and operation stage, would be comprehensively addressed in the EIS, in accordance with relevant legislation, guidelines and the SEARs.

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