



## Strategic outcomes

**This section outlines the strategic outcomes and actions, broken down by objective, that are proposed to work towards achieving the transport vision for the Mackay region.**

### Objective 1

Integrate transport planning and land use planning.

**Strategic Outcome 1:** Land use and transport planning is integrated and infrastructure and service delivery is coordinated and sequenced.

The considerations and interactions between how land is used and how people and goods move are highly complex and inseparably intertwined. These two considerations influence so many other decisions and functions of the region and really form the bedrock for building a transport system that has the potential to increase liveability and prosperity and leave a positive legacy for future generations. The coordination and sequencing of infrastructure and services, such as bringing forward underground stormwater upgrades to align with planned road resurfacing works, is a practical and visible outworking of this. This results in a more efficient use of public funds and reduced instances of travel disruptions to the community.



Road linemarking

**Strategic Outcome 2:** Integration of land use and transport outcomes is a core project objective and considered early in the project lifecycle.

To ensure the benefits can be realised, land use and transport integration needs to be elevated as a core objective with impacts and opportunities for coordination and sequencing considered as early as possible in a project. In addition to benefits during project implementation which have previously been mentioned, effective integration also has the potential to delay, and in some cases remove the need for, the implementation of costly facilities. This means that funding can be redirected and spread across more of the transport system for the benefit of more of the region's residents and visitors. This will be particularly important as the region recovers from the far-reaching impacts of the global COVID-19 pandemic.

**Strategic Outcome 3:** Compact, mixed use neighbourhoods and settlements across the region reduce travel demand and promote more sustainable travel behaviour.

Compact, mixed use neighbourhoods contain a mix of residential dwellings, local employment opportunities and access to essential goods and services (groceries, schools, medical facilities). This allows residents to address more of their daily needs in the local area and directly influences travel behaviour as residents have the potential to significantly reduce the quantity and length of trips undertaken over the course of a day. This can make the use of active and public transport more practical and attractive, thus increasing travel options and addressing equity issues, and can significantly reduce the cost of delivering and maintaining infrastructure across the region. The provision of neighbourhoods that are more compact and contain a wider mix of different land uses will be encouraged.

**Did you know?**

**On average, every \$1 invested in walking interventions returns almost \$13 in benefits with decongestion, health and environment.**

*Source – Queensland Treasury, 2020.*

Walkability refers to how walk-friendly a place is, with highly walkable communities allowing a broad spectrum of ages and abilities to walk (or roll) safely, conveniently and comfortably. Walkability is linked to, and can be improved by positive changes in, density, the type and mix of different land uses, and physical characteristics such as footpaths, shade, lighting, block lengths, street connectivity, and safety. Walkability can positively influence physical, mental, environmental and social health and provide significant economic benefits.

**Strategic Outcome 4:** Transport system performance is measured through monitoring, reporting and evaluation of the MRITS.

As the saying goes, 'what gets measured gets managed'. Measuring transport system performance is important to determine the rate of progress towards implementation of the MRITS and to help determine whether the proposed actions and any future measures from Council, industry and the community are working effectively towards the fulfilment of the stated vision. This provides an opportunity to make corrective action if required and to respond to changing circumstances over time.

This measurement will be undertaken through regular monitoring, reporting and evaluation of the MRITS with the establishment of a dedicated Steering Committee within Council and regular, public reporting of the progress of relevant actions and how they are succeeding in achieving the objectives and strategic outcomes.



## Strategic outcomes

*“Bicycle safety seems to depend largely on how many people are biking, and that the resulting mandate – to create as many cyclists as possible – needs to drive the design of our urban bicycle networks” –*  
**Jeff Speck**, city planner, urban designer, author and lecturer

### Objective 2

Invest to create a connected, accessible, resilient and safe transport system that leaves a positive legacy for future generations.

**Strategic Outcome 5:** A safe, connected and accessible active transport network with supporting facilities encourages healthier, more environmentally sustainable travel.

Walking, cycling and other low-impact personal transport options, known collectively as *active transport*, are an integral component of the transport system. In fact, walking (including the use of wheelchairs and other mobility aides) is required at the beginning and end of every journey, even those undertaken by motorised means. The importance of active transport and the need to provide a safe, connected and accessible network, extends beyond mere utility. Other key benefits of providing additional transport options include the ability to improve transport equality and system resilience, reduce the environmental impacts of motorised vehicles and help provide a low carbon future, improve liveability and amenity, reduce the quantity and severity of vehicle crashes involving pedestrians and cyclists, and to improve physical and mental health and wellbeing.

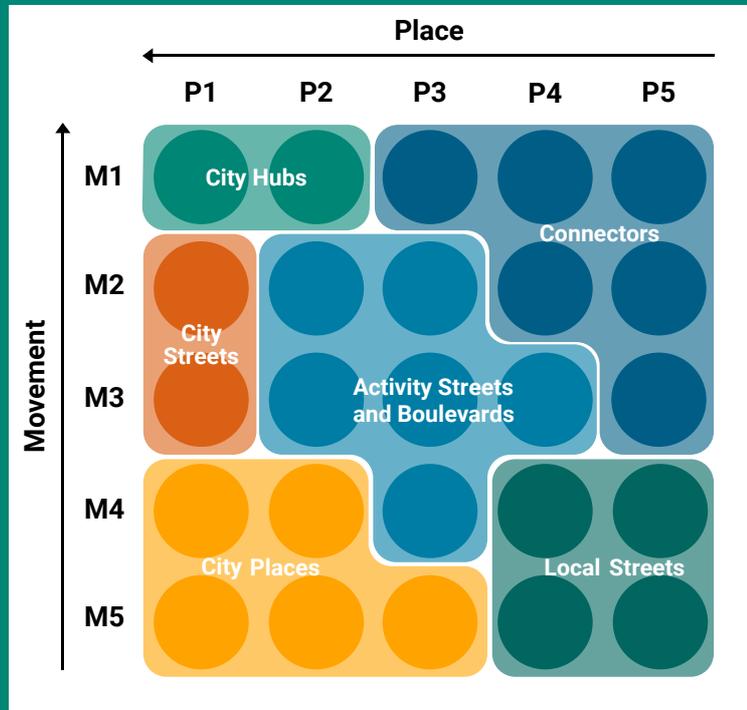
To further increase the convenience, attractiveness and safety of active transport as a viable transport option, any network improvements need to consider the provision of appropriate support facilities such as water bubblers, seats, shade, end of trip facilities, way-finding and bike racks. Together, this will help to promote the region (for example, by capitalising on natural assets including the climate, waterways and topography) and to create a much more integrated, balanced and resilient transport system. This will require the involvement of the State Government as they have an interest in the planning, delivering and funding of strategically important cycle connections in the Mackay region. These connections and the role of the State are outlined in the Mackay Isaac Whitsunday Principal Cycle Network Plan. Changes to physical infrastructure should be accompanied by initiatives to support changes towards more positive travel behaviour. This could include initiatives to raise awareness of active transport options and existing infrastructure across the region.

**Strategic Outcome 6:** An effective, accessible, appealing and reliable passenger transport network reflects local needs and offers a genuine alternative to private vehicle use.

Passenger transport includes traditional public transport such as buses as well as more personalised options such as community transport, taxis, rideshare and other on-demand services. These options are expected to continue to be an important part of the region's transport system, despite reassessments of their function globally during the COVID-19 pandemic. Improving integration with active transport and better aligning the passenger transport network with land use planning and development will help advocacy efforts for a more effective mixture of different passenger transport options and an improved network that reflects local needs and provides a genuine alternative to private vehicle use. This will make better use of existing transport infrastructure, provide practical transport alternatives which will also support tourism and the aging population, more effectively connect key growth areas with centres and employment, and create a more balanced transport system.

The concept of *Movement and Place* is gaining traction in Australia and New Zealand as a more effective and comprehensive way to address the complexity of street design, use and integration with surrounding land uses. The concept provides a framework for classifying and designing roads and streets based on their respective ability and/or desired intent to effectively transport motor vehicles (Movement) and to provide environments more conducive to people (Place).

This is an evolution of the traditional approach to classifying roads and streets which has historically been hierarchical and primarily based on automotive measures such as traffic volumes and speeds. The Movement and Place framework provides an opportunity to better align the design of a street or road with its function and surrounding land uses in order to provide a safer and more livable and productive region.



Source – Austroads, 2020

**Strategic Outcome 7:** Safe and convenient access to the water increases liveability and promotes tourism.

With more than 400km of pristine coastline coupled with picturesque rivers, dams and numerous islands, access to the water is an important factor for many in the region. The allure of the water is compounded by the variety of fish on offer for anglers as the region is situated at the natural meeting point for southern and northern fish species. Providing safe and convenient access to the water will therefore be critical to cater for future demand, increase liveability for residents and to create a desirable region that attracts and supports tourists.

**Strategic Outcome 8:** A safe and legible road network that facilitates the effective movement and access of people and goods and contributes to the liveability and financial sustainability of the region.

The road network is the most extensive and well utilised of all components of the overall transport system, supporting the movement of people and goods to, through and within the region. The safety of all users of the network, which includes pedestrians and cyclists is paramount. Safety considerations are multifaceted but at their core are deeply connected to the function and design of roads and streets and their integration with surrounding land uses. To support improvements to the liveability and financial sustainability of the region, it is important that the road network enables people and goods to move safely and legibly. During extreme weather and/or unforeseeable events, the transport network and specifically the road network, needs to be able to facilitate the movement of people, services and goods in a way that is integrated with emergency management plans and communication systems.



## Strategic outcomes

**Strategic Outcome 9:** The region is positioned for sustained and diversified economic growth through the identification of current and anticipated freight needs and the removal of logistical and organisational barriers.

As the gateway to North Queensland and with the mining, manufacturing and agricultural sectors expected to continue to support the economy into the future, the movement of goods and freight is likely to be a constant in the Mackay region. Positioning the region for growth will require a deep understanding of current and anticipated freight needs and the identification and removal of logistical and organisational barriers. Logistical barriers could include inconsistencies in heavy vehicle haulage routes and issues with first and last mile access and servicing, while organisational barriers could include issues related to permitting and approval processes. This will need to be undertaken across a variety of sectors as needs and barriers are not always consistent and will need to remain sensitive to local amenity and quality of life.

**Strategic Outcome 10:** Parking and the allocation of road space supports land use planning intents, increases liveability and prosperity, and encourages more sustainable travel behaviour.

It has been estimated that on average, cars spend roughly 5% of their time in use and the remaining 95% of their time parked<sup>14</sup>. This is a sobering statistic with very real implications for the future of the region. It is important that parking and other road space allocations such as kerbside pick-up and drop-off areas work towards the attainment of the vision, support the intention behind land use planning efforts, increase local and regional liveability and prosperity, and encourage greater active and public transport use. Central to this and to any changes to parking that may occur in future is the provision of relevant data to inform decision making and appropriate engagement with stakeholders.

**Strategic Outcome 11:** Existing assets and resources are responsibly stewarded to improve quality of life and provide an enhanced environmental, economic and social foundation for future generations.

The ability of the region to not only survive but flourish, regardless of future circumstances, is a direct product of the responsible stewardship of existing integrated transport infrastructure assets and the sustainable use of limited resources. This is critical to increasing the resilience of the transport system, improving quality of life and leaving a positive legacy for future generations. This will include better understanding, acknowledging and working within limitations, maintaining and making much better use of what we have already built, and making decisions that will set future generations up to be in a stronger, healthier and more secure position than we currently experience.

*“Our challenge now is not about expanding our infrastructure networks but making better use of what we’ve already built. We must put meat on the bones, so to speak, a shift in focus to building more wealth within the framework of our current investments” –*

**Charles L. Marohn, Jr,**  
*author, speaker, founder and president of Strong Towns*

<sup>14</sup>Shoup, D. *The High Cost of Free Parking*

**Objective 3**

The community is engaged, and relevant technologies and systems are harnessed, to develop innovative transport solutions that reflect local conditions.

**Strategic Outcome 12:** Locally relevant technologies, tools, approaches and innovations improve the planning, delivery, operation and management of the transport system.

New technologies, tools, approaches and innovations are inescapable but if leveraged effectively, can help improve the transport system and overall sustainable development of the region. To be effective, technologies and innovations will need to be investigated in light of the local context and tailored as appropriate to ensure they deliver consistent benefits for residents, businesses and visitors now and in the future. The long-term viability and applicability of these technologies and innovations requires consideration of the impacts of climate change and the transition and adaptation measures outlined in the State Government’s Queensland Climate Change Response. Investigations will require improvements to data and integration with decision-making while better consideration of the local context will require improved community involvement and more effective engagement that reaches a diverse cross-section of society. The views of younger residents will be especially relevant as they will experience the implications of any decisions for the greatest length of time.



Roadworks

**Strategic Outcome 13:** Alternative funding and delivery models support the development of the transport system.

The need to investigate and apply alternative funding and delivery models to develop the region’s transport system is not something that is only reserved for bigger cities. These alternative approaches could include targeted capital raising programs, more streamlined and efficient financing arrangements, innovative ways to capture value, greater community involvement in the delivery of infrastructure and new approaches to addressing the needs and aspirations of the community. The COVID-19 pandemic has highlighted some of the vulnerabilities in our current transport system, primarily around day-to-day operations, but there is the potential that over time more structural vulnerabilities may emerge, including those beyond the influence of Council. There are also opportunities that can emerge through increased demand for active transport facilities and lower private vehicle usage. New and creative ways to fund and deliver transport in the region will become an increasingly important underpinning to increase resilience, liveability, prosperity and to leave a positive legacy for future generations.



Shared pathway



Section 3:  
**Action plan**

## Action plan

### The comprehensive actions presented in this section each support and reflect different aspects of the overarching vision.

The varied nature of the actions is an outcome of the complex and multifaceted nature of transport systems and emphasises the interdependencies with other planning and the need for genuine and ongoing engagement with all stakeholders to create a transport system that is more representative of the local context.

Most actions will require the involvement of stakeholders including all levels of government, industry sectors, stakeholder organisations and the community. Rather than identify specific stakeholder organisations, the action plan identifies key and emerging industry sectors that Council will seek to partner with to deliver on the actions.

These sectors include:

- » Government (State and Federal)
- » Mining Equipment, Technology and Services (METS)
- » Sport and Recreation
- » Construction
- » Agriculture
- » Health and Allied Services
- » Education
- » Engineering and Robotics
- » Biofutures
- » Transport, freight and logistics
- » Tourism.

In addition to sectors with whom Council will partner, the action plan also provides an indication of proposed time periods for the implementation of each action. These are:

- » Ongoing – actions which continue across the life of the MRITS
- » Short term – actions which cover the period to 2025
- » Long term – actions which cover the period 2026 to 2036.

Whilst many of the actions support Council's policies and strategies, a number of the actions have direct spatial application to the region. These spatial actions are presented in *Figure 9* and *Figure 10*.



Hydration station



## Action plan

Action	Description	Strategic outcomes	Stakeholder Sectors	Timing		
				Short	Long	Ongoing
1	Strengthen relationships with stakeholders who contribute to the strategic development of the transport system to improve integration, better understand current needs and issues, and capitalise on emerging trends and technological changes	1, 9	Council Government (Federal and State) Community METS Tourism Construction Agriculture Health and Allied Services Education Engineering and robotics Biofutures Transport, freight and logistics Sport and Recreation			●
2	Undertake multifaceted and consistent advocacy for the continual improvement of Mackay's transport system, including for the construction of additional stages of the Mackay Ring Road and ongoing improvements to the Bruce Highway, Peak Downs Highway and key State haulage routes	8, 9	Council Government (Federal and State) METS Agriculture Transport, freight and logistics			●
3	Continue to integrate Council planning, processes and systems to enable identification of opportunities that optimise, coordinate and appropriately sequence the delivery of infrastructure and build resilience in the network (renewal, upgrade, new) across all of Council's asset classes (for example, water, parks, transport)	1, 3, 8	Council Government (State)			●
4	Identify and protect key future priority transport corridors (for example, Principal Cycle Network routes, high frequency public transport routes, access routes to air and seaports, industrial areas and regional road and rail freight networks) from incompatible planning, development and infrastructure	1	Council Government (State)			●
5	Review the Mackay Region Planning Scheme to identify opportunities for amendments to policies and provisions that will support increased active and public transport use	1, 3	Council Government (State) Community Construction Health and Allied Services Education	●		
6	Prepare a local area transport plan for the Northern Beaches to support current and planned growth, improve multi-modal access and network resilience	2	Council Government (State)	●		

Action	Description	Strategic outcomes	Stakeholder Sectors	Timing		
				Short	Long	Ongoing
7	Develop a locally relevant Travel Demand Management toolkit to manage demand and encourage more sustainable travel behaviour, including greater active transport use for school trips	5, 11	Council Government (State) Community Health and Allied Services Education Sport and Recreation	●		
8	Develop an Active Transport Strategy to support the future prioritisation and development of walking, rolling and riding, including investigation of opportunities to deliver the Principal Cycle Network through the TMR Cycle Network Local Government Grants Program	3, 5	Council Government (State) Community Health and Allied Services Construction	●		
9	Identify opportunities to support the growth of cycle tourism in the region including investigating the feasibility of providing an iconic cycle trail linking the Mackay City Centre to the planned mountain bike trails in Finch Hatton and Eungella	5	Council Government (Federal and State)	●		
10	Improve transport infrastructure and operations in and around the Mackay Waterfront PDA to support the planning intent of the PDA and City Centre	5, 6	Council Government (State) Construction	●		
11	Ensure the active and public transport network is supported by and integrated with land use planning, demographics and existing and emerging transport modes	2, 3, 5, 6	Council Government (State)	●		
12	Research and document the requirements of emerging transport services (for example, rideshare, personal mobility devices) and the role of Council, ensuring any recommendations are tailored to the local context	6	Council Government (State) Community Transport, freight and logistics Engineering and robotics	●		
13	Ensure new transport initiatives and/or infrastructure will support the relevant transport actions in the Mackay Recreational Fishing Strategy and Mackay Region Mountain Bike Strategy	7	Council Tourism and agritourism Sport and Recreation			●
14	Work with tourism operators and industry to investigate opportunities and facilitate increased water-based tourism	7	Council Government (State) Transport, freight and logistics Tourism	●		



## Action plan

Action	Description	Strategic outcomes	Stakeholder Sectors	Timing		
				Short	Long	Ongoing
15	To better integrate land use and transport planning outcomes, implement a Movement and Place Framework into Council's relevant transport and land use policies and standards	8, 10	Council Government (State)	●		
16	Continue to develop Statements of Intent for all of Council's rural roads to establish the functional requirements and consistently identify improvements and priorities across the rural road network	8	Council	●		
17	Continue to review posted speed limits across the region to address potentially unsafe, frequent variations in speed limit, to provide greater alignment between posted speed limits, adjacent developments and the design of streets and roads, and to improve safety for pedestrians and cyclists.	8	Council Government (State) Community	●		
18	Ensure that the operating characteristics and physical requirements of buses and heavy vehicles (including OSOM vehicles) are considered in the design of relevant streets and roads	8	Council Government (State) Transport, freight and logistics	●		
19	Work with stakeholders to improve freight access and/or support facilities to enable increased economic activity and freight efficiency	8, 9	Council Community METS Transport, freight and logistics	●		
20	Identify opportunities to improve network resilience (for example, intra-state coastal shipping) and to maintain the movement of essential goods and freight across supply chains and transport modes during disruptive events	8, 9	Council Government (State) Transport, freight and logistics		●	
21	Investigate options to better understand and manage parking in the region, with a focus on the Mackay City Centre, to facilitate future growth and economic vitality	10	Council	●		
22	Prioritise and increase the importance of transport infrastructure maintenance through ongoing asset management planning	11	Council	●		

Action	Description	Strategic outcomes	Stakeholder Sectors	Timing		
				Short	Long	Ongoing
23	Investigate emerging technologies, methods and information systems to improve data collection, modelling, analysis, communication and system integration to monitor and inform future planning and decision-making	12	Council Community Engineering and robotics		●	
24	Increase community involvement in the assessment, planning and delivery of the transport system through improved access to data and more effective engagement	12, 13	Council Community Engineering and robotics	●		
25	Support the integration, implementation and evaluation of the MRITS by embedding the policy framework within Council decision making processes and working with internal and external stakeholders to establish effective performance management processes	4	Council Government (State)			●
26	Investigate opportunities for the use of off-grid power/renewable energy and recycled materials in the delivery of transport infrastructure and services	5, 12	Council Government (State) Engineering and robotics Biofutures Transport, freight and logistics		●	
27	Investigate locally relevant options (for example, value capture) for funding and delivering transport infrastructure and services of varying scales across the region	13	Council		●	



# Action plan



Action	Description
2	Undertake multifaceted and consistent advocacy for the continual improvement of Mackay's transport system, including for the construction of additional stages of the Mackay Ring Road and ongoing improvements to the Bruce Highway, Peak Downs Highway and key State haulage routes
4	Identify and protect key future priority transport corridors (for example, Principal Cycle Network routes, high frequency public transport routes, access routes to air and seaports, industrial areas and regional road and rail freight networks) from incompatible planning, development and infrastructure
6	Prepare a local area transport plan for the Northern Beaches to support current and planned growth, improve multi-modal access and network resilience
9	Identify opportunities to support the growth of cycle tourism in the region including investigating the feasibility of providing an iconic cycle trail linking the Mackay City Centre to the planned mountain bike trails in Finch Hatton and Eungella
14	Work with tourism operators and industry to investigate opportunities and facilitate increased water-based tourism
16	Continue to develop Statements of Intent for all of Council's rural roads to establish the functional requirements and consistently identify improvements and priorities across the rural road network
20	Identify opportunities to improve network resilience (for example, intra-state coastal shipping) and to maintain the movement of essential goods and freight across supply chains and transport modes during disruptive events

Figure 9 – Selected actions – Mackay region

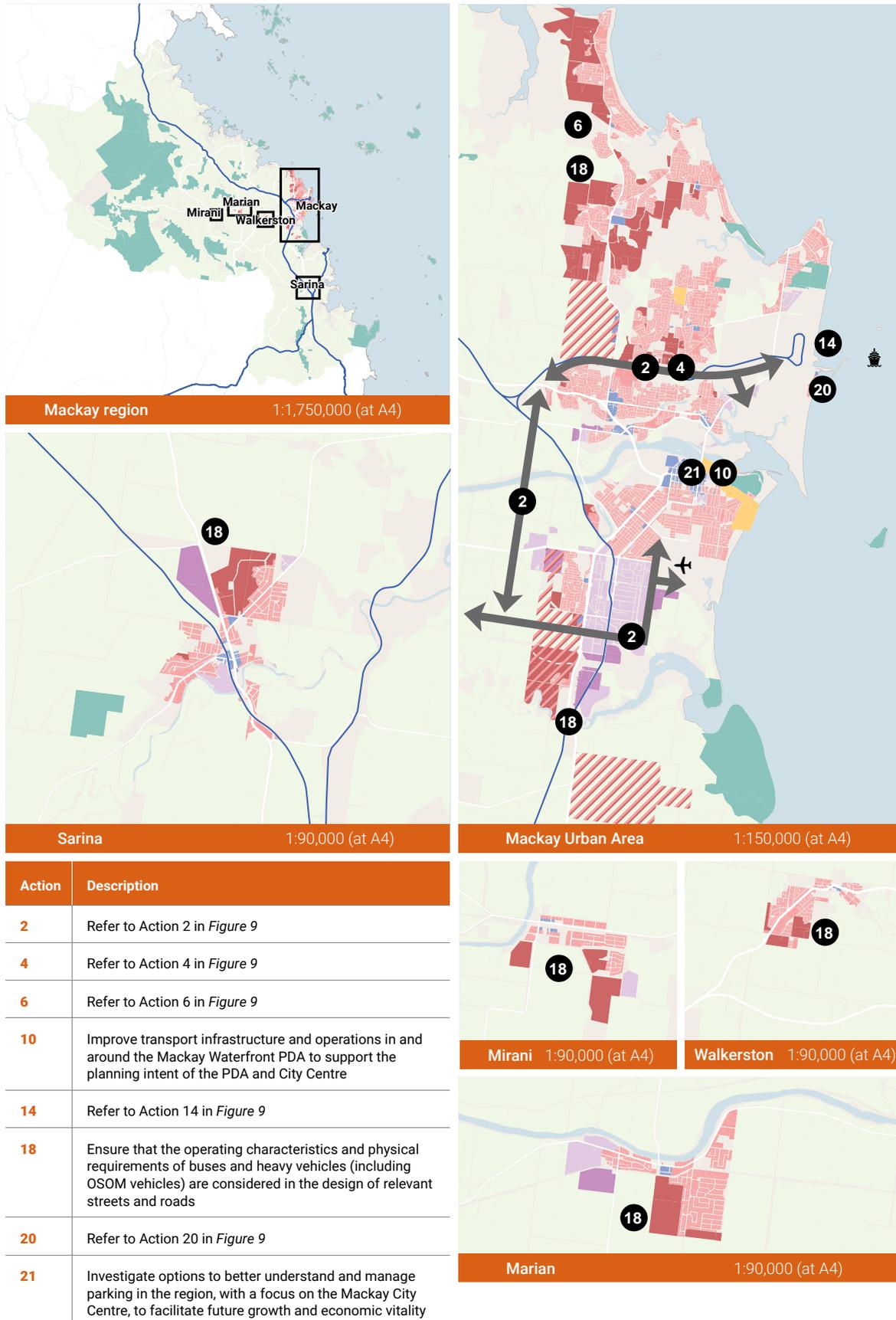


Figure 10 – Selected actions – towns



Section 4:  
**Implementation**

## Implementation

**The MRITS was prepared based on a review of existing plans and policies, consideration of growth pressures, emerging trends and technologies, and input from government, industry and the community.**

The resulting actions presented in the Action Plan provide an indication of Council's strategic forward planning for the region's transport system over the next 15 years.

Because of the strategic nature of the MRITS, it is unlikely that every single proposed action will directly address the issues and challenges in the region that need to be resolved right away. In recognition of this, Council has identified a number of specific initiatives that are immediate priorities. These immediate priorities are presented below.

Initiative	Related action
Audit the MRPS to understand the effectiveness and implications of existing provisions towards the attainment of the MRITS vision	5
Prepare a local area transport plan for the Northern Beaches to support current and planned growth, improve multi-modal access and network resilience	6
Develop an Active Transport Strategy for the Mackay region	8
Identify cycle tourism opportunities across the region through research and engagement with key organisations, including Bicycle Queensland	9
Establish a MRITS Working Group and terms of reference to implement, monitor and evaluate the MRITS, drawing on available data where possible	25



# Implementation

**The overarching process for implementing the MRITS and translating the actions and initiatives into actual improvements to the transport system is outlined in Figure 11.**

As shown below, this will require effective integration and alignment with other plans and policies, the involvement of a variety of stakeholders, the application and adherence to realistic timeframes, consideration of competing priorities, and recognition of available resources and funding.

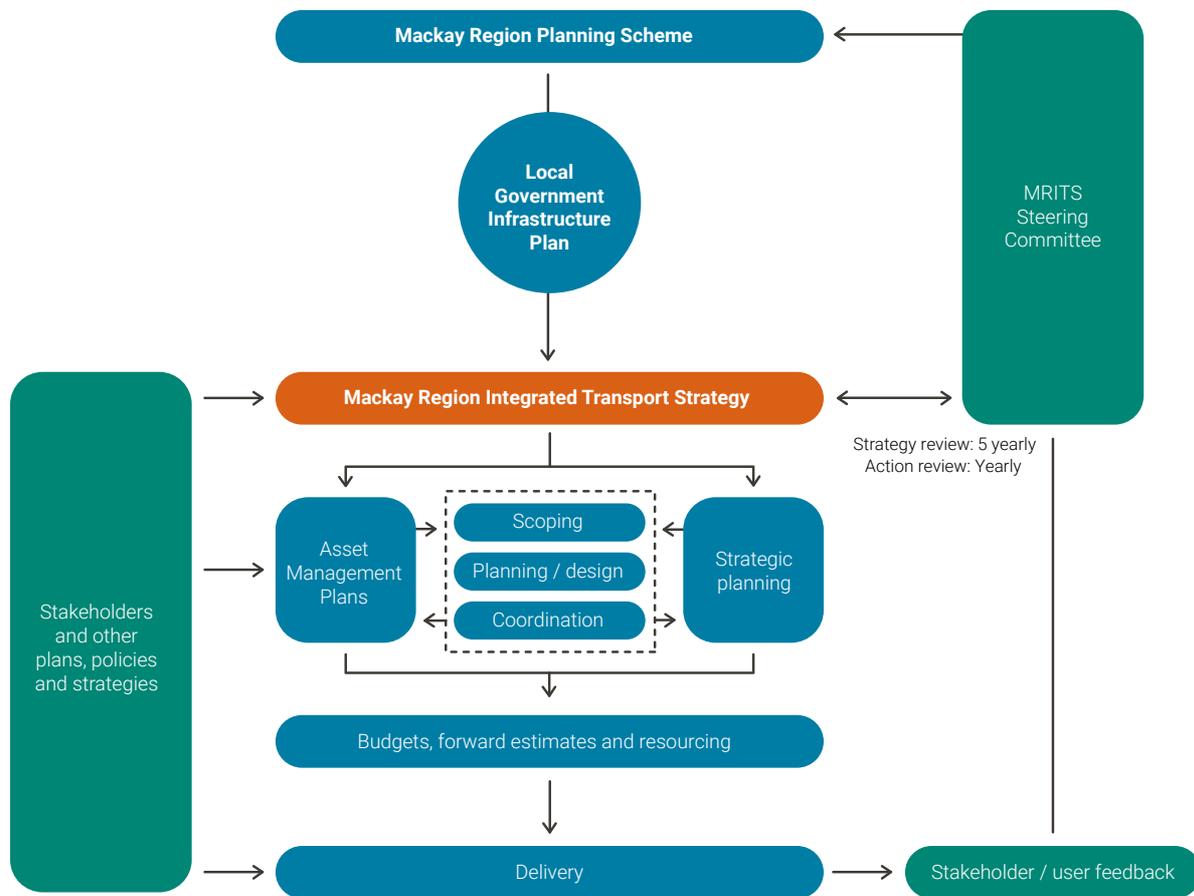


Figure 11 – Implementation process

The actions presented in the MRITS will be reviewed annually to determine their progress towards implementation and confirm their ongoing relevance. The entire Strategy, including the issues, challenges and strategic direction (i.e., vision, objectives, strategic outcomes), will be reviewed by Council every five years.

Undertaking regular reviews and evaluation will help to ensure the Strategy continues to support the development of a transport system that increases the liveability and prosperity of our region and leaves a positive legacy for future generations.



Section 4: Implementation







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### **11.4.2. FACILITATING DEVELOPMENT GREAT BARRIER REEF ARENA**

**Author** Principal Economic Development Officer (Nadine Connolly)  
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**File Reference** Facilitating Development

**Attachments** 1. 2. Great Barrier Reef Arena - Town Planning Report [11.4.2.1 - 41 pages]

#### **Purpose**

To assess an application under the Facilitating Development in the Mackay Region Policy.

#### **Related Parties**

Mackay Cricket Association  
Harrup Park Country Club  
Paynter's Commercial Construction  
Empower Economics  
Wohlsen Consulting  
Urbis Planning

#### **Corporate Plan Linkage**

Priority: Economy

*Strategy: Facilitate development* - Utilising the Planning Scheme to deliver an integrated approach to the facilitation of development and sustainable growth.

Facilitate catalytic land and infrastructure developments by attracting investment through joint ventures and partnerships with the private sector, and by working with State and Federal governments on joint initiatives.

#### **Background/Discussion**

The proposed development by the Mackay Cricket Association known as the Great Barrier Reef Arena Development, is categorised as a Material Change of Use for Major Sport, Recreation and Entertainment Facility (DA-2020-57). The development is located at 89 Juliet Street, South Mackay (Lot 20 on SP281890).

The proposal involves a major redevelopment of the Harrup Park Country Club in South Mackay. The purpose of the redevelopment is to create a venue that enables the Mackay region to host major entertainment events, concerts and sporting events including test cricket matches, Big Bash League matches, AFL exhibition matches, and AFLW matches. The proposal also includes substantial internal public space improvements, as well as upgrades to site infrastructure, providing the venue with the capacity to host a wider range of public and sporting events.

The core components of the redevelopment are as follows:

- A new northern stand
- A 'Northern Green' entertainment precinct and public open space
- Improvement to TV filming and broadcasting capabilities
- Construction of a new public plaza and pedestrian connections to Juliet and Kippen Streets
- Overall improvements to public amenity (landscaping and architecture) and simplified car and bus access from Juliet Street
- Enhanced event management arrangements for large events (e.g. event car parking and traffic management).

The proposed northern stand will increase the general admission seating capacity for the overall venue from 189 to 1,867 people. The new seating includes a substantial increase in seating options for patrons with lower levels of mobility and vision.

The applicant's development application (DA-2020-57) was approved by Council on 4 December 2020.

### Incentive Requests

The applicant submitted an Expression of Interest under the Facilitating Development in the Mackay Region Policy (Policy) on 18 February 2021, and the subsequent Stage 2 Application was received on 25 March 2021. The applicant is seeking concessions under Schedule 4 Tourism Development.

The application has been assessed against version 7 of the Policy, which has been in effect since 9 December 2020.

The following concessions have been requested:

- Schedule 4 Tourism Development (100% concession on infrastructure charges):
  - Infrastructure Charges = \$191,634.75
  - Requested concession = \$191,634.75
  - Charges payable = \$0

As per Schedule 4 Tourism Development in Version 7 of the Policy, infrastructure charges may be reduced up to 100% based on the net charge amount identified on the Infrastructure Charges Notice, after the subtraction of any offsets or credits, to a maximum concession value of \$1,000,000 for eligible tourism developments.

### General Eligibility Criteria

The Policy seeks to attract investment in qualifying developments to stimulate growth, diversify and add value to the economy of the Mackay region.

Based on information provided by the applicant, the proposed development satisfies the requirements under the General Eligibility Criteria in Schedule 4 Tourism Development, as follows.

Criteria	Eligibility
<b>Timing of development</b> Lots are registered within 2 years.	Commencement of construction – July 2021 Commencement of use – July 2022
<b>Non-Government Development</b>	Yes
<b>Infrastructure capacity</b>	The applicant has advised services are already provided to the site, and no external or trunk infrastructure upgrades will be required to service the proposed development.  As per the Infrastructure Charges Notice, no offsets or refunds are applicable to DA-2020-57.

### Specific Eligibility Criteria

Based on information provided by the applicant, the proposal satisfies the requirements under Eligibility Criteria in Schedule 4 Tourism Development of the Policy:

Criteria	Eligibility
<p><b>Economic Investment</b> There is no minimum capital investment for Schedule 4.</p>	<ul style="list-style-type: none"> <li>• Estimated construction cost of development is \$20M.</li> <li>• Estimated total capital investment of \$24.2M</li> <li>• Based on Council’s economic modelling, a direct injection of \$20M (construction costs) will result in combined supply chain and consumption effects of \$27.45M, totalling \$47.451M economic impact.</li> <li>• The applicant has committed to utilising local contractors and suppliers during construction of the development.</li> </ul>
<p><b>Employment Generation</b></p>	<ul style="list-style-type: none"> <li>• The applicant has proposed that the development will generate approximately 90 FTE workers for the construction period.</li> <li>• Post construction, the applicant anticipates 90 new permanent jobs will be created as a result of the development.</li> <li>• Based on Council’s economic modelling, the project will generate 25 direct and 78 indirect jobs, totalling 103 jobs during construction.</li> <li>• The applicant has committed to utilising local contractors and suppliers during construction of the development.</li> </ul>
<p><b>Applicable Area</b> In urban areas, appropriately zoned land that supports the development of tourism uses or accommodation options that principally services short-stay needs.</p>	<p>The development is on appropriately zoned land in the urban area.</p>
<p><b>Applicable Land Uses</b> The Policy applies to material change of use (MCU) for uses that are consistent with “applicable land uses” in Schedule 4 Tourism Development in urban areas (refer to the table in the Policy).</p>	<p>The development application applies to a Material Change of Use for Major Sport, Recreation and Entertainment Facility which is not a defined land use under Schedule 4 Tourism Development in the Policy.</p> <p>Schedule 4 Tourism Development applies to uses that are consistent with the following “appropriate land uses” in urban areas:</p> <ul style="list-style-type: none"> <li>• Function facility</li> <li>• Market</li> <li>• Resort complex</li> <li>• Short-term accommodation</li> <li>• Tourist attraction</li> <li>• Tourist park</li> </ul> <p>The applicant proposes that the new facility will provide an anchor attraction for domestic tourism, benefiting the community and businesses of the Mackay, Whitsunday and Isaac Regions by generating visitation, extending length of stay and increasing expenditure.</p>

	<p>The project scope will enable the retention and attraction of major sporting, entertainment and cultural events with the ability to increase visitation to the region, both domestic and international markets, by over 54,000 visitor nights per year.</p> <p>Mackay Cricket Association / Harrup Park Country Club has been working with the working with state and local governments as well as national sporting and entertainment bodies to identify and validate events and opportunities that may be attracted to the new facilities.</p> <p>In addition, Harrup Park Country Club is partnering with tourism bodies, industry and Mackay Airport to ensure full value of the redevelopment is realised through event scheduling, holiday packaging and marketing.</p> <p>Given the nature of the development and the overarching benefits that it can provide to the region, it is the considered that Schedule 4 Tourism Development is the most appropriate “fit for purpose” schedule under the Policy.</p>
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### Business and Regional Benefits

Based on the information provided by the applicant, the development supports enhanced regional tourism, increased business activity across the local construction/tourism/accommodation providers/hospitality industries and provides additional employment opportunities across various industry sectors.

The applicant has proposed that the development will deliver immediate benefits to the Mackay region’s economy, such as:

- The project demonstrates a direct injection of \$20 million into the regional economy, and an investment in the region’s tourism product. The economic importance of developing and diversifying our tourism assets and building domestic travel is growing in a post-COVID economy.
- The project will result in increased business activity across a number of industry sectors, benefiting the communities and businesses of the Mackay, Whitsunday and Isaac regions.
- The project will generate increased visitation, length of stay and expenditure.
- The project will provide new community precincts, spaces and amenities that will benefit the people of the Mackay region (eg. markets, festivals, concerts, etc).
- The project will enable the retention and attraction of major sporting, entertainment and cultural events, potentially increasing visitation to the region (from domestic and international markets) by over 54,000 visitor nights per year.
- During construction, the applicant anticipates the project will increase gross regional product by \$14,448 million, generate 90 jobs, contribute \$7.37 million in wages and salaries, and result in a total output of \$43.215 million.
- When operational, the applicant anticipates the development will increase gross regional project by \$14.691 million, generate 90 ongoing jobs, contribute \$7.628 million in wages and salaries, inject 54,000 additional visitor nights, and result in a total output of \$31.69 million per annum.

### Consultation and Communication

The Development Assessment program has considered the development application through the statutory assessment provisions under the *Planning Act 2016*. As part of this assessment process, other relevant sections of Council were consulted.

The Director of Development Services has also considered this application and provided approval for the Expression of Interest to progress to a Stage 2 Application.

A Council briefing on the application under the Policy was held on 14 April 2021.

### Resource Implications

In accordance with the Infrastructure Charges Notice, the development gives rise to total infrastructure charges of \$191,634.75 (+ annual adjustments).

Under Schedule 4 Tourism Development, infrastructure charges may be reduced up to 100% based on the net charge amount identified on the Infrastructure Charges Notice and after the application of any offsets and credits, to a maximum concession value of \$1,000,000.

It is proposed that infrastructure charge concessions only apply to the net charge amounts calculated following the subtraction of any offsets and credits. The application of this methodology will ensure that the granting of concessions does not introduce any additional infrastructure costs to Council.

Schedule 4 Tourism Development:

Gross Infrastructure Charge (IC)	Credit	Net Infrastructure Charge (IC minus Credit)	Concession (%)	Concession (\$)	Charges Payable
\$191,634.75	\$0	\$191,634.75	100%	\$191,634.75	\$0

### Risk Management Implications

There is a risk that granting significant concessions can leave Council exposed to similar claims in the future and that a potential infrastructure funding gap could present. These risks are sufficiently mitigated through the following measures:

- An existing development approval is in place and on-site infrastructure requirements have been reviewed as part of the assessment process;
- A condition has been included as part of the officer's recommendation stating that the approved concessions are dependent on Council not incurring any additional infrastructure costs (including 'bring forward costs') to service the development;
- Strict timeframes are placed for claiming approved concessions. If the lots are not registered within the recommended timeframe, the concessions will no longer be applicable and 100% of the applicable Infrastructure Charges will be applicable to the development;
- Council can review the application of the Policy at any time.

## **Conclusion**

The Policy provides incentives for developments that will deliver economic development and growth outcomes in alignment with Council's policy and planning objectives.

The proposed application supports the desired outcomes of Schedule 4 of the Policy and the provision of concessions will facilitate the delivery of the project and the delivery of construction jobs and increased economic output.

## **Officer's Recommendation**

THAT the following Specific Incentive is approved under the Facilitating Development in the Mackay Region Policy for Mackay Cricket Association's Great Barrier Reef Arena Development, located at 89 Juliet Street, South Mackay (Lot 20 on SP281890):

- a. Concession of 100% (estimated at \$191,634.75) be applied against the net charge amount, calculated following annual adjustments and subtraction of any offsets and credits, on the Material Change of Use for Major Sport, Recreation and Entertainment Facility (DA-2020-57).

AND THAT the approval of concessions is dependent on:

- a. The development must be completed and commenced use by 23 June 2023.
- b. No additional infrastructure costs incurred by Council (including establishment and bring forward costs).
- c. The developer utilising local contractors and suppliers.

Cr Bonaventura queried if staff had conducted checking on the validity of numbers in relation to jobs created and visitor nights supplied by the applicant.

The Director advised that the Department relies on the information provided by the applicant as part of the application process but does sometimes assist applicants to work out the methodology for the generation of that data. The Director advised that the department is quite comfortable with the information submitted.

Cr Bonaventura noted that the Specific Eligibility Criteria is based on information provided by the applicant but under Business and Regional Benefits, this same information is used. Cr Bonaventura asked if confirmation could be provided that staff have checked the numbers and agree with the points provided in that section of the report.

The Director advised that that section of report explains that Council's analysis is based on information provided by the applicant. The Director advised that she would have to take on notice whether any specific checks were undertaken but reiterated that the Department is satisfied with the information that has been provided.

Cr Seymour noted that there are currently 272 car parks off Juliet Street with the report from URBIS stating that a total of 159 parking spaces will be provided which include 141 existing spaces. Cr Seymour sought clarification on the number of car parks.

The Director advised that she understands the number includes the additional car parks. The Director noted that parking for business as usual and for events was assessed as part of the Development Application.

## **Council Resolution ORD-2021-210**

**THAT the following Specific Incentive is approved under the Facilitating Development in the Mackay Region Policy for Mackay Cricket Association's Great Barrier Reef Arena Development, located at 89 Juliet Street, South Mackay (Lot 20 on SP281890):**

- a. Concession of 100% (estimated at \$191,634.75) be applied against the net charge amount, calculated following annual adjustments and subtraction of any offsets and credits, on the Material Change of Use for Major Sport, Recreation and Entertainment Facility (DA-2020-57).**

**AND THAT the approval of concessions is dependent on:**

- a. The development must be completed and commenced use by 23 June 2023.**
- b. No additional infrastructure costs incurred by Council (including establishment and bring forward costs).**
- c. The developer utilising local contractors and suppliers.**

**Moved Cr Englert**

**Seconded Cr Green**

Cr Englert noted that he wished to speak to this as mover, however his computer had just shut down containing his notes and suggested that Cr Green may like to speak first.

Cr Green expressed the view that this was an exciting development which will be a bonus to the Region. Cr Green noted that the proposal involves a major redevelopment of Harrup Park Country Club which will allow them to host Tier 1 cricket events and other major sporting and entertainment events. Cr Green noted that Harrup Park Country Club is partnering with tourism bodies, industry and Mackay Airport to ensure full value of the redevelopment is realised through event scheduling, holiday packaging and marketing and believes that the concession is a small sum in exchange for the economic and social benefits that will flow to the Region.

Cr Bonaventura advised that in light of the Directors assurance that what is in the report regarding economic benefits is accurate, he supports the resolution.

Cr Jones queried if there were going to be zones for bus drop offs.

The Director advised that through the development application process, there was a plan provided in relation to event management in relation to bus drop offs and overflow car parking and she would be happy to circulate that document.

Cr Englert noted that Councillors had been briefed on this matter in April and under Schedule 4 Tourism Development, infrastructure charges may be reduced to a maximum of \$1,000,000. Cr Englert expressed the view that this was the best outcome for the rate payers noting that the State Government had wanted Council to own this facility if they were to contribute funding. Cr Englert noted that a condition was that they must be operational by 23 June 2023 and must use local contractors and suppliers.

**CARRIED**



# TOWN PLANNING REPORT

Great Barrier Reef Arena

Prepared for  
**MACKAY CRICKET ASSOCIATION**  
23 April 2020



**URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:**

Director	Kris Krpan
Associate Director	Sophie Lam
Consultant	Sam Robinson
Project Code	P0015928
Report Number	Final V1

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## CONTENTS

<b>Executive Summary</b> .....	<b>5</b>
Aspects of Development .....	5
Applicant Details.....	5
<b>Introduction</b> .....	<b>6</b>
<b>1. The Site</b> .....	<b>7</b>
1.1. Location .....	7
1.2. Site Characteristics .....	7
<b>2. Surrounding Context</b> .....	<b>10</b>
<b>3. The Proposal</b> .....	<b>1</b>
3.1.1. Proposed Northern Stand.....	3
3.1.2. Refurbished Eastern AFL Building .....	4
3.1.3. Pedestrian Spines and Northern Green Entertainment Precinct .....	5
3.1.4. Other Improvements.....	7
<b>4. Community Benefits Statement</b> .....	<b>9</b>
<b>5. Prelodgement Engagement</b> .....	<b>12</b>
5.1. Council Prelodgement Meetings.....	12
5.2. SARA Prelodgement Advice.....	12
<b>6. Specialist Information</b> .....	<b>13</b>
6.1.1. Architectural Design .....	13
6.1.2. Traffic Engineering .....	13
6.1.3. Engineering .....	14
6.1.4. Environmental Noise Assessment.....	14
6.1.5. Landscape Architecture .....	15
<b>7. State Planning Framework</b> .....	<b>17</b>
7.1. Planning Act 2016.....	17
7.1.1. Definition of Development .....	17
7.1.2. Categories of Assessment .....	17
7.2. State Planning Policy .....	17
7.3. Regional Plan.....	19
7.4. State Assessment Referral Agency .....	20
<b>8. Local Planning Framework</b> .....	<b>23</b>
8.1. Definitions .....	23
8.2. Zoning .....	23
8.3. Local Plan Areas.....	24
8.4. Overlays.....	24
8.5. Category of Development and Assessment .....	25
8.5.1. Category of Assessment .....	25
8.6. Assessment Benchmarks .....	26
<b>9. Reasons for Approval</b> .....	<b>27</b>
<b>9.1. Local Government Reasons for Approval</b> .....	<b>27</b>
9.1.1. Assessment Benchmarks.....	27
9.1.2. Matters Prescribed by the Regulation .....	27
9.1.2.1. Mackay Region Planning Scheme 2017 .....	28
9.1.2.2. Mackay, Isaac and Whitsunday Regional Plan .....	28
9.1.2.3. State Planning Policy.....	28
9.1.2.4. Designations .....	28
9.1.2.5. Temporary State Planning Policies .....	28
9.1.2.6. Development Approvals .....	28

9.1.2.7. Common Material .....	28
<b>10. Conclusion .....</b>	<b>29</b>
<b>Disclaimer .....</b>	<b>30</b>
<b>Appendix A Title, Easement and Contaminated Land Documents</b>	
<b>Appendix B Mackay Region Planning Scheme Benchmark Assessment</b>	
<b>Appendix C State Development Assessment Provisions Checklist and Assessment</b>	
<b>Appendix D State Planning Policy Assessment</b>	
<b>Appendix E Architectural Design Report prepared by Cox Architecture</b>	
<b>Appendix F Architectural Plans prepared by Cox Architecture</b>	
<b>Appendix G Traffic Engineering Report prepared by TTM Group</b>	
<b>Appendix H Operational Waste Management Plan prepared by TTM Group</b>	
<b>Appendix I Environment Noise Assessment Report prepared by TTM Group</b>	
<b>Appendix J Civil Engineering Report prepared Cardno</b>	
<b>Appendix K Flooding Report prepared by Cardno</b>	
<b>Appendix L Flood Evacuation Plan prepared by Cardno</b>	
<b>Appendix M Site Based Stormwater Management Plan prepared by Cardno</b>	
<b>Appendix N Landscape Concept Plan prepared by Tract</b>	
<b>Appendix O Council Prelodgement Meeting Minutes</b>	
<b>Appendix P SARA Prelodgement Advice</b>	

## EXECUTIVE SUMMARY

Key Information	Proposal Detail
Address of Site	89 Juliet Street and 44 Lamb Street, South Mackay QLD 4740
Real Property Description	Part of Lot 20 on SP28190 and Lot 392 on SP247646
Total Site Area	152,710m <sup>2</sup>
Local Government	Mackay Regional Council
Planning Scheme / Local Government Categorising Instrument	Mackay Region Planning Scheme 2017
Zone and Precinct	Sport and Recreation Zone
Local Plan	The site is not located within a Local Plan area
General Description of Proposal	The proposal involves a major redevelopment of the Harrup Park Country Club to create a premier sports and event destination in Mackay. The proposed redevelopment will increase seating capacity, improve patron experience, deliver new public spaces, and improve general public amenity.
Land Owner	Mackay Cricket Club Pty Ltd

Title, Easement and Covenant documents are provided within **Appendix A**.

## ASPECTS OF DEVELOPMENT

Aspect of Development	Approval Sought	Category of Assessment
Material Change of Use for Major Sport, Recreation and Entertainment Facility	Development Permit	Code Assessment

## APPLICANT DETAILS

Applicant	Urbis Contact Details	Urbis Reference Number
Mackay Cricket Association C/- Urbis Level 32, 300 George Street Brisbane City, QLD, 4000	Sophie Lam / Sam Robinson <a href="mailto:slam@urbis.com.au">slam@urbis.com.au</a> / <a href="mailto:srobinson@urbis.com.au">srobinson@urbis.com.au</a> (07) 3007 3800	P0015928

## INTRODUCTION

Urbis Pty Ltd, has prepared this development application on behalf of Mackay Cricket Association (**'the Applicant'**). This report addresses the merits of the development with regard to the assessment benchmarks under the *Mackay Region Planning Scheme 2017* (**'the Planning Scheme'**) and the relevant sections of the *Planning Act 2016* (**'the Act'**).

This application seeks a Development Permit for a Material Change of Use for a Major Sport, Recreation and Entertainment Facility. The proposal involves a major redevelopment of the Harrup Park Country Club stadium in South Mackay.

The proposed redevelopment of Harrup Park Country Club will elevate the stadium to an elite sporting venue capable of hosting major sporting events. In particular, the redeveloped facility will qualify for hosting Tier 1 Cricket events and will also become a Category 4 Venue for Australian Rules Football. These new facility classifications will allow for Mackay to host major events including test cricket matches, Big Bash League matches, AFL exhibition matches, and AFLW matches.

The project also seeks to reinforce Harrup Park as a key community space which can host a range of public events. The proposed redevelopment project will be underpinned by substantial public space improvements within the site, as well as upgrades to site infrastructure.

The land the subject of this development application comprises three allotments described as 89 Juliet Street, 44 Lamb Street, and 90 Bridge Road in South Mackay. The site is formally described as part of Lot 20 on SP28190 and Lot 392 on SP247646 (**'the site'**).

This report is accompanied by and should be read in conjunction with the following drawings and technical reports:

- Appendix A** – Property Title Documentation;
- Appendix B** –Mackay Regional Planning Scheme Code Responses;
- Appendix C** – SPP Assessment;
- Appendix D** – SDAP Checklist;
- Appendix E** – Architectural Design Report prepared by *Cox Architecture*;
- Appendix F** – Architectural Plans prepared by *Cox Architecture*;
- Appendix G** – Traffic Engineering Report prepared by *TTM Group*;
- Appendix H** – Operational Waste Management Plan prepared by *TTM Group*;
- Appendix I** – Environment Noise Assessment Report prepared by *TTM Group*;
- Appendix J** – Civil Engineering Report prepared *Cardno*;
- Appendix K** – Flooding Report prepared by *Cardno*;
- Appendix L** – Flood Evacuation Plan prepared by *Cardno*;
- Appendix M** – Site Based Stormwater Management Plan prepared by *Cardno*;
- Appendix N** – Landscape Concept Plan prepared by *Tract*;
- Appendix O** – Mackay Regional Council Prelodgement Meeting Minutes; and
- Appendix P** – SARA Prelodgement Advice.

The assessment of the application is to be undertaken in accordance with Section 45(3) of the Planning Act and Sections 26 and 27 of the *Planning Regulation 2017*. This report provides the Applicant's assessment against these provisions and concludes that the development is appropriate, generally consistent with State legislative framework, the existing Local Planning Scheme controls and intent for the area and is not anticipated to impact upon the amenity of the locality. Council's approval of the application is therefore sought, subject to relevant and reasonable conditions.

# 1. THE SITE

## 1.1. LOCATION

This application relates to the Harrup Park Country Club stadium in the suburb of South Mackay, as shown in **Figure 1** below. The site is described as 89 Juliet Street and 44 Lamb Street in South Mackay. The site is more formally described as Lot 392 on SP247646 and part of Lot 20 on SP28190.

It is noted that for the purposes of this application, only part of Lot 20 on SP28190 has been included. The excluded part of Lot 20 comprises the residential zoned section fronting Juliet Street, over which part of the existing car parking area sits.

Figure 1 – Aerial Image of Site



Source: Nearmap

For full details on the bounds of the site, please refer to the Architectural Plans prepared by *Cox Architecture* in **Appendix F**.

## 1.2. SITE CHARACTERISTICS

The land totals 152,710m<sup>2</sup> in area and has frontages to Juliet Street (approx. 20m), Kippen Street (approx. 260m) and Lamb Street (approx. 450m).

The site is the location of the Harrup Park Country Club, which is a multi-use sports and entertainment premises. Historical recounts indicate that the site has been used for sporting and recreation uses since the 19<sup>th</sup> century.

The site is currently improved with the following:

- 6 ovals catering for Cricket and AFL at both the junior and senior levels;

- main club building;
- car parking area comprising 272 car parking spaces, accessed from Juliet Street;
- temporary and permanent grandstands;
- scoreboard; and
- ancillary buildings encompassing players change facilities and coaches box.

The land exhibits very little topographical variance, with the highest point of the site being approximately 6m AHD and the lowest point being approximately 4m AHD.

Whilst the site does include a number of mature trees, the majority of the land is devoid of significant vegetation. Notably, the site is not included on the Mackay Significant Tree Register.

Photographs of the site are shown in **Figure 2** below.

Figure 2 – Site Photographs



Picture 1 – Main vehicular access from Juliet Street  
Source: Google Maps



Picture 2 – Vehicular access from Lamb Street  
Source: Google Maps



Picture 3 – Existing Harrup Park Country Club building on the site  
Source: Urbis



Picture 4 – Existing southwing grandstand  
Source: Urbis



Picture 5 – Existing sporting fields on site  
Source: Urbis



Picture 6 – Northern end of site and location of proposed north grandstand  
Source: Google Maps

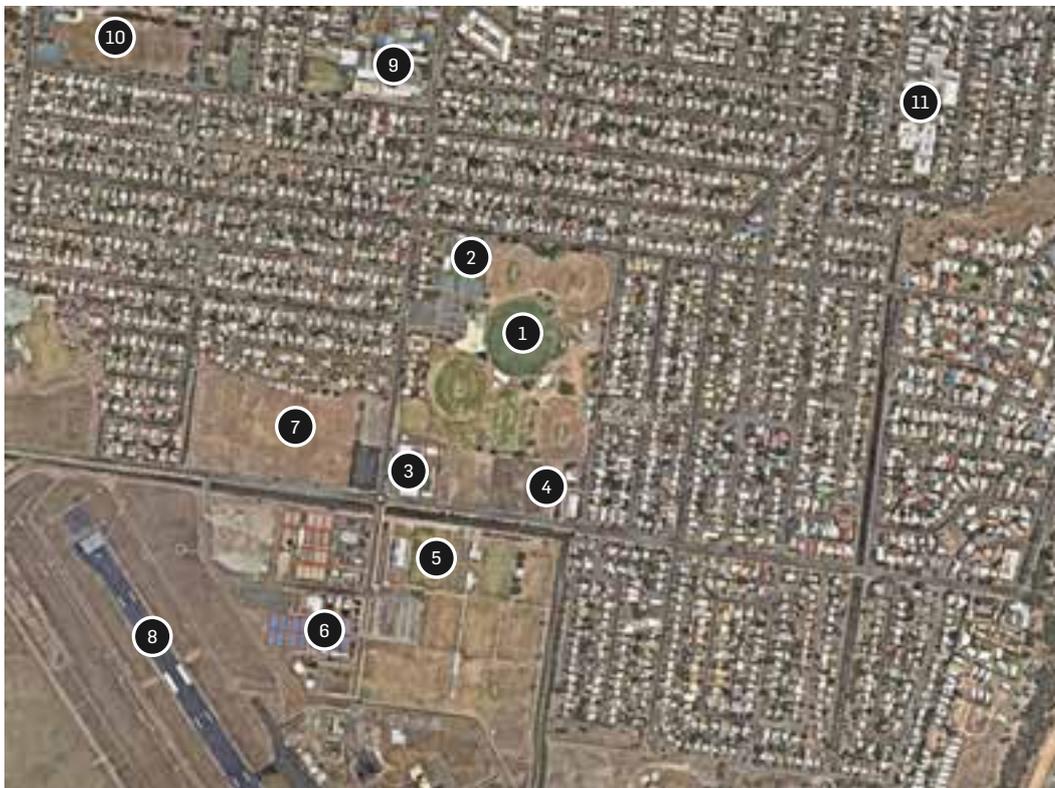
## 2. SURROUNDING CONTEXT

The site is located adjacent to a number of sporting and recreation facilities along with low density residential uses. Specifically, the premises are surrounded by the following:

- South – to the south of the site is the Mackay multi-use indoor sports stadium and the Mackay Table Tennis Association facilities. Further to the south, across Bridge Road, are other sporting and recreation uses including Abbott Park and the Mackay Netball Association;
- North – the area to the north of the site across Kippen Street comprises a low density residential area;
- West – the area to the west of the site across Juliet Street comprises a low density residential area; and
- East – directly adjoining the site to the east is the Mackay Netball Association outdoor courts. Other easterly adjoining premises involve low density residential land uses. The area further to the east, across Lamb Street, features low density residential uses along with other sporting and recreation uses.

**Figure 3** below outlines a selection of significant key sites in the local area surrounding Harrup Park.

Figure 3 – Surrounding Context Map



Source: Nearmap 2019

### Legend:

- |  |                              |
|--|------------------------------|
| 1. Site  | 8. Mackay Airport            |
| 2. Mackay Tennis Association                   | 9. Mercy College Mackay      |
| 3. Mackay Multisports Stadium and Croquet Club | 10. Mackay State High School |
| 4. Mackay Table Tennis Association             | 11. Good Shepherd Aged Care  |
| 5. Stadium Mackay (NRL)                        |                              |
| 6. Mackay Netball Association                  |                              |
| 7. City Brothers Football Club                 |                              |

### 3. THE PROPOSAL

This application seeks a Development Permit for a Material Change of Use for a Major Sport, Recreation and Entertainment Facility. The proposal involves a major redevelopment of the Harrup Park Country Club stadium in South Mackay.

The purpose of the proposed redevelopment is to provide an elite venue for Mackay which caters for AFL, Cricket, and other events. In particular, the redeveloped facility will qualify for hosting Tier 1 Cricket events and will also become a Category 4 Venue for Australian Rules Football. These new facility classifications will allow for Mackay to host major events including test cricket matches, Big Bash League matches, AFL exhibition matches, and AFLW matches.

The proposal will establish Harrup Park as a key community space which has the capacity to host a wider range of public and sporting events. The proposed redevelopment will be underpinned by substantial internal public space improvements, as well as upgrades to site infrastructure. The core components of the redevelopment project are summarised below:

- development of a new northern stand on the northern side of main playing field;
- delivery of a new 'Northern Green' entertainment precinct and public open space;
- improvement of TV filming and broadcasting capabilities through new facilities and infrastructure;
- construction of a new public plaza and pedestrian connections to Juliet and Kippen Streets;
- overall improvements to public amenity through refreshed landscaping and architecture;
- simplified car and bus access from Juliet Street; and
- enhanced event management arrangements for large weekend sporting and community events including formalised event car parking and traffic management strategies.

No changes are proposed to the existing Harrup Park Country Club building on the site, or to the layout of fields. In parallel to this application, improvements to pedestrian access over non-core land are being made by changes to existing approvals.

The proposed upgrades will allow the Great Barrier Reef Arena to accommodate a variety of sporting and community events, in addition to the existing Harrup Park Country Club and sporting use of the site. Typical use and events are anticipated to include the following:

- **Weekday** – usual operations of the Harrup Park Country Club;
- **Weekend (normal use)** – usual operations of the Harrup Park Country Club as well as local grade cricket and AFL games;
- **Weekend (major event use)** – Major sporting events, community events, concerts, celebrations, and local festivals.

**Figure 4** below illustrates the proposed masterplan for the site. The individual components of the proposal are discussed in the sections below.



Key Development Parameter	Proposed Development
	<ul style="list-style-type: none"> <li>• 5 additional spaces in the main car parking area accessed via Juliet Street; and</li> <li>• 6 additional spaces located to the north of the proposed northern stand.</li> </ul> <p><i>It is noted that an additional 117 car parking spaces are located on the part of Lot 20 on SP28190 which is not included as part of this application. Practically, these spaces are associated with the proposed development and are open and accessible for use by patrons. The above figures do not include overflow parking, which is outlined in section 6.1.2 below.</i></p>
Servicing	The development is to utilise the existing servicing arrangements, with designated loading bays for RCVs accessed from the existing vehicular crossovers from Lamb Street and Juliet Street.
Seating	1,867 seats, comprised of: <ul style="list-style-type: none"> <li>• 1,678 proposed seats; and</li> <li>• 189 existing seats.</li> </ul>
Hours of Operation	Regular operation - 7am to 10pm Large events to operate as per event management plan.

### 3.1.1. Proposed Northern Stand

The proposal involves the development of a new northern stand adjacent to the main playing field on the site. This proposed new northern stand will act as an anchor for the other new elements of the proposal in context of its location on the site. Specifically, the movement infrastructure, landscaping, and public space elements also being proposed are located around this new northern stand.

**Figure 5** below illustrates the location and orientation of the proposed northern stand in context of the main playing field and clubhouse.

The proposed northern stand will increase the general admission seating capacity for the overall venue from 189 to 1,867 people. The proposed new seating also includes substantially increased seating options for patrons with lower levels of mobility and vision.

The proposed northern stand also includes flexible spaces for functions, player spectating, medical treatment, change rooms, and other general amenities. The use of these spaces is limited to activities which are consistent with the Planning Scheme land use definition for a Major Sport, Recreation, and Entertainment Facility.

The proposed northern stand has been designed to cater for different 'modes', the most distinct being an AFL mode and a Cricket mode. This proposed northern stand will also include areas used for building services, plant, and storage.

Figure 5 – Proposed Northern Stand



Source: Cox Architecture

For further details on this element of the proposal, please refer to the Architectural Plans prepared by Cox Architecture in **Appendix F**.

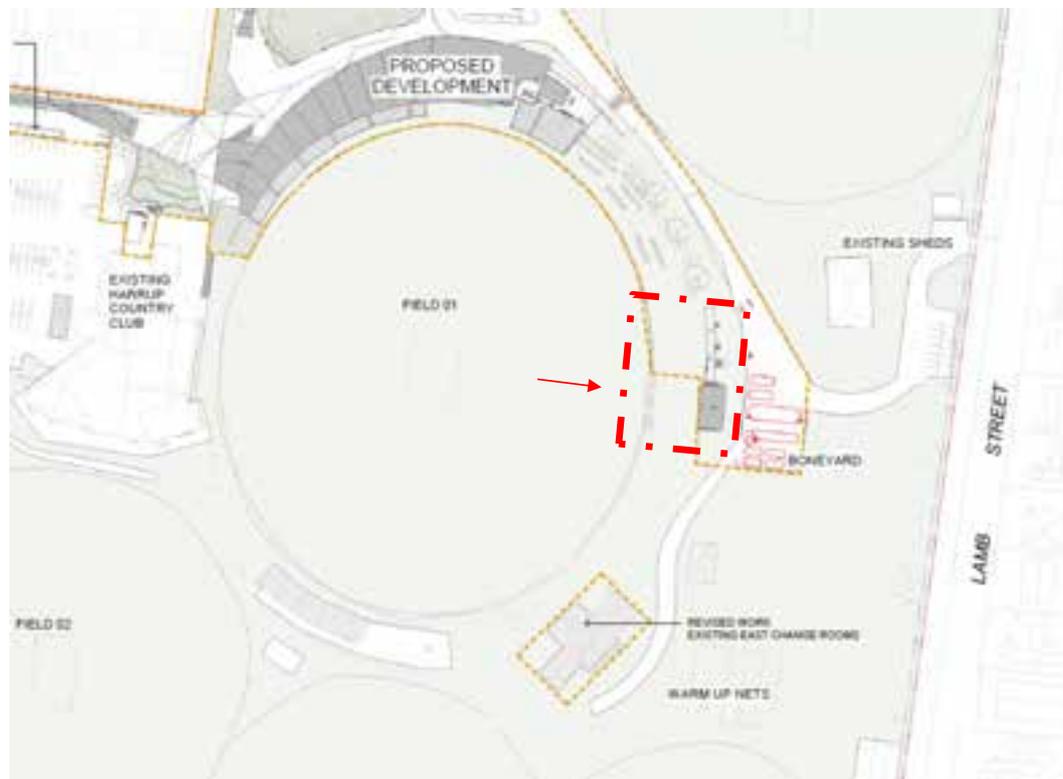
### 3.1.2. Refurbished Eastern AFL Building

The proposal involves refurbishment of the eastern building adjacent to the main field. This building is to host a camera deck of AFL matches, coaches rooms for AFL matches, and a corporate box. The adjoining areas, being the boneyard (TV broadcasting vehicle parking) and player interchange boxes are also to be updated.

**Figure 6** below illustrates the location of this eastern building on the site.

The proposal also involves an update to the eastern changing sheds illustrated in orange in the below figure. These refurbishments are predominantly internal and will not increase the area of the changing sheds. The refurbishments therefore do not form a formal part of this development application.

Figure 6 – Refurbished Eastern AFL Building



Source: Cox Architecture

### 3.1.3. Pedestrian Spines and Northern Green Entertainment Precinct

The proposed redevelopment is to be underpinned by new pedestrian connections and pathways through the site. As previously outlined, a key aim of the redevelopment is to create a space which supports use of the site by the community for a wide variety of functions and events. Providing attractive and functional pedestrian connections through the site is critical to achieving this goal.

Figure 7 below illustrates key movement spines that will be provided by the proposed development:

Figure 7 – Movement Spines



Source: Cox Architecture

As part of this commitment to improving connectivity, the proposed development will deliver new shaded pedestrian walkways from Juliet and Kippen Street, which will lead to a new plaza area adjacent to the northern stand. It is noted that the walkway from Juliet Street will be sought through a separate application, via a Minor Change to the existing development approval for the Harrup Park Country Club.

The proposed development will also deliver a new entertainment precinct described as 'the Northern Green', which will comprise conversion of the existing sports field in this location. The Northern Green will be adjacent to the new northern stand and benefits from integration with two key site entrances off Kippen Street.

The overall precinct of the Northern Green, new pedestrian spines, central plaza, and northern stand has been designed to facilitate a wide variety of activities, including:

- community events;
- local markets;
- concerts;
- outdoor fitness;
- Public Holiday celebrations;
- small festivals or shows;
- sports carnivals;
- corporate events; and
- a passive space for recreation and pedestrian connectivity.

**Figure 8** below illustrate how these spaces may be designed and used. As outlined above, the above events are expected to occur infrequently, and traffic and parking measures will be addressed through Event Management Plans to be submitted to Council prior to certain events. A draft Event Management Plan is included in the Traffic Engineering Report prepared by TTM and included in **Appendix G**.

Figure 8 – Renders of Proposed Northern Green and Walkway



Source: Cox Architecture

### 3.1.4. Other Improvements

In addition to the key elements of the proposed development described above, the proposal will deliver other improvements to the site including:

- updated and increased landscaping;

- provision of a new vehicle thoroughfare through to the northern stand. This internal road will support improve convenience, legibility, and emergency services access for this part of the site;
- updated boneyard area (mobile TV broadcasting); and
- access points formalised and filtered by mode of transport. Notably, the eastern vehicle accesses will become secure and will only be able to be accessed by designated vehicles.

For full details on the proposed development, please refer to the Architectural Plans prepared by Cox Architecture in **Appendix F**.

## 4. COMMUNITY BENEFITS STATEMENT

The proposed redevelopment of Harrup Park will deliver significant benefits to not only the site itself but also broader community. The design of the redevelopment has considered community benefits and sought to create a space which is highly valued by the residents of Mackay. This section of the report identifies and discusses key community benefits which will be resultant from the redevelopment of Harrup Park.

### Attracting Premier Events

As outlined in Section 4 above, the proposal seeks to deliver a stadium to Mackay capable of hosting premier sporting events. In particular, the redeveloped facility will qualify for hosting Tier 1 Cricket events and will also become a Category 4 Venue for Australian Rules Football. These new facility classifications will also allow for Mackay to host major events including test cricket matches, Big Bash League matches, AFL exhibition matches, and AFLW matches. Currently, Mackay does not have a facility capable of hosting such events.

In addition to sporting events, the proposed redevelopment will provide a facility capable of hosting major entertainment events and concerts. The redeveloped facility will allow for concerts to be set up in numerous arrangements and as such will be able to cater for a large variety of acts. Further details on the proposed development's capabilities in this regard are provided in Architectural Design Report (**Appendix E**).

Figure 9 – Major Event Capacity



Source: Cox Architecture

### Reinforcing Mackay's Identity

The proposed redevelopment of Harrup Park into the Great Barrier Reef Arena will create a distinct and memorable place which contributes to the reputation of Mackay. The creation of a major sporting venue will elevate Mackay's profile and status by virtue. The redevelopment of the site will also advance the reputation of Mackay as a sporting city. In view of these points, a significant opportunity to provide a positive design statement is presented by the development.

The Architectural Design Report (**Appendix E**) outlines how the proposed design capitalises on these opportunities presented for the site. The result design is highly attractive, functional, and most importantly – distinctive.

## Supporting Sport and Recreation

The proposed redevelopment will not only allow for premier sporting events at the site but will also advance grassroots sports in Mackay. Specifically, the upgraded Great Barrier Reef Arena will be available for use by a variety of parties, not just elite sporting codes. Access to high level facilities and sporting infrastructure is a critical factor in the ability for local sporting clubs to operate a successful programme.

Further to the above, the proposed provision of public spaces and improved pedestrian connections will improve the site's ability to cater for active and passive recreation. The public realm improvements delivered by the development will increase the functionality and visual amenity of the site, which in turn will attract members of the public to use the space for recreational uses.

In view of the above points, the proposed redevelopment of Harrup Park is considered to be a highly positive investment in community infrastructure.

## Delivering New Public Spaces

The proposed redevelopment will deliver new public spaces on the site, namely the Northern Green and also the central plaza area. These areas have been designed to be flexible in nature and will further diversify the ways in which the public can enjoy the site. The proposed public spaces will be fully accessible to the public and have been designed to reinforce a sense of openness. The delivery of public spaces which are enjoyed by the community is also a key driver towards reinforcing Mackay's identity as outlined above.

As outlined in the Architectural Design Report (**Appendix E**), these public spaces will be able to be used for community events, markets, or other informal and temporary uses. For a more detailed list on the possible uses of these public spaces, please refer to **Section 3** of this report.

Figure 10 – Kippen Street Entrance and Market Spine



Source: Cox Architecture

## Landscaping

The proposed redevelopment of Harrup Park will deliver a refreshed landscape design for the site. The landscape design for the site has been influenced by the architectural design, environmental and climatic context, and functionality considerations. Increased visual amenity and functionality of the site will be the key benefits from the landscaping proposed for the site.

### Improving Pedestrian Connections

In addition to the provision of public spaces, the proposed development will greatly improve pedestrian connectivity and permeability through the site. Specifically, the key pedestrian spine connecting Juliet and Kippen Streets reflects an excellent urban design outcome with respect to both form and function. This improved connectivity will also in turn support increased patronage to the site, through making access more convenient and attractive.

Figure 11 – Improved Pedestrian Connections



Source: Cox Architecture

## 5. PRELODGE MENT ENGAGEMENT

### 5.1. COUNCIL PRELODGE MENT MEETINGS

On 18 September 2019, a prelodgement meeting with Council was held to discuss the proposed development. An initial concept design for the proposal was presented to Council and discussed. Council indicated their support for the proposal, subject to relevant technical investigations being resolved.

Since this initial prelodgement meeting, a second prelodgement meeting with Council was held on 6 March 2020 to discuss the proposed development.

The following matters were discussed at the meeting:

- Brief of design progression to date;
- Extent of site;
- Land use definition;
- Relevant Planning Scheme controls;
- Transport, access, parking, and servicing;
- Preparation of an event management plan and consideration of overflow parking;
- Civil engineering; and
- Flood and stormwater.

A copy of the minutes for this prelodgement meeting, prepared by the Applicant, is included within **Appendix O**.

### 5.2. SARA PRELODGE MENT ADVICE

On 5 March 2020, the State Assessment and Referral Agency (SARA) provided written advice and comments regarding the proposed development. As described in **Section 8.2** below, SARA is identified as a referral agency for the proposed development.

This written advice provided by SARA included information on the following matters:

- Confirmation of referral trigger and referral agency role;
- Assessment benchmarks involved with referral;
- Public transport considerations;
- Active transport considerations; and
- Preparation of an event management plan.

A copy of the advice provided is included within **Appendix P**. In response to the items raised by SARA, the Traffic Engineering Report includes an Active Transport Assessment and Public Transport Assessment to confirm the development does not have any adverse impacts on these elements.

## 6. SPECIALIST INFORMATION

### 6.1.1. Architectural Design

The proposal has been the subject of extensive architectural design exercises, in which both the current and future function of the development has been contemplated. The architectural design seeks for the premises to become a place for the public to:

- stroll, play and pass through;
- have the flexibility to entertain markets and festivals; and
- gave the capacity to hold large concerts and events in a park environment, and ensure it will be a destination that is:
  1. a tropical place;
  2. promotes sports excellence;
  3. a sports development and education precinct;
  4. celebrating the community; and
  5. operationally sustainability.

The proposed architectural design for Harrup Park draws from the following influences:

- Mackay's environment;
- Mackay's people;
- operational desires for the facility;
- integration with the surrounding area; and
- a place to support the local community.

An Architectural Design Report has been prepared by Cox Architecture and is included within **Appendix E**. This report synthesis the above intentions and considerations of the development to guide the architectural outcomes of the proposed development. The Architectural Design Report includes the following analyses:

- solar studies;
- climatic response studies;
- pedestrian flow analysis;
- pedestrian movement and circulation analysis;
- amenities analysis;
- seating and view performance analysis; and
- sustainability commentary.

For full details, please refer to the Architectural Design Report prepared by Cox Architecture in **Appendix E**.

### 6.1.2. Traffic Engineering

A Traffic Engineering Report has been prepared by TTM Group and is included within **Appendix G**. This report examines the suitability of the proposed development in view of the transport planning requirements relevant to the proposal and the site. The key findings of this statement are summarised below:

- an event management plan will govern the operations of the site during major events. This will include guidance for overflow parking areas and traffic management practices to be implemented for the site;
- the proposed redevelopment of the site will not result in noteworthy impacts on traffic flows with regards to day to day operations;

- a total of 159 parking spaces (including 4 PWD spaces) will be provided for the development. This comprises 148 existing spaces in the main car park accessed via Juliet Street and adjacent to the Lamb Street vehicular entrance, and 11 additional spaces within the main car parking area and adjacent to the proposed north stand. It is noted that an additional 117 car parking spaces are located on the part of Lot 20 on SP28190 which is not included as part of this application. Practically, these spaces are associated with the proposed development and are open and accessible for use by patrons;
- the introduction of event traffic management controls would benefit the local transport network, particularly the Juliet and Kippen Street roundabout. To this end, the report recommends a detail event management plan is prepared for the premises in due course; and
- an analysis of the traffic impacts resultant from major sporting and entertainment events reveals that the current road infrastructure benefitting the site is generally capable of accommodating for additional demand during major event subject to the above.

It is noted that management of overflow parking for events will include providing for this parking on land outside the site the subject of this application. The final details of the extent of this land which may be required is not known and will be determined through the event management plan for specific events. This overflow parking land has therefore not been included in this application.

For further details on traffic engineering matters, please refer to the full report included within **Appendix G**.

### 6.1.3. Engineering

An Engineering Report has been prepared by Cardno and is included within **Appendix J**. This report outlines the civil engineering considerations relevant to the assessment of the development application. Analysis on the following key topics is provided within the report:

- Site earthworks;
- Existing infrastructure;
- Overview of proposed stormwater management arrangements;
- Reticulated water and sewerage servicing;
- Electricity and telecommunications connections;
- Overview of flooding considerations.

In addition to the above matters described in the Engineering Report, the development application is accompanied by the following technical engineering reporting prepared by Cardno:

- Flood Report – **Appendix K**;
- Flood Evacuation Plan – **Appendix L**;
- Site Based Stormwater Management Plan – **Appendix M**.

The abovementioned reporting and documentation detail how the proposed development achieves compliance with the engineering benchmarks relevant to the proposed development.

### 6.1.4. Environmental Noise Assessment

An Environmental Noise Assessment Report has been prepared by TTM Group and is included within **Appendix I**. This assessment examines the current environmental noise circumstances affecting the site along with anticipating future acoustic impacts resultant from the proposed development. The key findings of this statement are summarised below:

- The proposed development is predicted to comply with the relevant noise criteria, if practical noise management strategies are implemented. Recommendations on these strategies is provided within Section 7 of this report and include:
  - Use of the Northern Grandstand should be between the hours of 7am and 10pm;
  - Use of Northern Green should be between the hours of 7am and 10pm;
  - Use of the Outdoor Stage (on Field 01) should be between the hours of 7am and 10pm;

- Waste collection is to occur between the hours of 7am and 10pm;
- Amplified noise sources at the Northern Grandstand should comply with the predicted levels detailed in Section 6.5 or further design and acoustic treatment may be required;
- Amplified noise sources at the Northern Green should comply with the predicted levels detailed in Section 6.6 or further design and acoustic treatment may be required;
- Amplified noise sources at the Outdoor Stage (on Field 01) should comply with the predicted levels detailed in Section 6.7 or further design and acoustic treatment may be required;
- Consider notification of the surrounding community of upcoming large-scale game days so that they are pre-warned of potential noise emissions;
- Any grates or other protective covers in the car parks and access driveways must be rigidly fixed in position to eliminate clanging, and be maintained.

For further details on acoustic impact matters, please refer to the full report included within **Appendix I**.

### 6.1.5. Landscape Architecture

Landscape Concept Plans for the proposed development have been prepared by Tract and are included within **Appendix N**. The landscaping design for the site has been influenced by the architectural and urban design of the development as well as the tropical landscape character of Mackay. In conjunction with the analysis of the project site and project requirements, the proposed landscape design aims to enhance the user / visitor experience and comfort whilst adhering to safety and respecting existing site conditions. This can be achieved through landscape strategies such as:

- Providing shade to pathways and seating areas
- Embellishing entry accesses
- Strengthening views to feature points
- Increasing facilities
- Improving connections
- Incorporating WSUD principles

**Figure 12** below includes an extract from the Concept Plan demonstrating how these features have been incorporated into the pedestrian pathways and Northern Green, including:

- Coloured concrete pavement;
- Arbour structure with trellis planting;
- Low concrete wall seating;
- Turfed areas;
- Stormwater bioswale with WSUD vegetation; and
- Stone pavers and garden beds.

Figure 12 – Landscape Concept Plan



Source: Tract

## 7. STATE PLANNING FRAMEWORK

### 7.1. PLANNING ACT 2016

The *Planning Act 2016* provides a legislative framework for planning and development matters across most areas of Queensland. It is identified that this framework established by the *Planning Act 2016* is relevant to the proposed development. To this end, the proposed development is not located within a Priority Development Area, State Development Area, Infrastructure Designation area, other or specific land use planning jurisdiction.

#### 7.1.1. Definition of Development

The *Planning Act 2016* nominates several types of works within the definition of development. Specifically, relevant to the proposed development, Schedule 2 of the *Planning Act 2016* identifies the following as being classified as development:

Building Work:

“(a) means—

- (i) building, repairing, altering, underpinning (whether by vertical or lateral support), moving or demolishing a building or other structure; or
- (ii) works regulated under the building assessment provisions; or
- (iii) excavating or filling for, or incidental to, the activities stated in subparagraph (i); or
- (iv) excavating or filling that may adversely affect the stability of a building or other structure, whether on the premises on which the building or other structure is situated or on adjacent premises; or
- (v) supporting (vertically or laterally) premises for activities stated in subparagraph (i)”

A Material Change of Use:

“means any of the following that a regulation made under section 284(2)(a) does not prescribe to be minor change of use—

- (a) the start of a new use of the premises;
- (b) the re-establishment on the premises of a use that has been abandoned;
- (c) a material increase in the intensity or scale of the use of the premises.”

In view of the above and details included within **Section 4** of this report, the proposal involves a Material Change of Use and Building Works.

#### 7.1.2. Categories of Assessment

The *Planning Act 2016* nominates two categories of assessment for assessable development, being Code Assessment and Impact Assessment. A Code Assessment is to be undertaken against Section 45(3) of the *Planning Act 2016*. An Impact Assessment is to be undertaken against Section 45(5) of the *Planning Act 2016*.

## 7.2. STATE PLANNING POLICY

The State Planning Policy (‘SPP’) was introduced on 3 July 2017 as part of a new State planning system. The SPP defines the Queensland Government’s policies about matters of state interest in land use planning and development and provides direction for the preparation of local planning instruments and assessment of development applications. The SPP also includes assessment benchmarks for some development applications, if a planning scheme does not appropriately integrate the relevant state interest.

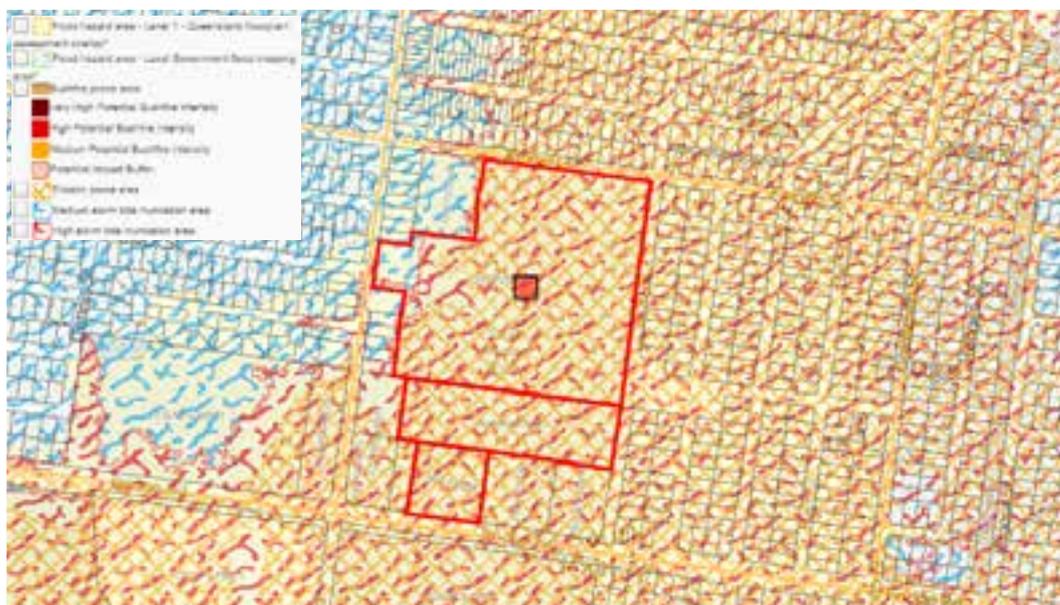
The SPP provides supporting mapping to assist in spatially representing policies and requirements contained within the SPP. A comprehensive overlay map of state planning interests is provided in **Figure 13**.

The mapping indicates that the following SPP matters apply to the site:

- Natural Hazards Risk and Resilience
  - Flood hazard area – Level 1 – Queensland floodplain assessment overlay
  - Flood hazard area - Local Government flood mapping area

- Erosion prone area
- Medium storm tide inundation area
- High storm tide inundation area
- Strategic Airports and Aviation Facilities
  - Obstacle limitation surface area
  - Light restriction zone C
  - Light restriction zone D
  - Lighting area buffer 6km
  - Wildlife hazard buffer zone 3km
  - Aviation facility building restricted area zone A
  - Aviation facility building restricted area zone A/B
  - Aviation facility building restricted area zone Area of interest

Figure 13 – State Planning Policy Mapping





Source: DSDMIP

It is noted that the applicable Planning Scheme, the Mackay Region Planning Scheme 2017 has not been prepared to fully reflect the July 2017 SPP. Accordingly, an assessment against the relevant components of the SPP has been undertaken and is included within **Appendix C**.

### 7.3. REGIONAL PLAN

The Mackay, Isaac and Whitsunday Regional Plan ('Regional Plan') was released in February 2012

The purpose of the Regional Plan is to establish a vision and direction for the region to 2031. The Regional Plan provides certainty about where the region is heading and provides a framework to respond to challenges and opportunities that may arise.

In order to achieve this purpose, the Regional Plan sets forth a land use pattern. The site is located within the Urban Footprint, which identifies land predominantly allocated to provide for the region's urban development needs to 2031.

An extract of the Regional Plan mapping is provided in **Figure 14** below.

Figure 14 – Regional Plan Mapping Extract



Source: DSDMIP

When considering the nature of the proposal, the proposed development accords with the Desired Regional Outcomes and overall intent of the Regional Plan.

The proposed redevelopment plans for the Harrup Park Country Club achieve the intent for development within the Urban Footprint of the MIW Regional Plan, as they enhance the functionality of a key piece of urban infrastructure servicing Mackay and the wider region.

## 7.4. STATE ASSESSMENT REFERRAL AGENCY

The State Assessment and Referral Agency ('SARA'), introduced on 1 July 2013, seeks to deliver a coordinated, whole-of-government approach to the state's assessment of development applications. The State Development Assessment Provisions ('SDAP') is an outcome of the SARA and a statutory instrument made under the Act which sets out matters of interest of the state for development assessment, where the chief executive of administering the Act is the assessment manager or a referral agency.

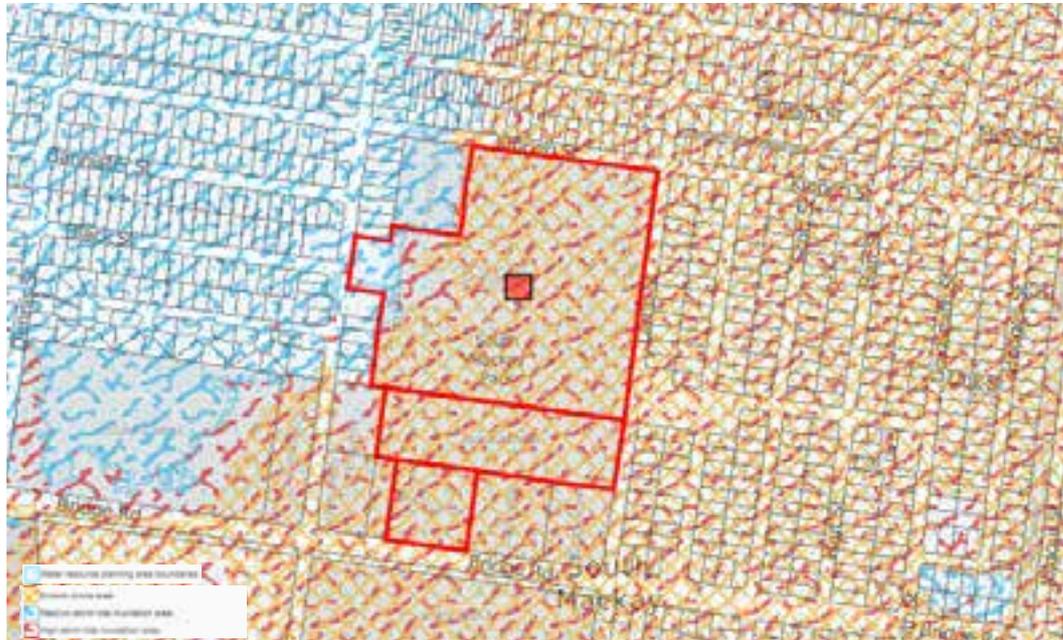
Importantly, the SDAP provide assessment benchmarks for the assessment by the chief executive or a referral agency and provides applicants with the opportunity to address performance criteria to demonstrate that a development appropriately manages any impacts on a matter of state interest, and/or protects a development from impacts of matters of state interests.

An extract of the SDAP Mapping is shown in **Figure 15** below and the mapped state interests are as follows:

- Coastal Protection
  - Coastal area – erosion prone area
  - Coastal area – medium storm tide inundation area
  - Coastal area – high storm tide inundation area
- MIW Regional Plan land use categories
  - Urban Footprint
- Water Resources

- Water resource planning area boundaries

Figure 15 - SDAP Mapping Extract



Source: DSDMIP, 2019

An assessment of the proposed development against the State Assessment criteria for the relevant referral agency role is included at **Appendix D**. This assessment reveals that the proposal requires referral to SARA for the following matters:

Table 1 – State Referral Triggers

Planning Regulation 2017 Reference	Trigger
Schedule 10, Part 9, Division 4, Subdivision 1	<p>Development application for an aspect of development stated in schedule 20 that is assessable development under a local categorising instrument or section 21, if:</p> <p>...</p> <p>(b) the development meets or exceeds the threshold –</p> <p>...</p> <p>(ii) for development in local government area 2 – stated in schedule 20, column 3 for the purpose.</p> <p><i>State Transport Infrastructure - Schedule 20 identifies a threshold of 5,000m<sup>2</sup> total site area for any Major Sport, Recreation and Entertainment Facility in Local Government Area 2, in which Mackay is located. This referral trigger necessitates referral of any development which is of a use and scale which is considered to have the potential to impact on State transport infrastructure.</i></p>

An assessment of the State Development Assessment Provisions (SDAP) indicates that the development needs to be assessed against the following State codes:

- State Code 6: Protection of State Transport Networks

An assessment against State Code 6 is provided within **Appendix G** reveals all relevant outcomes can be complied with.

## 8. LOCAL PLANNING FRAMEWORK

The Mackay Region Planning Scheme 2017 v3.0 ('Planning Scheme') is the local planning instrument that is used to assess the proposed development. The following sections of this report provide an assessment of the proposed development against the assessment benchmarks under the Planning Scheme.

It is noted that there are no Temporary Local Planning Instruments relevant to the site or proposed development.

### 8.1. DEFINITIONS

The Planning Scheme provides a series of land uses definitions which are relevant for categorising and assessing development. Schedule 1 of the Planning Scheme provides the following definition of a Major Sport, Recreation and Entertainment Facility:

*"Major sport, recreation and entertainment facility means the use of premises for large-scale events, including, for example, major sporting, recreation conference or entertainment events."*

In view of the above definition, the proposed development is for a Major Sport, Recreation and Entertainment Facility use.

It is noted small scale and temporary uses involved with the development such as local markets or food and drink stalls are ancillary in nature to the Major Sport, Recreation and Entertainment Facility use. This has been confirmed by Council during prelodgement engagement (refer to **Appendix O**).

### 8.2. ZONING

The Planning Scheme identifies the site as being wholly located within the Sport and Recreation Zone. While part of Lot 20 on SP28190 is located within the Medium Density Residential Zone, this part of the lot has been excluded from this application (and the development is sought over 'part of Lot 20 on SP28109'). **Figure 16** below illustrates the zoning of the site and its surrounds.

Figure 14 – Site Zoning



■ Sport and Recreation Zone    ■ Medium Density Residential Zone  
■ Low Density Residential Zone

Source: Mackay Region Planning Scheme Interactive Mapping

The purpose of the Sport and Recreation Zone is that the Zone facilitates:

- “(a) a variety of cultural, educational, recreation and sporting uses and activities that require built infrastructure, including, for example, clubhouses, gymnasiums, swimming pools or tennis courts; and
- (b) facilities and infrastructure to support the uses and activities stated in paragraph (a).”

The proposed development is consistent with the intent of the Sport and Recreation zone as it seeks to facilitate infrastructure upgrades to the existing sporting use occurring on the site. Overall, the development assists in delivering the outcomes of the sport and recreation zone by maximising the participant and spectator experience of the existing facility.

### 8.3. LOCAL PLAN AREAS

The site is not designated within a Local Plan area.

### 8.4. OVERLAYS

The following Overlays from the Planning Scheme have been identified as applicable to the application:

- Acid Sulfate Soils Overlay;
  - Land at or below 5m AHD;
- Airport Environs Overlay;
  - Aviation Facility Building Restriction Area sub-category;
  - Airport Lighting Area Buffer 6km sub-category;
  - Obstacle Limitation Surface sub-category;
  - Wildlife Hazard Buffer Zone 3km sub-category;
- Flood and Coastal Hazards Overlay;
  - 0.2% AEP Flood Event sub-category;
  - 1% AEP Flood Event sub-category;
  - Erosion Prone Areas sub-category;
  - Storm Tide Inundation Areas sub-category;
- Landscape Character and Image Corridor Overlay;
  - Image Corridor sub-category;
- Road Hierarchy Overlay.

Assessment against the relevant codes is incorporated in **Appendix B**.

## 8.5. CATEGORY OF DEVELOPMENT AND ASSESSMENT

### 8.5.1. Category of Assessment

In this instance, the Planning Scheme acts acting as the primary categorising instrument for the development proposal. Section 1.5 of the Planning Scheme specifies that the following hierarchy of provisions within the Planning Scheme, which is particularly useful for categorisation:

- Overlay provisions prevail over all other components;
- Local Plans prevail over zone provisions, use provisions, and other development codes; and
- Zone provisions prevail over use provisions and other development codes.

#### Zone Provisions:

Table 5.5.21 of the Planning Scheme specifies that a Material Change of Use for a Major Sport, Recreation and Entertainment Facility within the Sport and Recreation Zone is subject to Code Assessment if the development site adjoins land within a sensitive land use zone.

Given the site adjoins land within the Medium Density Residential Zone, which is a sensitive land use zone, the development will be subject to **Code Assessment**.

Section 5.7 of the Planning Scheme specifies that Building Works is not regulated by zoning under the Planning Scheme. Building Works has therefore not been included as an aspect of development within this application. It is noted that no overlay or other planning scheme designations relevant to the proposal include assessment triggers for Building Works.

#### Overlay Provisions:

Section 5.10 of the Planning Scheme provides categorisation advice for development with respect to overlays. Specifically, Table 5.10.1 of the Planning Scheme does not include any provisions which alter the prevailing category of assessment from **Code Assessment** for the Material Change of Use component.

Furthermore, Table 5.10.1 of the Planning Scheme does not specify that Building Works within the relevant overlays of the site are subject to Code Assessment. As such, the Building Works has not been included as an aspect of development within this application.

**Planning Regulation 2017 Provisions:**

There are no identified provisions of the *Planning Regulation 2017* which alter the prevailing category of assessment from Code Assessment.

## **8.6. ASSESSMENT BENCHMARKS**

A review of Part 5 of the Planning Scheme reveals that the following Assessment Benchmarks are applicable to the proposed development:

- Sport and Recreation Zone Code;
- General Developments Code;
- Acid Sulfate Soils Overlay Code;
- Airport Environs Overlay Code;
- Flood and Coastal Hazards Overlay Code; and
- Landscape Character and Image Corridor Overlay Code.

The development proposal has been assessed against the abovementioned codes within **Appendix B** of this report. This assessment reveals that the proposed development complies with the overwhelmingly majority of relevant acceptable outcomes as described in the abovementioned codes. Where the proposal does not comply with an acceptable outcome, the proposal demonstrates compliance with the overarching relevant performance outcome.

## 9. REASONS FOR APPROVAL

### 9.1. LOCAL GOVERNMENT REASONS FOR APPROVAL

Under Section 45(3) of the Act, assessment of Code Assessable applications:

*... must be carried out only—*

- (a) against the assessment benchmarks in a categorising instrument for the development; and*
- (b) having regard to any matters prescribed by regulation for this paragraph.*

#### 9.1.1. Assessment Benchmarks

Section 43 of the Act sets out the relevant matters for assessment of any assessable development. As stated above, Section 45(3)(a) identifies that the categorising instrument, in this case the Mackay Region Planning Scheme 2017 specifies the Assessment Benchmarks.

Assessment Benchmarks are considered to include the Code, including the overall intents for a zone, precinct or Code, Performance Outcomes and Acceptable Outcomes.

As discussed in Section 5.6 of this Report, the Planning Scheme identifies the codes in **Table 5** as relevant Assessment Benchmarks.

The detailed assessment of these Assessment Benchmarks in **Appendix B** of this Report identifies that the proposed development complies with all relevant Assessment Benchmarks.

Table 2 – Compliance with Assessment Benchmarks

Assessment Benchmark	Complies with all Acceptable Outcomes	Complies with all Performance Outcomes	Complies with all Overall Outcomes
Sport and Recreation Zone Code	Yes	Yes	Yes
General Developments Code	Yes	Yes	Yes
Acid Sulfate Soils Overlay Code	Yes	Yes	Yes
Airport Environs Overlay Code	Yes	Yes	Yes
Flood and Coastal Hazards Overlay Code	Yes	Yes	Yes
Landscape Character and Image Corridor Overlay Code	Yes	Yes	Yes

#### 9.1.2. Matters Prescribed by the Regulation

In accordance with Section 45(3)(b) as specified above, Section 27(1)(a), Schedules 9 and 10 of the Regulation are identified as matters prescribed by the Regulation.

An assessment of the Application against Schedule 9 and Schedule 10 has been undertaken. This assessment is summarised in Section 7.4 of this Report, with a detailed assessment in **Appendix D**. This assessment identifies that referral is required to the Chief Executive.

Given that the assessment manager is the Local Government, the Assessment Manager must have regard to the following matters as stated in Section 31(1) of the Regulation:

- *“The Planning Scheme;*
- *the Regional Plan for a region, to the extent the Regional Plan is not identified in the planning scheme as being appropriately integrated in the Planning Scheme; and*

- *the State Planning Policy, to the extent the State Planning Policy is not identified in the planning scheme as being appropriately integrated in the Planning Scheme; and*
- *for designated premises—the designation for the premises; and*
- *any temporary State Planning Policy applying to the premises; and*
- *any development approval for, and any lawful use of, the premises or adjacent premises; and*
- *the common material.”*

#### **9.1.2.1. Mackay Region Planning Scheme 2017**

The development is required to be assessed under the Mackay Region Planning Scheme 2017. Detailed discussion on the proposals compliance with the Planning Scheme is provided in **Appendix B**.

#### **9.1.2.2. Mackay, Isaac and Whitsunday Regional Plan**

Section 2.2 of Mackay Region Planning Scheme identifies that the Planning Scheme appropriately advances the Mackay, Isaac and Whitsunday Regional Plan as it applies to the planning scheme area. Accordingly, this planning instrument is not relevant to the assessment of this application.

#### **9.1.2.3. State Planning Policy**

The Planning Scheme does not entirely encompass the State Planning Policies, and assessment of the proposal against the relevant SPPs is included in section 7.2 of this report and **Appendix C**.

#### **9.1.2.4. Designations**

The Application does not involve a designation. Therefore, there are no designations relevant for assessment.

#### **9.1.2.5. Temporary State Planning Policies**

The site is not subject to any temporary State Planning Policy. Therefore, there are no temporary State Planning Policies relevant for assessment.

#### **9.1.2.6. Development Approvals**

The site is subject to an existing development approval for an extension and new car parking for Harrup Park Country Club (Council Ref: DA-2014-239). The proposed development is consistent with this approval in retaining all approved aspects of development (excluding the Stage 2 car parking area which is no longer intended to be constructed).

The site is not subject to any Preliminary or Variation Approvals under which this application must be assessed.

#### **9.1.2.7. Common Material**

The assessment manager must have regard to any additional material provided by the applicant during the assessment of the application that is related to the proposed development.

The material attached to this development application including assessment against relevant Assessment Benchmarks and the proposed Architectural Plans are also to be considered as part of the Common Material.

## 10. CONCLUSION

Urbis Pty Ltd has prepared this development application on behalf of Mackay Cricket Association ('the Applicant'). This application seeks a Development Permit for a Material Change of Use for a Major Sport, Recreation and Entertainment Facility. In general terms, the proposal involves a major redevelopment of the Harrup Park Country Club stadium in South Mackay, which as a whole precinct is referred to as the Great Barrier Reef Arena.

The proposed redevelopment of Harrup Park Country Club will elevate the stadium to an elite sporting venue capable of hosting major sporting and entertainment events. The project also seeks to reinforce Harrup Park as a key community space which can host a range of public events. The proposed redevelopment project will be underpinned by substantial public realm improvements and upgrades to site infrastructure.

The proposed redevelopment of Harrup Park is considered to be a highly positive investment in community infrastructure which will:

- play a key role in attracting premier events to Mackay and support sport and recreation in the area;
- provide a distinctive and attractive design which reinforce Mackay's identity, including refreshed and increased landscaping throughout the site;
- deliver new public spaces to the site, for the benefit of the wider community, including improved pedestrian connections through the site and to the street frontages; and
- ensure any amenity impacts are appropriately minimised and mitigated, particularly to residential areas in proximity to the site.

The assessment of the application is to be undertaken in accordance with Section 45(3) of the Planning Act and Sections 26 and 27 of the *Planning Regulation 2017*. This report provides the applicant's assessment against these provisions and concludes that the development is appropriate, generally consistent with State legislative framework, the existing Local Planning Scheme controls and intent for the area and is not anticipated to impact upon the amenity of the locality. Council's approval of the application is therefore sought, subject to relevant and reasonable conditions.

## DISCLAIMER

This report is dated 23 April 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Mackay Cricket Association (**Instructing Party**) for the purpose of a development application (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.



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**11.4.3. FACILITATING DEVELOPMENT IN THE MACKAY REGION POLICY - KERRISDALE GARDENS  
AGED CARE FACILITY STAGE 2**

<b>Author</b>	Principal Economic Development Officer (Nadine Connolly)
<b>Responsible Officer</b>	Director Development Services (Aletta Nugent)
<b>File Reference</b>	Facilitating Development in the Mackay Region
<b>Attachments</b>	1. 3. Kerrisdale Gardens Stage 2 - Design Drawings [11.4.3.1 - 10 pages]

**Purpose**

To assess an application under the Facilitating Development in the Mackay Region Policy.

**Related Parties**

Good Shepherd Lodge Ltd  
Good Shepherd Lodge Trust  
Jewell Planning Consultants

**Corporate Plan Linkage**

Priority: Economy

*Strategy: Facilitate development* - Utilising the Planning Scheme to deliver an integrated approach to the facilitation of development and sustainable growth.

Facilitate catalytic land and infrastructure developments by attracting investment through joint ventures and partnerships with the private sector, and by working with State and Federal governments on joint initiatives.

**Background/Discussion**

The proposed development is for the extension of the Kerrisdale Gardens Aged Care Facility located at 35 Norwood Parade, Beaconsfield (Lot 3 on SP268113).

The original Development Approval (DA-2012-152) for the residential aged care facility was issued on 20 December 2012. The approval is for a four-staged aged care facility which includes villas, apartments, care suites, varied medical and allied health services and ancillary retail facilities. The applicant has made slight amendments to the development approval over the following years.

Stage 1 of the development was completed in 2015. The applicant is now constructing Stage 2 (formally Stage 1B), which involves the construction of four stories and includes 10 apartments, 37 care rooms, chapel and men's shed. The facility will increase the capacity of high-quality living and care for seniors in the broader Mackay region.

Infrastructure charges for Stage 2 of the development are levied under the Infrastructure Charge Notices (ICN) issued for both DA-2012-152/A and DA-2012-152/C.

Stage 2 was previously approved for concessions under the Facilitating Development in the Mackay Region Policy (Policy) in December 2018, however, did not proceed due to extended timeframes in the detailed design process and financial challenges associated with COVID-19. In November 2020, prior to the lapse date of the previous approval, the applicant contacted Council to seek an extension. Council officers advised the applicant that they should reapply through a new application as the extension of 12 months was considered to be insufficient time to construct the facility. In addition, amendments to the Policy now allows for 100% concessions compared to 50% available under the previous approval.

The applicant is keen to progress this development. This new Policy application for 100% infrastructure concessions has strengthened the feasibility of the project and creates more certainty around project commencement.

### Incentive Requests

The applicant has requested Specific Incentives under Schedule 3: Health, Aged Care and Retirement Living of the Policy as follows:

- 100% concession on estimated infrastructure charges = \$431,369.51

The applicant, Good Shepherd Lodge Charitable Trust, is a not-for-profit organisation and is a significant employer in the Mackay Region.

In accordance with Schedule 3 – Health, Aged Care and Retirement Living, infrastructure charges may be reduced by up to 100% (based on the net charge amount identified on the Infrastructure Charge Notice) for not-for-profit groups that are a recognised charity, to a maximum concession value of \$1,000,000.

The Policy is discretionary and seeks to support projects that will deliver the greatest economic benefits to the region.

### General Eligibility Criteria

The Policy seeks to attract investment in qualifying developments to stimulate growth, diversify and add value to the economy of the Mackay region.

Based on information provided by the applicant, the proposal satisfies the requirements under the General Eligibility Criteria in Schedule 3 – Health, Aged Care and Retirement Living of the Policy.

Criteria	Eligibility
<b>Timing of development</b>	The applicant has advised that the project is currently in the final stages of the pre-construction process, and commencement of use is estimated to be within 2 years of an approved application.  Construction Commencement: September 2021 Commencement of Use: Mid 2023.
<b>Non-Government Development</b>	Yes
<b>Infrastructure capacity</b>	Based on the information provided by the applicant and the approved Development Application, it is considered that the proposed development can be serviced without requiring trunk infrastructure upgrades.

**Location Specific Eligibility Criteria – Stage 2**

Based on information provided by the applicant, the proposal satisfies the requirements under the Location Specific Eligibility Criteria in Schedule 3 – Health, Aged Care and Retirement Living of the Policy:

Criteria	Eligibility
<b>Economic Investment</b>	<ul style="list-style-type: none"> <li>• Estimated total capital investment: \$18.6M</li> <li>• Estimated construction cost \$12M</li> <li>• Based on economic modelling, from a direct injection of \$12M (construction costs), flow on economic output would be \$16.471M, totalling \$28.471M economic impact.</li> <li>• The applicant has committed to utilising local contractors and suppliers where possible.</li> </ul>
<b>Employment Generation</b>	<ul style="list-style-type: none"> <li>• The applicant has estimated that 14 direct jobs will be created during construction. In addition, it is anticipated there will be flow-on supply-chain effects and consumption effects, resulting in a total estimated increase of 61 jobs.</li> <li>• Council’s economic modelling supports this estimate, indicating that the project will generate 62 direct and indirect jobs during construction.</li> <li>• The applicant has committed to utilising local contractors and suppliers during construction and for ongoing needs.</li> </ul>
<b>Applicable Area</b>	The development is located inside the Priority Infrastructure Area.
<b>Applicable Land Uses</b>	The development is defined as a Hospital (Aged Care Facility, including Ancillary Retail and Medical uses and Supported Care Villas) which is identified as an applicable land use under Schedule 3.

**Business and Regional Benefits**

Based on information provided by the applicant, the development is considered to be value-adding to the regional economy and will generate additional full-time employment and business activity.

The applicant has provided the following information regarding the benefits of the development:

- Market analysis indicates the current aged care needs of the Mackay population are currently unmet and this trend is increasing with the aging population.
- Additional aged care accommodation, including specialised aged care, will provide for the existing and future demands of the current residents within Kerrisdale Gardens as well as the broader community.
- This development will be providing specific care needs for particular segments of the community not widely available in the region.
- The development will create significant construction jobs and will have a multiplier effect on the regional economy through the provision of food and medical supplies, allied health services and staff training.
- Concessions will allow the developer to proceed with a greater level of certainty.

## Consultation and Communication

Development Assessment considered and approved the development application through the statutory assessment provisions provided by the *Sustainable Planning Act 2009*. As part of this assessment process, Development Assessment consulted with the other relevant sections of Council.

The application under the Policy was first considered at the Council Meeting on 12 December 2018 when concessions were approved under the Policy.

In November 2020, prior to the lapse date of their approval, the applicant contacted Council to seek an extension. Council officers advised the applicant the best course of action would be to reapply through a new application.

The Director of Development Services has also considered this application and provided approval for the Expression of Interest to progress to a Stage 2 application.

## Resource Implications

The applicant has requested that a 100% concession on infrastructure charges be approved for this development.

Infrastructure charges for Stage 2 are split across ICNs issued for DA-2012-152/A and DA-2012-152/C. Both ICNs are charged at the same rate (\$119/m<sup>2</sup> for GFA and \$8.50 for impervious area), however, DA-2012-152/A will need to be indexed from 2 March 2015, and DA-2012-152/C will need to be indexed from 24 April 2018.

Estimation of charges are as follows:

m <sup>2</sup>	Charge per ICN	Indexed charge	Amount payable
<b>DA-2012-152/A</b>			
1,987.87m <sup>2</sup>	\$119	\$130.88 (indexed from 2/3/2015)	\$260,172.42
848.94m <sup>2</sup>	\$8.50	\$9.35 (indexed from 2/3/2015)	\$7,937.58
<b>DA-2012-152/C</b>			
1,269m <sup>2</sup> GFA	\$119	\$127.39 (indexed from 24/4/2018)	\$161,657.91
176m <sup>2</sup> impervious area	\$8.50	\$9.10 (indexed from 24/4/2018)	\$1,601.60

Therefore, as at 30 June 2021, the estimated total infrastructure charges payable for Stage 2 is \$431,369.51 (+ annual adjustments).

Under the Policy, infrastructure charges may be reduced up to 100% (based on the net charge amount identified on the Infrastructure Charges Notice including application of any offsets) for not-for-profit groups that are a recognised charity, to a maximum concession value of \$1,000,000.

Concessions requested by the applicant, and in accordance with the Policy, are shown below.

Estimated Net Infrastructure Charge (IC)	Offset	Credit	IC minus Offset and Credit	Concession (%)	Concession (\$)	Charges Payable
\$431,369.51	\$0	\$0	\$431,369.51	100%	\$431,369.51	\$0

## **Risk Management Implications**

There is a risk that granting significant concessions can leave Council exposed to similar claims in the future and that a potential infrastructure funding gap could present. These risks are sufficiently mitigated through the following measures:

- An existing development approval is in place;
- The development is in Council's priority infrastructure area and no trunk upgrades are required to service the development;
- A condition has been recommended as part of the officer's recommendation stating that the approved concessions are dependent on Council not incurring any additional infrastructure costs (including 'bring forward costs') to service the development;
- Strict timeframes are placed on claiming approved concessions. If the development is not completed and operational within the recommended timeframe, the concessions will no longer be applicable and 100% of the applicable Infrastructure Charges will be applicable to the development;
- Council can review the application of the Policy at any time.

## **Conclusion**

The Facilitating Development in the Mackay Region Policy provides incentives for development that will deliver significant economic development and growth outcomes in alignment with Council's policy and planning objectives.

The application complies with all requirements of Schedule 3 of the Policy and will provide aged care living to accommodate the region's ageing population. It is considered that the provision of concessions will support the delivery of the project and the realisation of significant economic investment to the Mackay region, including an economic impact of \$28.471M, 62 direct and indirect jobs during construction, and approximately 30 full-time and 50 part-time positions when operational.

## **Officer's Recommendation**

THAT the following Specific Incentives are approved under the Facilitating Development in the Mackay Region Policy for Kerrisdale Gardens Aged Care Facility Stage 2, located at 35 Norwood Parade, Beaconsfield (Lot 3 on SP268113):

- a. Infrastructure Charge concessions of 100% (estimated at \$431,369.51), applied to the net charge amount for the development of Stage 2, identified on the Infrastructure Charge Notices DA-2012-152/A and DA-2012-152/C (calculated following the subtraction of any offsets/credits, and plus annual adjustments).

AND THAT the approval of concessions is dependent on:

- a. The development to be completed and the use commenced by 14 July 2023;
- b. No additional infrastructure costs incurred by Council (including establishment and bring forward costs); and
- c. The developer utilising local contractors and suppliers.

## **Council Resolution ORD-2021-211**

**THAT the following Specific Incentives are approved under the Facilitating Development in the Mackay Region Policy for Kerrisdale Gardens Aged Care Facility Stage 2, located at 35 Norwood Parade, Beaconsfield (Lot 3 on SP268113):**

- a. Infrastructure Charge concessions of 100% (estimated at \$431,369.51), applied to the net charge amount for the development of Stage 2, identified on the Infrastructure Charge Notices DA-2012-152/A and DA-2012-152/C (calculated following the subtraction of any offsets/credits, and plus annual adjustments).**

**AND THAT the approval of concessions is dependent on:**

- a. The development to be completed and the use commenced by 14 July 2023;**
- b. No additional infrastructure costs incurred by Council (including establishment and bring forward costs); and**
- c. The developer utilising local contractors and suppliers.**

**Moved Cr Green**

**Seconded Cr Jones**

Cr Green noted that that this development will assist the Mackay Region to be in a position to care for its aged residents and also noted that Stage 2 of the development was previously approved but did not proceed due to extended timeframes in the detailed design process and financial challenges association with COVID-19 and the new Policy application for 100% infrastructure concessions has strengthened the feasibility of the project.

Cr Jones advised that she had been connecting lately with aged residents in the community and understood their need for care and was pleased to see more opportunity for aged care in the Region.

**CARRIED**



**Mackay REGIONAL COUNCIL**  
 DECISION NOTICE  
 DA-2012-152/D  
 APPROVED PLAN  
 17 Dec 2020

Concept Design

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DRAWING NAME: Floor Plan - Ground Level  
 PROJECT NAME: KERRISDALE GARDENS STAGE  
 PROJECT ADDRESS: 35 Norwood Pde, Beaconsfield

REV	DATE	DESCRIPTION
D	13/12/19	FOR INFORMATION
E	18/12/19	80% CD ISSUE
G	17/12/20	FOR INFORMATION

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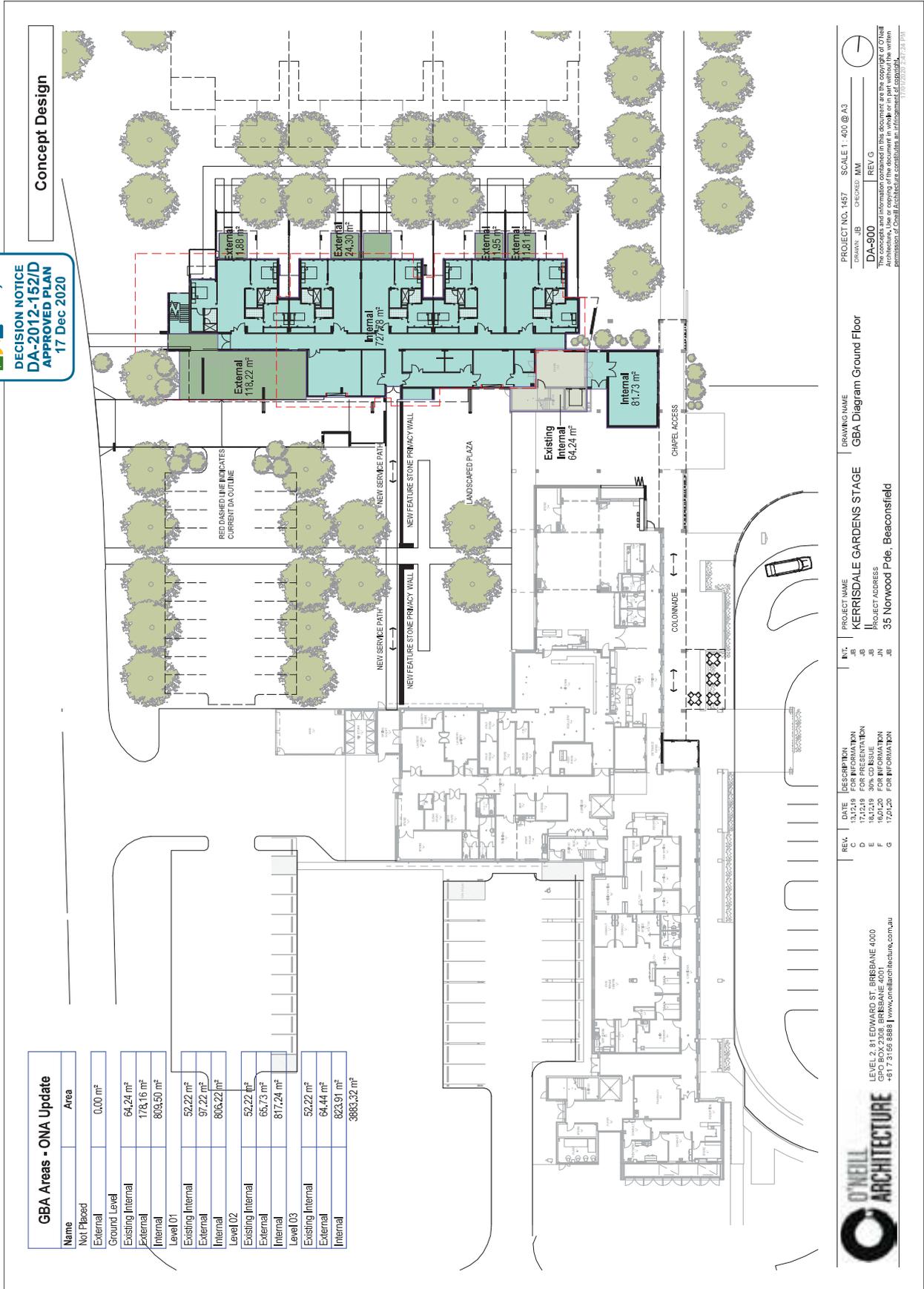


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DRAWING NAME: GBA Diagram Ground Floor  
 PROJECT NAME: KERRISDALE GARDENS STAGE  
 PROJECT ADDRESS: 35 Norwood Pde, Beaconsfield

REV: DATE: BY: FOR: INFORMATION  
 D 13/12/19 FOR PRESENTATION  
 E 18/12/19 80% CD ISSUE  
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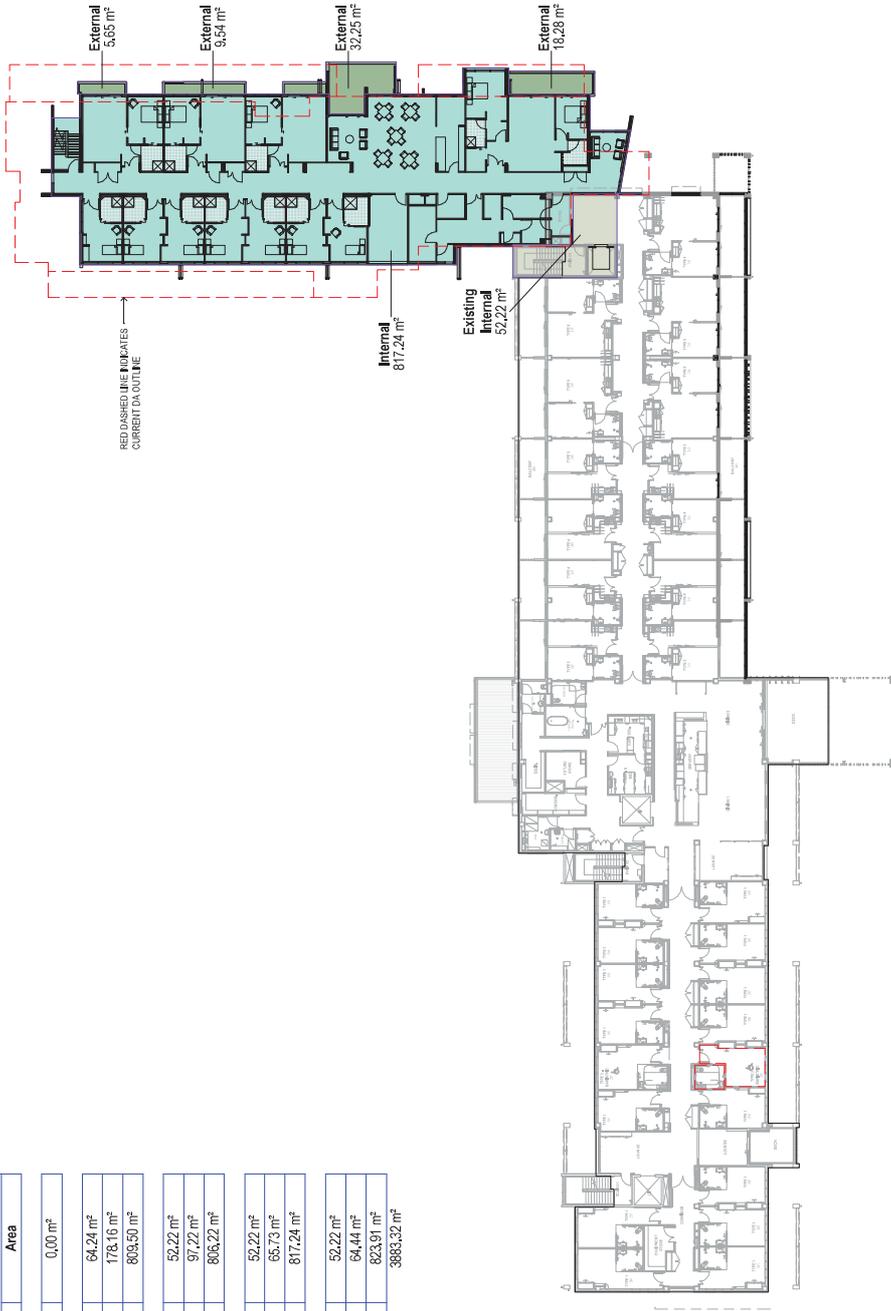


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Concept Design



GBA Areas - ONA Update	
Name	Area
Not Placed	
External	0,00 m²
Ground Level	
Existing Internal	64,24 m²
External	178,16 m²
Internal	809,50 m²
Level01	
Existing Internal	52,22 m²
External	91,22 m²
Internal	806,22 m²
Level02	
Existing Internal	52,22 m²
External	65,73 m²
Internal	817,24 m²
Level03	
Existing Internal	52,22 m²
External	64,44 m²
Internal	823,91 m²
	3883,32 m²



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DRAWING NAME: GBA Diagram Level 2  
 PROJECT NAME: KERRISDALE GARDENS STAGE  
 PROJECT ADDRESS: 35 Norwood Pde, Beaconsfield

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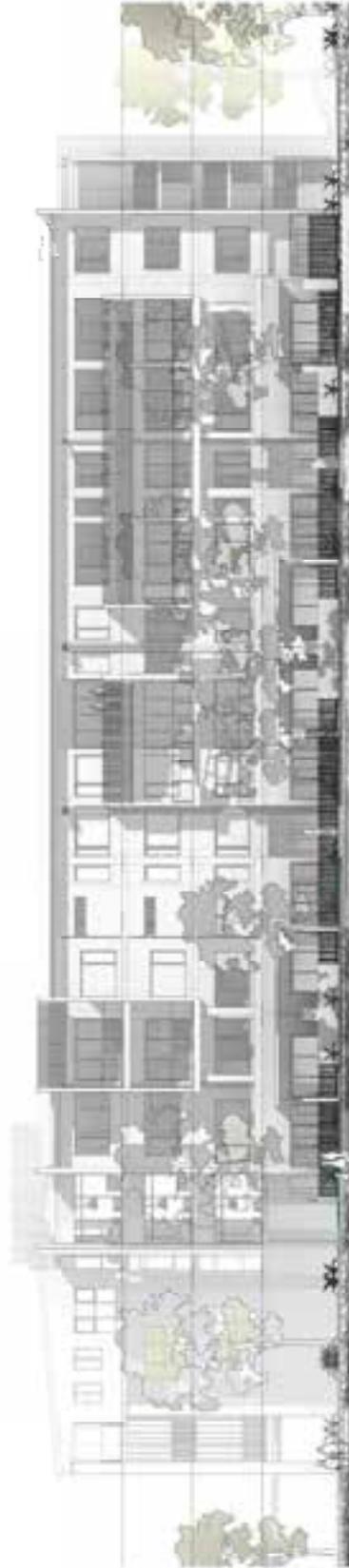


**DESIGN DEVELOPMENT**

**Mackay**  
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Southern Elevation  
 1:200



Eastern Elevation  
 1:200

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DESIGN DEVELOPMENT



Northern Elevation  
1:200



Western Elevation  
1:200

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## **11.5. ENGINEERING AND COMMERCIAL INFRASTRUCTURE**

### **11.5.1. PETITION - PALM RIDGE DRIVE/HOLTS INTERSECTION**

<b>Author</b>	Executive Assistant (Robyn Smith)
<b>Responsible Officer</b>	Director Engineering & Commercial Infrastructure (Jason Devitt)
<b>File Reference</b>	PETITION
<b>Attachments</b>	<ol style="list-style-type: none"><li>1. Summary Audit Finding Holts Palm Ridge [11.5.1.1 - 10 pages]</li><li>2. 2021.06.09 FINAL Road Safety Audit Holts Palm Ridge [11.5.1.2 - 65 pages]</li></ol>

#### **Purpose**

Council received a Petition from residents on 19 April 2021, and formally received at the Ordinary Meeting of 28 April 2021, regarding a request for Council to establish a turning lane at the Palm Ridge Drive and Holts Road, Richmond intersection.

The Resolution from Council was to undertake an investigation of the issues and provide a report back to Council. This Report identifies the outcome of the investigation for consideration by the Council.

#### **Related Parties**

- Petitioners
- Mackay Regional Council staff
- Mackay Regional Council Councillors

#### **Corporate Plan Linkage**

Priority: Infrastructure and Transport

*Strategy: Asset management* - Ensure that asset management aligns to the council's strategic direction and that effective asset management practices are in place to optimise the use of council's assets required to deliver services to the community.

#### **Background/Discussion**

A Petition was received by Council on 9 April 2021 and formally received at the Ordinary Meeting of 28 April 2021, regarding a request for Council to establish a turning lane at the Palm Ridge Drive and Holts Road, Richmond intersection. Following receipt of the Petition to Council, investigations into the reported issues have been undertaken.

As part of the investigations into this matter, a Road Safety Audit has been commissioned for an extended area to consider the impacts of increased traffic flow on Holts and Glendaragh Roads west of Mackay Bucasia Road, specifically in relation to relevant speed limit reviews as well as the specific issues raised in the Petition.

The location and extent of the Audit is shown in Figures 1 and 2. The route along Glendaragh Road and Holts Road provides an attractive connection for motorists travelling between Mackay's Northern Beaches Suburbs and the Bruce Highway which is then less than 1.0 km from the newly constructed Mackay Ring Road (MRR) which was opened in September 2020. Traffic volumes have noticeably increased along Glendaragh Road and Holts Road since the new Ring Road became operational, also putting pressure on the Bruce Highway/ Glendaragh Road intersection during peak traffic periods. This could potentially be a short-term phenomenon as motorists may be avoiding temporary roadworks associated with the Mackay Northern Approaches Upgrade Project along the Bruce Highway east of the Mackay Ring Road through to Mackay Bucasia Road and further

on to the Pioneer River. Traffic volumes may largely return to the lower levels of pre-MRR if the first section of MRR Stage 2 (new road towards Mackay Harbour, connecting directly to Glenella Richmond Road) becomes operational in about 2-3 years. A basic alignment of MRR Stage 2 is overlaid in Figure 1 for reference.

Although the speed limit along Glendaragh Road and Holts Road is 100 km/h, both horizontal and vertical curves in the vicinity generally limit the speed of vehicles to no more than 80 km/h through and/or in the vicinity of the Palm Ridge Drive intersection.

**Figure 1 – Locality Plan**



**Figure 2 - Extents of Road Safety Audit**



Traffic Volumes

Traffic volumes along Glendaragh Road and Holts Road (west of Woodward's Road) during the years 2018-2019 were between 1,600 and 2,400 vehicles per day with no more than 20% of the traffic being heavy vehicles. This is illustrated in the images below.





The completion and opening of the Mackay Ring Road to general traffic in September 2020 has had the impact of approximately doubled traffic volumes along Glendaragh Road and the western section of Holts Road. This increase has been noticeable to residents; however, there is still significant spare capacity on this two-lane rural road. Recorded 2021 daily and peak hour traffic volumes are summarised below.

**Table 1 – Daily Traffic Volumes (Both Directions) - February 2021, MRC Data**

Traffic Count Location	Average Weekday Traffic	% Heavy Vehicles
Site No. 10210-01_C01_L01_AB Glendaragh Road, between the Bruce Highway and Holts Road	4,225	19.7%

Average peak hour volumes during weekdays are as follows:

- AM peak hour (7:00am - 8:00am) = 371 vehicles (8.8% of daily volume)
- PM peak hour (4:00pm - 5:00pm) = 422 vehicles (10% of daily volume)

Crash Data

It is understood there have been no recorded/reported crashes at the Holts Road/Palm Ridge Drive intersection since 1992. Historical crash data for the 6-year period from 2015 to 2020 shows there were two crashes recorded within the extent of the Road Safety Audit related to the Petition location. Both crashes involved drivers under the age of 25 and both occurred just west of the old Larkins Road intersection where there is a superelevated curve (180m - 200m radius) with a warning sign but no advisory speed or other supporting delineation.

A brief summary is provided in the table below for reference.

**Table 2 – Summary of Crash Details (January 2015 to November 2020)**

Location	Date	Time	DCA	Severity	Direction	Road	Age	Comment
----------	------	------	-----	----------	-----------	------	-----	---------

Holts Rd	June 2016	1am or 1pm? (Day-light)	803	Hospital	Eastbound	Dry	19	Police description contradictory in terms of time and direction / references. The following is therefore assumed: Learner driver speeding, lost control on curve just west of Larkins Rd and hit ditch / culvert and overturned.
Holts Rd	Mar 2019	6pm	803	Hospital	Eastbound	Dry	22	Lost control on curve just west of Larkins Rd and hit power pole. BAC.

Observations

Following are selected general observations relating to the existing road environment along or in the general vicinity of the Holts Road/Palm Ridge Drive intersection:

- Horizontal geometry includes one sweeping 110° curve and two ≥45° curves, all within only 1.2 km. Vertical road geometry comprises a single major crest with a 50 km/h advisory speed located very close to the western tangent point of the middle curve.
- There is a sequence of existing warning signs in both directions along Holts Road.
- Typical rural road formation with minimum 7.5m wide sealed roadway increasing to 8.0m - 8.5m through curves and up to an estimated 10.5m across the major crest just east of the Palm Ridge Drive intersection. A sealed roadway up to 12.0m wide is provided at the curve through the Holts/ Glendaragh Road intersection allowing for westbound through vehicles to pass beside a vehicle slowing or stopped to turn right into Glendaragh Road towards Rowallan Park.
- There are no formalised (marked) auxiliary lanes or turn treatments at the two intersections or the major quarry access.
- In terms of current Austroads Design Guidance, desirable Safe Intersection Sight Distance (SISD) is generally in the order of 285m -300m for a posted speed limit of 100 km/h (110 km/h design speed) and the Safe Stopping Distance (SSD) is 193m - 209m. However due to the road curvature it is only practical for vehicles to travel safely through the Holts Road /Glendaragh Road and Holts Road/Palm Ridge Drive intersections at about 80 km/h in good conditions.
- Based on a 90 km/h design speed the desirable SISD = 214m - 226m and desirable SSD = 139m -151m. The actual sight distance measured at the Palm Ridge Road intersection was 150m to the east and 170m to the west, as illustrated below. These distances were obtained with a laser range finder, being an approximation for desktop assessment only.



- Therefore, the intersection is considered to offer sufficient visibility (distance/time) for a motorist travelling along Holts Road to avoid a crash should a vehicle be stationary/entering the through roadway into/from Palm Ridge Drive. It is noted that there is insufficient visibility for motorists turning from Palm Ridge Drive to have SISD, however, it is understood that this does not imply that there will be crashes. Rather, it is an indication that there are likely to be minor and/or major conflicts (e.g. light to heavy braking) associated with the ongoing operation of the intersection.
- No street lighting along Holts Road or Glendaragh Road or flag lights at any intersections.
- Traffic travelling through this part of the route tends to be bunched up into platoons. This may be due to a number of motorists not feeling comfortable travelling at the 100 km/h speed limit with other 'faster' drivers not having the opportunity to overtake them.
- No recreational pedestrians or cyclists were observed during any of the site inspections.

A summary of Audit findings and recommendations is appended to this report and is summarized as follows:

- Subject to Traffic Advisory Committee (TAC) review, general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway of 80 km/h
- Rationalisation and improvement of curve and crest warning signage
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if Quarry usage intensifies and is conditioned as part of future development requirements
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Rowallan Park increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed.

- Installation of Give Way signage and line-marking installation at Glendaragh Road and Palm Ridge Intersections
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Palm Ridge Drive increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed. Option to generate BAR concept and cost estimate for future LTFF inclusion.
- No warrant for flag lighting installation with current traffic volumes
- Installation of guideposts along Holts Road and Glendaragh Road to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4
- Representations made to Quarry operator for installation of an internal grid. Maintenance action to be undertaken to address immediate requirements.

### **Consultation and Communication**

- Director Engineering & Commercial Infrastructure
- Manager Transport & Drainage Infrastructure Planning
- Roads and Pavement Assets Engineer
- Traffic & Investigations Co-ordinator

### **Resource Implications**

No cost allocation is specifically allocated in current or future Operational or Capital Budgets for any project identified. Funding allocations to address the line marking and signage works identified could be made available within the road maintenance allocations in 2021/2022. Concept development for future BAR intersection upgrades could be developed from within planning allocations in the 5.03 Operational Budget.

### **Risk Management Implications**

Completion of the RSA has identified recommendations for upgrade of a range of issues at the subject location and along the adjacent road segments. Assessment of the recommendations has been undertaken and recommendations made based on best engineering assessment. Subject to approval, undertaking assessed treatment will address most risk/hazard items indicated. Residual risk will always remain but this would be considered Low Risk based on the changes recommended, level of traffic and accident history.

### **Conclusion**

The resident Petition focuses on upgrade of the Holts Road/Palm Ridge Drive intersection solely. Council engaged an independent Road Safety Auditor to assess this location and the adjacent road segments on Holts and Glendaragh Roads.

Following an assessment of RSA recommendations, it is recommended that the following actions be taken:

- Subject to Traffic Advisory Committee (TAC) review, general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway of 80 km/h
- Rationalisation and improvement of curve and crest warning signage
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if Quarry usage intensifies and is conditioned as part of future development requirements

- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Rowallan Park increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed.
- Installation of Give Way signage and line-marking installation at Glendaragh Road and Palm Ridge Intersections
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Palm Ridge Drive increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed. Option to generate BAR concept and cost estimate for future LTFF inclusion.
- Installation of guideposts along Holts Road and Glendaragh Road to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4
- Representations made to Quarry operator for installation of an internal grid. Maintenance action to be undertaken to address immediate requirements.

### **Officer's Recommendation**

THAT Council note the outcomes of previous investigations undertaken which consider those matters raised by the resident's Petition and approve the following actions:

- Subject to Traffic Advisory Committee review, general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway of 80 km/h
- Rationalisation and improvement of curve and crest warning signage
- Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only to be considered required if Quarry usage intensifies and is conditioned as part of future development requirements.
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- Installation of guideposts along Holts Road and Glendaragh Road to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4
- Representations made to Quarry operator for installation of an internal grid. Maintenance action to be undertaken to address immediate requirements.

AND FURTHER THAT the Principal Petitioner be advised of these outcomes

The Director for Engineering and Commercial Infrastructure Jason Devitt, provided an overview of the petition response report.

**Council Resolution ORD-2021-212**

**THAT Council note the outcomes of previous investigations undertaken which consider those matters raised by the resident's Petition and approve the following actions:**

- **Subject to Traffic Advisory Committee review, general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway of 80 km/h**
- **Rationalisation and improvement of curve and crest warning signage**
- **Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only to be considered required if Quarry usage intensifies and is conditioned as part of future development requirements.**
- **Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Rowallan Park increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed.**
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- **Given no accident history, intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered to be required if usage and traffic volumes at Palm Ridge Drive increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed. Option to generate BAR concept and cost estimate for future LTFF inclusion.**
- **Installation of guideposts along Holts Road and Glendaragh Road to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4**
- **Representations made to Quarry operator for installation of an internal grid. Maintenance action to be undertaken to address immediate requirements.**

AND FURTHER THAT the Principal Petitioner be advised of these outcomes

Moved Cr Jones

Seconded Cr Hassan

**CARRIED**

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>01 Speed Zone – Holts Road and Glendaragh Road – Priority B (IMPORTANT)</b></p> <p>The posted speed limit along Glendaragh Road and Holts Road (west of Pioneer Street) is 100 km/h, including through the intersection with Palm Ridge Drive. The horizontal geometry of both roads is generally straight along most of the 100 km/h section except within the RSA extents, being up to 1.0 km either side of the Palm Ridge Drive intersection. This section of roadway demands that motorists drive at lower vehicle speeds due to the following factors:</p> <ul style="list-style-type: none"> <li>• Horizontal geometry – 3 curves with sub-standard radii between R180 and R200. These radii imply a vehicle design speed of about 65-70 km/h based on a 3-6% range in superelevation. Although it is recognised that vehicles can traverse these curves at speeds of 80 km/h when the roadway is dry, adverse weather events may limit the safe speed to no more than 70 km/h.</li> <li>• Vertical geometry – 1 crest with relatively steep gradient around one of the horizontal curves. The combination of both vertical and horizontal curves immediately before / after a crest is not desirable; however there have been no reported crashes in the general vicinity to indicate that it is a significant safety issue to vehicles. However it may be an issue for motorcycles, particularly if the roadway surface is wet and/or there is leaf litter from the roadside trees.</li> <li>• There are also other safety issues / hazards for the driver to consider, including reduced readability due to forward visibility being restricted around curves and over the crest. This is particularly evident during the hours of darkness, being largely attributed to there being no marked edge lines and an insufficient number of Road Edge Guide Posts (REGP's).</li> </ul> <p>On Tuesday, 23 February 2021 a number of vehicle speeds were obtained at two locations along Holts Road, with the averages shown below:</p> <ul style="list-style-type: none"> <li>• Site 1 – 75 km/h between Glendaragh Road and west of the crest.</li> <li>• Site 2 – 70 km/h westbound and 75 km/h eastbound around the curve immediately east of the crest.</li> </ul> <p>The readability or feel of the section of road around the curves and over the crest in the vicinity of Palm Ridge Drive is better suited to a posted speed limit of 80 km/h when driven in normal, dry conditions. This would enable vehicles to better navigate the curve, crest, and promote lower speeds through and either side of the Palm Ridge Drive intersection and Quarry access.</p> <p>A Speed Limit Review (SLR) of the immediate 1.7km extents of the audit and a longer 4.14 km segment has subsequently been completed. The extents of each SLR and a copy of the results are contained in Appendix B for reference. The summary of technical assessments indicates "... that the speed limit of 80km/h be adopted along the road corridor and that speed management activities along the corridor be undertaken that this speed limit is considered credible by road users."</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest reducing the posted speed limit from 100 km/h to 80 km/h along Holts Road and Glendaragh Road within the extents of the road safety audit and a further 2.5 km east along Holts Road to a point 250m east of the Pioneer Street intersection.</p> <p>This will include the following two intersections where there have been numerous injury crashes over the past 5 years:</p> <ul style="list-style-type: none"> <li>• Holts Road / Glenella Richmond Road (7 crashes).</li> <li>• Holts Road / Pioneer Street (5 crashes).</li> </ul>	<p><b>Subject to TAC review general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>02 Substandard road geometry (3 curves and 1 crest) – Priority B (IMPORTANT)</b></p> <p>The locations of three R180-R200 curves and single crest are shown in the image below, along with an indication of suggested additional Chevron Alignment Markers (CAM's) and TC1530_2 signs (TMR design). The TC1530_2 sign combines the first CAM with the advisory speed in a larger font, providing a reminder to motorist's right up until they enter the curve itself.</p> <p>Photographs showing the sequence of existing warning signs in both directions along Holts Road are contained in Appendix C. It may be helpful to use these photos and the above image as references.</p> <p><b>Curve 1</b> – There are existing curve warning signs on both approaches (south approach also has 70 km/h advisory) and CAM's spaced around the curve facing both directions. Appears to be missing a 70 km/h advisory sign on the east approach. Would be even better with more prominent signage reinforcing the 70 km/h advisory speed.</p> <p><b>Curve 2</b> – Existing curve warning signs and 50 km/h advisory on both approaches. The existing 'Reverse Curve' (W1-4) sign on the east approach is not considered suitable given the distance between Curves 2 and 3, plus the crest and intersection between them. Some of the existing CAM's are missing in both directions and/or are not spaced around the whole curve.</p> <p><b>Curve 3</b> – Two recorded crashes occurred on this curve. There is only one existing warning sign on the west approach. No other signage at all, not even any REGP's on the outside of the curve to provide guidance to motorists, particularly at night in poor weather conditions where line markings may not be easily visible.</p> <p><b>Crest</b> – The 'Crest' and 'Curve' warning signs on the west approach are out of sequence for some reason.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest the following signage be installed for both completeness and consistency:</p> <p><b>Curve 1</b> – Install additional 70 km/h advisory sign below the existing curve warning sign on the east approach. Also suggest adding 70 km/h TC1530_2 signs on both approaches to complement existing CAM's.</p> <p><b>Curve 2</b> – Suggest removing the existing W1-4 sign and installing a new "Curve" (W1-3R) sign instead. Refer also to suggested action below for the 'Crest'.</p> <p>Also install a new 50 km/h TC1530_2 sign on the east approach only and additional CAM's in both directions so that it will be in general accordance with MUTCD.</p> <p><b>Curve 3</b> – Install new "Curve" (W1-3) and 70 km/h advisory signs on both approaches.</p> <p>Also suggest installing CAM's and 70 km/h TC1530_2 signs, particularly if the speed limit is not reduced to 80 km/h.</p> <p><b>Crest</b> – Suggest swapping the Crest' and 'Curve' warning signs on the west approach so it provides the correct sequence for motorists.</p> <p>Because the crest and curve is close together and the crest demands the 50 km/h advisory speed, it would be desirable combine the crest, curve and advisory speed information on one TC1338_4 sign as shown below, for both directions.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Eastbound</p> </div> <div style="text-align: center;">  <p>Westbound</p> </div> <div style="text-align: center;"> <p>TC1338_4</p> </div> </div>	<p><b>Agreed rationalisation and improvement of curve and crest warning signage advisable</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>03 Restricted Visibility at Crest – Priority B</b></p> <p>The available forward sight distance is restricted when approaching Palm Ridge Drive due to the crest in the road. This is a potential safety hazard, particularly when combined with westbound vehicles entering and exiting Palm Ridge Drive and the curved roadway immediately to the east. Vehicles wanting to perform a right hand turn into Palm Ridge Drive are at risk of being rear-ended by following vehicles that may be travelling at higher speed (e.g. &gt;70 km/h) and are not alert.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest reducing the speed limit to 80 km/h within the wider area and installing a TC1338_4 sign on the east approach to the crest, as suggested in Items 01 and 02.</p>	<p><b>Subject to TAC review general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway. Agreed rationalisation and improvement of curve and crest warning signage advisable</b></p>
<p><b>04 Quarry access – Heavy vehicles turning but no treatment – Priority C</b></p> <p>There are existing ‘Trucks Crossing or Entering’ (W5-22) signs on both approaches to the Quarry access, but no auxiliary turn lane treatments on Holts Road at the access itself. The Quarry access is located on the inside of the start-end of a sweeping R180-200m curve on Holts Road, 90m east of the Palm Ridge Drive intersection.</p> <p>Although daily turning volumes at the Quarry access are assumed to be low (say &lt; 250), there is still a risk of conflict between through and turning traffic, particularly where visibility is restricted. The convex mirror installed opposite the Quarry access is evidence of restricted visibility to / from the west.</p> <p>Eastbound vehicles approaching the Quarry access from the west during the daytime are likely to regularly encounter a heavy vehicle waiting to turn right from the through lane. This is a hazard as there is a potential 80 km/h speed differential between the two vehicles and there is no alternative but to slow down or stop behind the vehicle until it clears the through lane. There is insufficient sealed shoulder widening (1.0-1.5m) to safely pass beside.</p> <p><i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Consider constructing a BAR type turn treatment at the Quarry access to allow vehicles following behind to manoeuvre around a vehicle stopped to give way, when turning right into the Quarry access.</p> <p><u>Note:</u> If there is further development of the Quarry site then MRC should consider requiring the developer to construct a CHR(S) treatment from a road safety impact point of view.</p> <p>Additional benching and reduced cane cropping within their property boundary to provide at least 170m safe stopping distance on a permanent basis would also be required to meet at least the minimum stopping sight distance criteria.</p> 	<p><b>Given no accident history intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered required if Quarry usage intensifies and be conditioned as part of future development requirements. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed.</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>05 Holts Road / Glendaragh Road intersection – Right Turn – Priority C</b></p> <p>The side road to Rowallan Park is located on the outside of a curve where there is an existing informal (unmarked) BAR treatment. The total sealed roadway is up to 12.0m wide at the curve through the Holts Road / Glendaragh Road intersection. The wide 7.5m westbound lane allows through vehicles to pass beside a vehicle slowing or stopped to turn right into Glendaragh Road towards Rowallan Park. However there is still potential for major conflicts (e.g. heavy braking or lateral movement to avoid) as there are no exclusive marked lanes or guidance for either through or right turning traffic.</p> <p>There is no Give Way sign or hold line on the Glendaragh Road side road approach to Holts Road.</p> <p><i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Consider the potential for retrofitting a CHR(S) type treatment within the existing sealed roadway.</p> <p><u>Note:</u> A CHR treatment would be desirable but may not be warranted in terms of conflicting traffic volumes.</p> <p>Suggest installing a Give Way (R1-2) sign and hold line markings.</p>	<p><b>Given no accident history intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered required if usage and traffic volumes at Rowallan Park increase. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed. Agree for Give Way signage and linemarking installation.</b></p>
<p><b>06 Palm Ridge Drive intersection – Right Turn – Priority B</b></p> <p>There are no auxiliary lanes or turn treatments at the Holts Road / Palm Ridge Drive intersection.</p> <p>The existing 7.0-8.0m sealed roadway cross-section generally continues through the intersection without any widening at all. Vehicles turning right into Palm Ridge Drive are at risk of being rear-ended by following vehicles travelling at speed. Following vehicles are unable to manoeuvre to the left around right turning vehicles due to the lack of sealed shoulder and often unknown condition of the roadside grass verge.</p> <p>Vehicles standing at an intersection waiting to turn right are a potential hazard to vehicles approaching from behind at 80 km/h and potentially 100 km/h if travelling at the speed limit. The speed differential between the two vehicles and the lack of sealed roadway to pass beside the standing vehicle is a safety issue, especially where sun-strike may limit the driver's visibility when approaching from behind.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Consider installing a basic right-turn (BAR) treatment and basic left-turn (BAL) treatment on the Holts Road approaches to the Palm Ridge Drive intersection.</p> <p><i>(Note: The BAL treatment could be an extension of a BAR treatment at the Quarry access, or vice versa)</i></p>	<p><b>Given no accident history intersection upgrade to BAR/CHR and land acquisition to address sight distance only considered required if usage and traffic volumes at Palm Ridge Drive. Reduction in speed limits will generate adequate sight distance available for the speed environment proposed. Option to generate BAR concept and cost estimate for future LTFF inclusion</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>07 Visibility and sight distance from Palm Ridge Drive approach – Priority C</b>            Visibility is restricted looking east from Palm Ridge Drive along Holts Road. This is due to the curve and crest on the eastern approach to Palm Ridge Drive intersection. Vehicles turning right from Palm Ridge Drive into Holts Road may create some low-medium level of conflict with westbound vehicles coming over the crest.  <i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Suggest reducing the speed limit to 80 km/h within the wider area and installing a TC1338_4 sign on the east approach to the crest, as suggested in Items 01 and 02.</p>	<p><b>Subject to TAC review general agreement to reduce speed limit and have a homogeneous speed limit on Holts Glendaragh from Mackay Bucasia to the Bruce Highway. Agreed rationalisation and improvement of curve and crest warning signage advisable</b></p>
<p><b>08 Minimal advance warning of Holts Road intersection – Priority C</b>            There is an existing W2-3 (T Junction) sign located 180m on the Palm Ridge Drive approach to the Holts Road intersection. It is positioned on a crest and is too far away from the intersection to be effective as a stand-alone warning to motorists.  <i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>While not strictly required by MUTCD, a W3-2 (Give Way Sign Ahead) sign located closer (100m) to the intersection would provide additional warning and support the existing W2-3 sign. This is considered to be a proactive safety device at very low cost.</p>	<p><b>Agree installation of additional warning signage advisable</b></p>
<p><b>09 Palm Ridge Drive – Absence of Regulatory (Give Way) Sign – Priority C</b>            There is no Give Way sign on the Palm Ridge Drive approach to the Holts Road Intersection and the existing Give Way hold line is worn. Holts Road is designated as a traffic distributor in the MRC road hierarchy. All side road approaches to distributor and arterial roads should be considered for installation of both Give Way signs and hold lines.  <i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Suggest installing a Give Way (R1-2) sign and reinstating the existing hold line marking.</p>	<p><b>Agree for Give Way signage and linemarking installation.</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>10 No street lighting – Priority C</b></p> <p>There are no street lights along most of Holts Road despite there being some major vehicle conflict points such as railway crossings, intersections and major property accesses.</p> <p>No street light exists at the Holts Road / Palm Ridge Drive or Holts Road / Glendaragh Road intersections to either positively identify the intersection at night or illuminate vehicles waiting at the intersection, either on Holts Road or the side road approaches.</p> <p>Although not necessarily ‘unsafe’, it would be a safety improvement to provide some level of lighting at major conflict locations.</p> <p><i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Check / consider the warrant for installing flag lighting at both the Holts Road / Palm Ridge Drive and Holts Road / Glendaragh Road intersections.</p>	<p><b>No warrant for flag lighting installation with current traffic volumes</b></p>
<p><b>11 Missing Chevron Alignment Marker (CAM) Signs – Priority B</b></p> <p>Existing CAM’s delineate Curve 2 immediately east of the crest. CAM’s are beneficial by defining the curve geometry, extents and leading the driver around the curve, especially at night and/or during inclement weather.</p> <p>Some CAM’s were missing or not properly installed in the following locations where it is important.</p> <ul style="list-style-type: none"> <li>• Westbound – start (1), middle (1) and end (2) of curve.</li> <li>• Eastbound – middle (3) and end (2) of curve</li> </ul> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest installing additional CAM’s so that the arrangement is generally in accordance with MUTCD.</p> <p>Also suggest installing a TC1338_4 sign on the east approach to the crest, as suggested in Items 01 and 02.</p>	<p><b>Agree installation of additional warning signage advisable</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>12 Missing edge line marking and RRPM's – Priority B (IMPORTANT)</b></p> <p>There are no edge lines or RRPM's along the whole length of Holts Road and Glendaragh Road, except for 650m at the eastern end of the audit extents. Curves, crests, floodways, major accesses and intersections are locations where it is most critical to have this type of delineation clearly visible to drivers. Edge lines and RRPM's are very helpful for motorists to define the traffic lane and roadway edge, particularly at night.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Strongly suggest installing edge lines and RRPM's in accordance with MUTCD wherever a minimum lane width of 3.25-3.5m can be established with an absolute minimum 0.25m sealed shoulder width.</p>	<p>Edge lines are not normally used except where one or more of the following conditions apply:</p> <ul style="list-style-type: none"> <li>• Alignment is poor</li> <li>• frequent fogs occur</li> <li>• contrast between the pavement and shoulder is insufficient, e.g. sealed shoulders</li> <li>• roadside hazards occur close to the pavement edge, e.g. trees.</li> </ul> <p>Edge lines shall not be used unless:</p> <p>(A) a dividing line is also marked, and</p> <p>(B) the lane widths within the edge lines are at least 3.0 m or if there is a high proportion of heavy vehicle traffic, 3.2 m.</p> <p>While pavement width requirements are met it is not believed the other criteria are achieved. Installation of guideposts as per Item 13 is suggested will adequately address delineation of road pavement extents</p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>13 Lack of guideposts – Priority B (IMPORTANT)</b></p> <p>There are many instances where two pairs of guideposts are not clearly visible to the driver at any time, as required by MUTCD. This occurs on straight sections of road as well as when approaching, going through and departing horizontal and/or vertical curves. This may not be an issue during the day time in good weather conditions, but at night and/or during poor weather conditions (e.g. heavy rain) the guideposts are heavily relied upon by motorists to discern the extents of the relatively narrow roadway. Even if there are edge lines or RRPM’s they may not be very distinct during extreme weather events due to refraction of the headlights from rain and surface water.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Strongly suggest increasing the frequency of guideposts along the whole of Holts Road and Glendaragh Road to be in strict accordance with MUTCD. This will provide motorists with appropriate guidance through the changing geometric elements of the roadway.</p> <p>Also consider reducing the spacing of guideposts along straight sections of road from a maximum of 150m to 75m as this road is known to experience fog at times.</p>	<p><b>Agreed guideposts to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4</b></p>
<p><b>14 Numerous roadside hazards within the Clear Zone – Priority B</b></p> <p>There are a number of roadside hazards within the adopted 6.0m clear zone at many locations along Holts Road. These include:</p> <ul style="list-style-type: none"> <li>• Non-recoverable steep batter slopes of 1 on 3 and steeper. An errant car would not be able to recover on the steep batter slopes and may be at risk of overturning. An errant bus or truck would almost definitely overturn.</li> <li>• V drains, particularly noticeable on the inside of the western curve near the quarry access.</li> <li>• Trees in the cutting / crest area.</li> <li>• Significant power pole on outside of curve departure, opposite the old Larkins Road access (refer image below).</li> <li>• Culvert endwall at the quarry access.</li> <li>• The frequency of road edge guide posts (REGP’s) is very poor along a substantial portion of the audit extents, particularly towards the eastern section.</li> </ul> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Strongly suggest immediately increasing the number of guideposts along the whole length of Holts Road and Glendaragh Road to be strictly in accordance with MUTCD (AS1743 Part 2).</p> <p>The number of guideposts should be further increased in the vicinity of roadside hazards within the adopted 6.0m clear zone. Reducing guidepost spacing (e.g. to 15-30m) is intended to create a ‘visual’ barrier and better define the roadway edge for motorists, rather than focusing on the hazards themselves. This is a preventative measure, to minimise the likelihood of errant vehicles.</p>	<p><b>Agreed guideposts to be installed in accordance with MUTCG Pt 2 Cl 4.2.4.4</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>15 Lack of sealed shoulder width for cyclists – Priority C</b></p> <p>There are no dedicated pedestrian or cyclist facilities in this rural road environment. The sealed lane width is typically close to 4.0m in both directions and there is no marked shoulder area.</p> <p><i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>Suggest installing painted edge lines at 3.25m to 3.5m from the existing centreline.</p> <p>Consider the need and viability for future widening of the sealed shoulder.</p>	<p><b>No immediate requirement. To be addressed during future rehabilitation works to increase pavement widths to road hierarchy requirements</b></p>
<p><b>16 Road Seal Condition and Aquaplaning – Priority B</b></p> <p>The site inspections were completed during fine and dry conditions. It is unknown how the frictional qualities of the existing sealed road surface would perform during wet conditions.</p> <p>However it was noted that there are some sections of bleeding / flushing within the through lanes in a number of places on Holts Road either side of the Palm Ridge Drive intersection and the two eastern curves. This will likely cause drivers (particularly vulnerable motorcyclists) to lose traction when the roadway is wet.</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest treating and/or resealing the sections of road affected by bleeding / flushing to maintain a good standard of road surface texture / friction.</p> <p>Further investigation of the roadway surface and pavement condition may be necessary if there is reason to suspect there are other potential issues. For example, consider modelling / testing for potential aquaplaning due to surface stormwater flowing across the roadway, from the inside to the outside of the curve immediately east of the crest. It is suspected that the longitudinal gradient is greater than the crossfall in this area.</p>	<p><b>To be addressed based on intervention level action from Pavement Management system outputs</b></p>
<p><b>17 Dirt / debris / gravel on roadway at driveways – Priority C</b></p> <p>There is evidence of loose gravel on the sealed shoulder at unsealed property accesses along Holts Road, particularly the quarry access. Vehicles (particularly trucks) exiting the unsealed quarry access bring loose gravel onto the roadway, which may then be flicked up by tyres of passing vehicles, possibly hitting the windscreen of oncoming vehicles in the adjacent lane. Drivers entering or exiting the accesses may also experience some level of skidding on the gravel surface when decelerating or accelerating. Debris on the roadway is also a hazard for motorcyclists in the vicinity of curves, where a rider is starting to lean the bike into the corner.</p> <p><i>Risk Ranking = Medium (Occasional, Minor)</i></p>	<p>Suggest that the quarry install a motor grid within their property (say 20m back from Holts Road) and seal the quarry access between the motor grid and Holts Road.</p>  <p>Quarry access</p>	<p><b>Representations made to Quarry operator for installation. Maintenance action to be undertaken to address immediate requirements</b></p>

SAFETY HAZARD/ISSUE	SUGGESTED ACTION	REVIEW/COMMENT
<p><b>18 Sun-strike – Priority C</b></p> <p>Sun-strike is an issue along Holts Road when driving east within two hours of sunrise and driving west within two hours of sunset.</p> <p>The results of sun-strike can range widely from being just a distraction through to causing a significant loss of forward visibility along the road. The impact of the sun can vary within a matter of seconds depending on the changing road geometry, both horizontal and vertical. An example of the sun’s path on Holts Road is shown as a yellow line in the plan below, with the annual range of the sun’s path shown as the yellow shading.</p> <p><i>Risk Ranking = Medium (Improbable, Serious)</i></p>	<p>No practical suggestions except possibly planting trees (outside the clear zone) at locations that may be able to partially screen the impact of the sun approaching critical points along the road (e.g. on the approach to curves).</p> <p>Motorists should be encouraged to drive to the conditions by slowing down, being alert, maintain a clean windscreen, adjusting the sun visor and/or wearing sunglasses to maintain adequate forward vision.</p>	<p><b>No action required or possible</b></p>



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## Road Safety Audit (Existing Road Stage) Holts Road / Palm Ridge Drive intersection and surrounds



**Client:**



Client Ref: PO 951580

Report Status: FINAL (Rev01)

Date: 9 June 2021

Reference: 003-20B-03

**Disclaimer**

This report documents a technical and subjective assessment that has generally been completed based on Austroads guidelines. It has been intentionally prepared as advice only for the consideration of the client and/or its representative. Therefore, this document does not necessarily represent the Client's position or policy. The client has the right to accept, reject any of the safety issues identified or change the suggested actions expressed in this report based on further information, consultation or investigations.

Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



## Contents

<b>1</b>	<b>Project Introduction .....</b>	<b>3</b>
	Figure 1 Locality Plan .....	3
	Figure 2 Extents of Road Safety Audit .....	4
<b>2</b>	<b>Background Information .....</b>	<b>5</b>
2.1	Audit team .....	5
2.2	Audit process .....	5
2.3	Documentation reviewed .....	5
2.3.1	Traffic volumes .....	5
Table 1	Daily traffic volumes (both directions) – February 2021, MRC data .....	6
2.3.2	Crash data .....	6
Table 2	Summary of crash details (January 2015 to November 2020) .....	6
2.3.3	Other references .....	6
2.3.4	Previous RSA report .....	7
2.4	Extent of audit .....	7
2.5	Site inspections .....	7
2.6	Adopted clear zone .....	7
2.7	Special road users .....	9
2.8	Observations .....	10
2.9	Consultation .....	11
<b>3</b>	<b>Risk Assessment Methodology .....</b>	<b>12</b>
Table 3.1	Frequency of the safety issue leading to a crash .....	12
Table 3.2	Severity of resulting crash type .....	12
Table 3.3	Risk level .....	12
<b>4</b>	<b>Audit Findings .....</b>	<b>13</b>
Table 4.1	Relationship between priority, risk and treatment approach .....	13
Table 4.2	Audit Findings .....	13
<b>5</b>	<b>Recommendation and Statement .....</b>	<b>27</b>
5.1	Recommendations .....	27
5.2	Auditor statement .....	27
	<b>Appendix A – Supporting Information .....</b>	<b>28</b>
	<b>Appendix B – Speed Limit Review (SLR) Results .....</b>	<b>29</b>
	<b>Appendix C – Sequence of Existing Warning Signs .....</b>	<b>30</b>
	<b>Appendix D – Client Response Template .....</b>	<b>31</b>



# 1 Project Introduction

This report presents the findings of a Road Safety Audit (Existing Road stage) in the vicinity of the Holts Road / Palm Ridge Drive intersection. The location and extent of the audit is shown in Figures 1 and 2. The audit was requested by Mackay Regional Council (MRC).

All roads in the surrounding area are controlled and maintained by Council. The route along Glendaragh Road and Holts Road provides an attractive connection for motorists travelling between Mackay's northern beaches suburbs and the Bruce Highway, which is then less than 1.0 km from the newly constructed Mackay Ring Road (MRR), opened in September 2020. It is understood that traffic volumes have noticeably increased along Glendaragh Road and Holts Road since the new Ring Road became operational, also putting pressure on the Bruce Highway / Glendaragh Road intersection during peak traffic periods. This could potentially be a short-term phenomenon as motorists may be avoiding temporary roadworks associated with the Mackay Northern Approaches Upgrade project along the Bruce Highway east of the Mackay Ring Road through to Mackay Bucasia Road and further on to the Pioneer River. Traffic volumes may largely return to the lower levels of pre-MRR if the first section of MRR Stage 2 (new road towards Mackay Harbour, connecting directly to Glenella Richmond Road) becomes operational in about 2-3 years. A basic alignment of MRR Stage 2 is overlaid in Figure 1 for reference.

Although the speed limit along Glendaragh Road and Holts Road is 100 km/h, both horizontal and vertical curves in the vicinity generally limit the speed of vehicles to no more than 80 km/h through and/or in the vicinity of the Palm Ridge Drive intersection.

**Figure 1** Locality Plan



Map Source: <https://qldglobe.information.qld.gov.au/>

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<b>1</b>	<b>Project Introduction</b> .....	<b>3</b>
	Figure 1    Locality Plan .....	3
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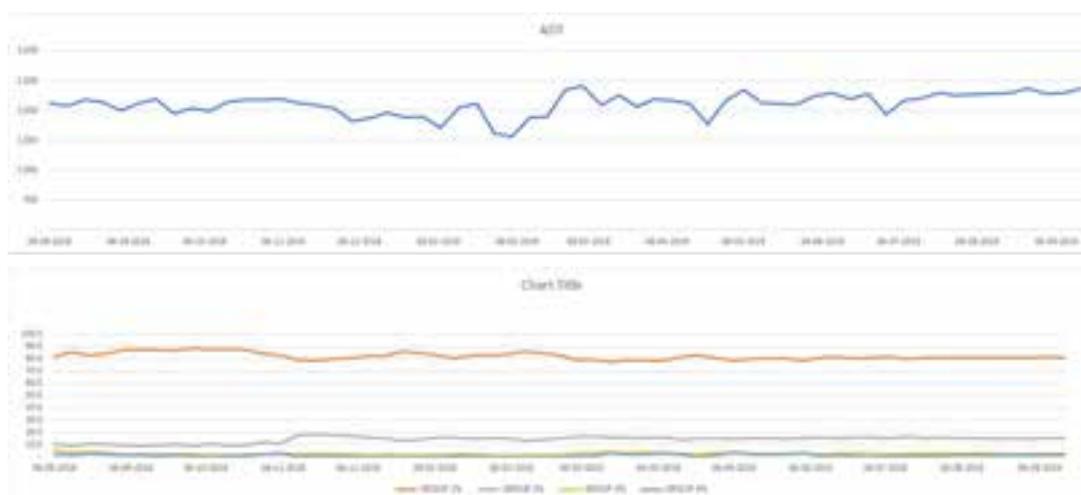
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- Prepare report and submit to Mackay Regional Council for response.

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MRC traffic volumes along Glendaragh Road and the Holts Road (west of Woodward's Road) during the years 2018-2019 was between 1,600 and 2,400 vehicles per day, with no more than 20% of the traffic being heavy vehicles. This is illustrated in the images below.



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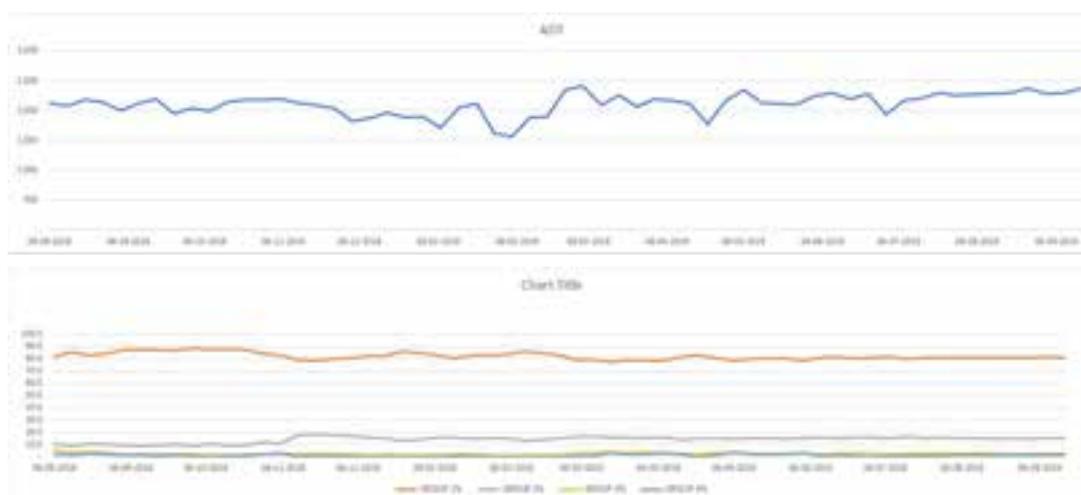
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### 2.3.4 Previous RSA report

The audit team is not aware of any previous road safety audits that have been completed in the vicinity of the Holts Road / Palm Ridge Drive intersection.

## 2.4 Extent of audit

The general extent of the road safety audit is defined as between 500 metres west and 700m east of the Palm Ridge Drive intersection and extending up to 100 metres north along Palm Ridge Drive from the Holts Road intersection.

## 2.5 Site inspections

Site visits (including video recordings) were completed by the audit team at the following times:

- Tuesday, 23 February 2021 from 4:30pm to 6:15pm – Daytime and dusk site inspections.
- Tuesday, 23 February 2021 from 7:30pm to 8:00pm – Night time site inspection.
- Thursday, 25 February 2021 from 5:40pm to 5:50pm – Sight distance inspection from Quarry access.

A medium-size 4WD was used for the drive-through / detailed inspections. The inspection at night was assessed with the vehicle headlights on both low and high beam.

## 2.6 Adopted clear zone

Austrroads Guide to Road Safety Part 9: Roadside Hazard Management (2008) provides the following commentary regarding clear zones.

*A clear zone is an area adjacent to the traffic lane that should be kept free from features that would be potentially hazardous to errant vehicles. The clear zone is a compromise between the recovery area for every errant vehicle, the cost of providing that area and the probability of an errant vehicle encountering a hazard. Where it is environmentally appropriate and economically viable, the clear zone should be kept free of non-frangible hazards and all features that would 'snag' a vehicle or cause it to behave adversely. Alternatively, hazards within the clear zone should be treated to make them safe or be shielded by a safety barrier. Clear zones are measured from the edge of the traffic lane.*

*Clear zone dimensions are intended as a guide by which practitioners can assess sites, not a prescriptive value. Practitioners may provide a greater or lesser width depending on the risk factors applying to a site.*

It is noted that the concept of a clear zone has been abandoned in recent (2020/21) Austrroads guidelines, however it is still of assistance to road safety auditors in terms of limiting the scope of potential roadside hazards. The following assumptions have been made in determining an appropriate clear zone width along both Holts Road and Glendaragh Road:

- Design speed = 110 km/h, based on an existing 100 km/h posted speed limit.
- Design ADT = Maximum of 5,000 vehicles per day (assumed).
- Batter / shoulder slope = Typical fill slopes ranging between 1 on 2 and 1 on 6. Cut slope >1 on 2.

Table 4.1 of the Austrroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers (2010) suggests a clear zone as shown below.

Road Safety Audit (Existing Road Stage)  
 Holts Road / Palm Ridge Drive intersection and surrounds



Table 4.1: Clear zone distances from edge of through travelled way

Design speed (km/h)	Design ADT	Clear zone width (m)					
		Fill batter			Cut batter		
		6:1 to flat	4:1 to 5:1	3:1 and steeper <sup>(1)</sup>	6:1 to flat	4:1 to 5:1	3:1 and steeper <sup>(1)</sup>
≤ 60	≤ 750	3.0	3.0	∅	3.0	3.0	3.0
	750 – 1500	3.5	4.5	∅	3.5	3.5	3.5
	1501 – 6000	4.5	5.0	∅	4.5	4.5	4.5
	> 6000	5.0	5.5	∅	5.0	5.0	5.0
70 – 80	≤ 750	3.5	4.5	∅	3.5	3.0	3.0
	750 – 1500	5.0	6.0	∅	5.0	4.5	3.5
	1501 – 6000	5.5	8.0	∅	5.5	5.0	4.5
	> 6000	6.5	8.0	∅	6.5	6.0	6.0
90	≤ 750	4.5	5.5	∅	5.5	5.5	3.8
	750 – 1500	5.5	7.5	∅	6.5	5.0	3.8
	1501 – 6000	6.5	9.0	∅	6.5	5.5	5.0
	> 6000	7.5	10.0 <sup>(2)</sup>	∅	7.5	6.5	3.8
100	≤ 750	5.5	7.5	∅	5.0	4.5	3.8
	750 – 1500	7.5	10.0 <sup>(2)</sup>	∅	6.5	5.5	4.5
	1501 – 6000	8.0	12.0 <sup>(2)</sup>	∅	8.0	6.5	5.5
	> 6000	10.0 <sup>(2)</sup>	12.5 <sup>(2)</sup>	∅	8.5	8.0	6.0
110	≤ 750	6.0	8.0	∅	5.0	6.0	3.8
	750 – 1500	8.0	11.0 <sup>(2)</sup>	∅	6.5	6.0	5.0
	1501 – 6000	10.0 <sup>(2)</sup>	11.0 <sup>(2)</sup>	∅	8.5	7.5	6.0
	> 6000	10.0 <sup>(2)</sup>	14.0 <sup>(2)</sup>	∅	9.0	9.0	7.5

1. Where a site specific investigation indicates a high probability of continuing crashes, or such occurrences are indicated by crash history, the designer may provide clear zone distances greater than the clear zone shown in Table 4.1. A jurisdiction may limit clear zones to 9 m for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.

2. Since recovery is less likely on the unshaded, insensate 3:1 slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of the slope. Determination of the recovery area at the toe of the slope should take into consideration available road reservation, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the travelled lane and the beginning of the 3:1 slope should influence the recovery area provided at the toe of the slope. While the application may be limited by several factors, the fill slope parameters which may enter into determining a maximum desirable recovery area are illustrated in Figure 4.6.

Notes:  
 The design ADT in the table is the average daily traffic volume in both directions and in all lanes, other than for divided roads where it is the total traffic in all lanes in one direction.

Where the road is curved the values in Table 4.1 should be adjusted by the curve correction factors in Table 4.2.

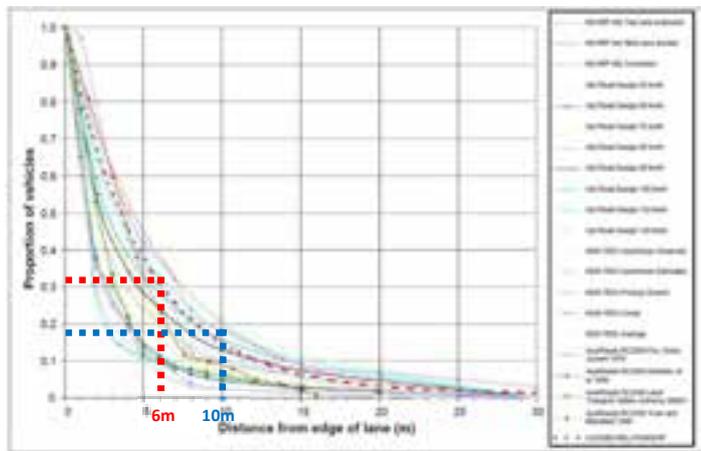
The RTA New South Wales uses a similar approach based on a hazard corridor and with curve adjustments included rather than NCF (Appendix C). For the same situation the RTA method results in greater clear zones than those shown in Table 4.1.

Source: Adapted from AASHTO (2006).

The application of the above parameters is considered to result in a conservative clear zone width. From a practical viewpoint, a maximum clear zone of 6.0 metres has been adopted for the purpose of this audit. An exception to this is adjacent to cut slopes and typically at minor pipe / culvert end walls where there is a vertical drop of less than 0.6 metres, in which case a maximum clear zone of only 4.0 metres has been adopted.

This reduction in the clear zone has only been accepted because it is recognised that the existing road environment presents constraints that are generally uneconomic to fully overcome. These reduced clear zone parameters represent a compromise for a proportion of potential errant vehicles, and is considered reasonable based on Figure C-1 of the Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers (2010), shown below for reference. Further supporting documentation is discussed in Appendix C and Commentary 3 of the Austroads guide.

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Source: KIR (2005)

Figure C 1: Lateral distance travelled before control is regained

## 2.7 Special road users

2021 traffic data indicates that heavy vehicles along Glendaragh Road represent approximately 20% of the total 4,225 vehicles per day. About 4 out of 5 of the heavy vehicles using Glendaragh Road and Holts Road are small-medium size trucks with only 2 axles (Class 3). Therefore, only about 4% (say 170) of daily traffic are either heavy rigid trucks or up to 19m articulated vehicles.

Holts Road and Glendaragh Road are not part of a designated B-Double route. For the purpose of this report it is assumed that there are no oversize heavy vehicles in excess of 3.5m wide.

An existing quarry operates with frequent heavy vehicle movements to and from the access located about 90m west of the Palm Ridge Drive intersection, at the start of a 180-200m radius curve. The image below shows that sight distance from the access towards the curve is restricted to about 125m for car drivers. Heavy vehicles have a nominal 2.4m driver height and are therefore able to see further around the curve in this instance, however the acceleration profile of trucks is much slower than light vehicles so this additional sight distance is considered to be critical. An existing convex mirror is positioned opposite the quarry access to assist visibility for drivers turning right from the access onto Holts Road.



Looking west from the Quarry access

There are no existing footpaths provided for pedestrians or cyclists in this rural environment. There are no on-road facilities for cyclists or delineated sealed shoulder area.

There does not appear to be any existing school bus stop areas within the extents of the road safety audit. We are not aware of any regular public bus services in the vicinity.

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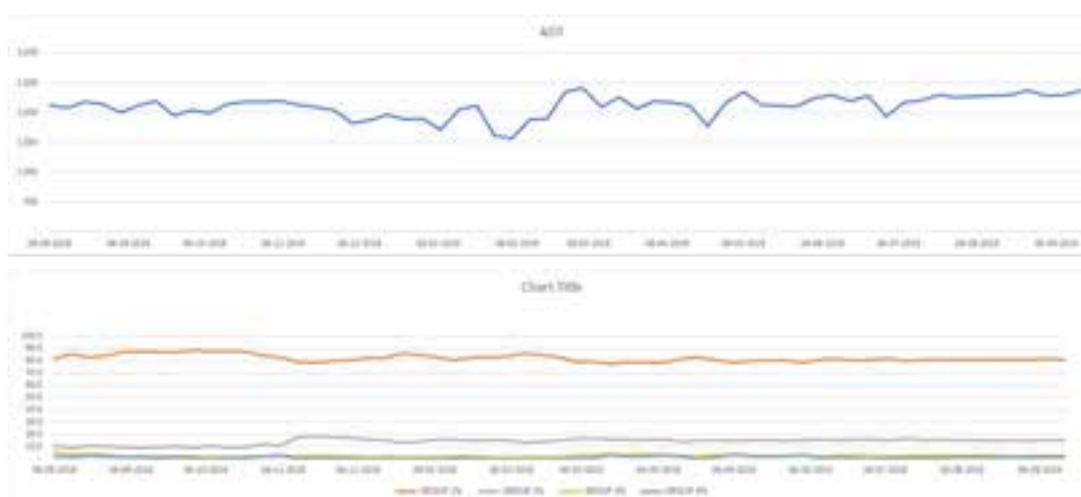
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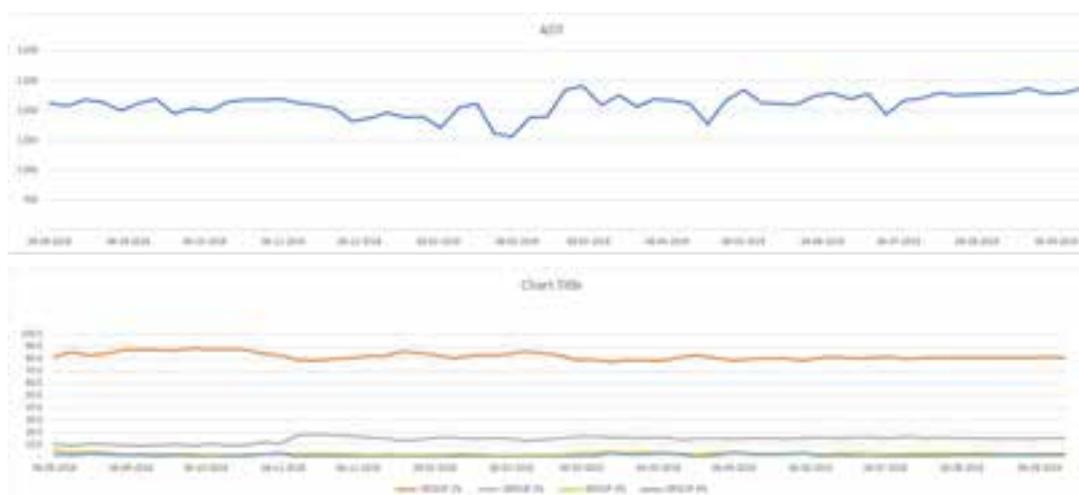
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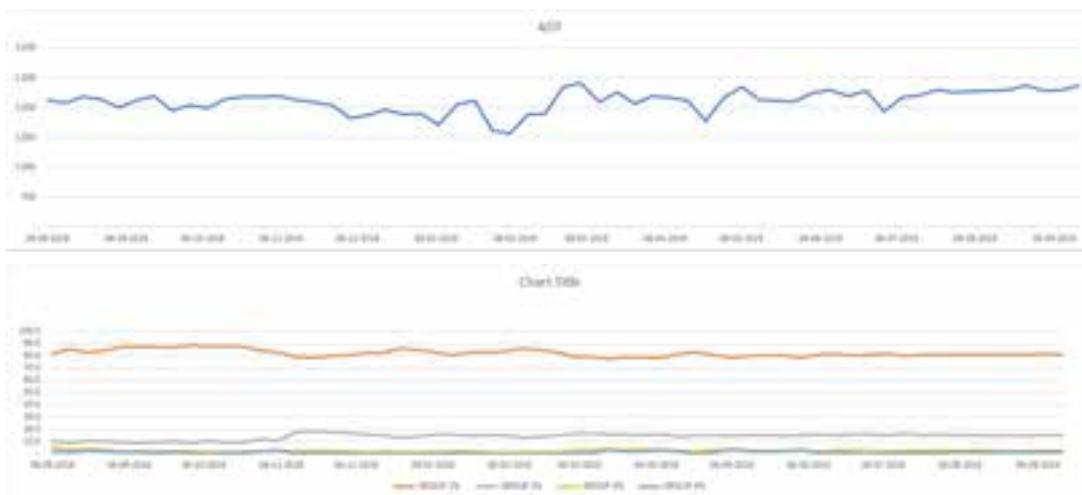
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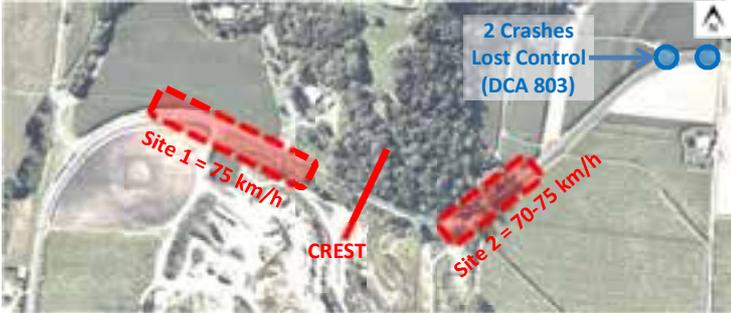
**Figure 1 Locality Plan**



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Safety Hazard / Issue	Suggested Action
<p><b>01 Speed Zone – Holts Road and Glendaragh Road – Priority B (IMPORTANT)</b></p> <p>The posted speed limit along Glendaragh Road and Holts Road (west of Pioneer Street) is 100 km/h, including through the intersection with Palm Ridge Drive. The horizontal geometry of both roads is generally straight along most of the 100 km/h section except within the RSA extents, being up to 1.0 km either side of the Palm Ridge Drive intersection. This section of roadway demands that motorists drive at lower vehicle speeds due to the following factors:</p> <ul style="list-style-type: none"> <li>• Horizontal geometry – 3 curves with sub-standard radii between R180 and R200. These radii imply a vehicle design speed of about 65-70 km/h based on a 3-6% range in superelevation. Although it is recognised that vehicles can traverse these curves at speeds of 80 km/h when the roadway is dry, adverse weather events may limit the safe speed to no more than 70 km/h.</li> <li>• Vertical geometry – 1 crest with relatively steep gradient around one of the horizontal curves. The combination of both vertical and horizontal curves immediately before / after a crest is not desirable; however there have been no reported crashes in the general vicinity to indicate that it is a significant safety issue to vehicles. However it may be an issue for motorcycles, particularly if the roadway surface is wet and/or there is leaf litter from the roadside trees.</li> <li>• There are also other safety issues / hazards for the driver to consider, including reduced readability due to forward visibility being restricted around curves and over the crest. This is particularly evident during the hours of darkness, being largely attributed to there being no marked edge lines and an insufficient number of Road Edge Guide Posts (REGP's).</li> </ul> <p>On Tuesday, 23 February 2021 a number of vehicle speeds were obtained at two locations along Holts Road, with the averages shown below:</p> <ul style="list-style-type: none"> <li>• Site 1 – 75 km/h between Glendaragh Road and west of the crest.</li> <li>• Site 2 – 70 km/h westbound and 75 km/h eastbound around the curve immediately east of the crest.</li> </ul>  <p>The readability or feel of the section of road around the curves and over the crest in the vicinity of Palm Ridge Drive is better suited to a posted speed limit of 80 km/h when driven in normal, dry conditions. This would enable vehicles to better navigate the curve, crest, and promote lower speeds through and either side of the Palm Ridge Drive intersection and Quarry access.</p> <p>A Speed Limit Review (SLR) of the immediate 1.7km extents of the audit and a longer 4.14 km segment has subsequently been completed. The extents of each SLR and a copy of the results are contained in Appendix B for reference. The summary of technical assessments indicates "... that the speed limit of 80km/h be adopted along the road corridor and that speed management activities along the corridor be undertaken that this speed limit is considered credible by road users."</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest reducing the posted speed limit from 100 km/h to 80 km/h along Holts Road and Glendaragh Road within the extents of the road safety audit and a further 2.5 km east along Holts Road to a point 250m east of the Pioneer Street intersection.</p> <p>This will include the following two intersections where there have been numerous injury crashes over the past 5 years:</p> <ul style="list-style-type: none"> <li>• Holts Road / Glenella Richmond Road (7 crashes).</li> <li>• Holts Road / Pioneer Street (5 crashes).</li> </ul>



Safety Hazard / Issue	Suggested Action
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Safety Hazard / Issue	Suggested Action
<p><b>01 Speed Zone – Holts Road and Glendaragh Road – Priority B (IMPORTANT)</b></p> <p>The posted speed limit along Glendaragh Road and Holts Road (west of Pioneer Street) is 100 km/h, including through the intersection with Palm Ridge Drive. The horizontal geometry of both roads is generally straight along most of the 100 km/h section except within the RSA extents, being up to 1.0 km either side of the Palm Ridge Drive intersection. This section of roadway demands that motorists drive at lower vehicle speeds due to the following factors:</p> <ul style="list-style-type: none"> <li>• Horizontal geometry – 3 curves with sub-standard radii between R180 and R200. These radii imply a vehicle design speed of about 65-70 km/h based on a 3-6% range in superelevation. Although it is recognised that vehicles can traverse these curves at speeds of 80 km/h when the roadway is dry, adverse weather events may limit the safe speed to no more than 70 km/h.</li> <li>• Vertical geometry – 1 crest with relatively steep gradient around one of the horizontal curves. The combination of both vertical and horizontal curves immediately before / after a crest is not desirable; however there have been no reported crashes in the general vicinity to indicate that it is a significant safety issue to vehicles. However it may be an issue for motorcycles, particularly if the roadway surface is wet and/or there is leaf litter from the roadside trees.</li> <li>• There are also other safety issues / hazards for the driver to consider, including reduced readability due to forward visibility being restricted around curves and over the crest. This is particularly evident during the hours of darkness, being largely attributed to there being no marked edge lines and an insufficient number of Road Edge Gide Posts (REGP’s).</li> </ul> <p>On Tuesday, 23 February 2021 a number of vehicle speeds were obtained at two locations along Holts Road, with the averages shown below:</p> <ul style="list-style-type: none"> <li>• Site 1 – 75 km/h between Glendaragh Road and west of the crest.</li> <li>• Site 2 – 70 km/h westbound and 75 km/h eastbound around the curve immediately east of the crest.</li> </ul>  <p>The readability or feel of the section of road around the curves and over the crest in the vicinity of Palm Ridge Drive is better suited to a posted speed limit of 80 km/h when driven in normal, dry conditions. This would enable vehicles to better navigate the curve, crest, and promote lower speeds through and either side of the Palm Ridge Drive intersection and Quarry access.</p> <p>A Speed Limit Review (SLR) of the immediate 1.7km extents of the audit and a longer 4.14 km segment has subsequently been completed. The extents of each SLR and a copy of the results are contained in Appendix B for reference. The summary of technical assessments indicates “... that the speed limit of 80km/h be adopted along the road corridor and that speed management activities along the corridor be undertaken that this speed limit is considered credible by road users.”</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest reducing the posted speed limit from 100 km/h to 80 km/h along Holts Road and Glendaragh Road within the extents of the road safety audit and a further 2.5 km east along Holts Road to a point 250m east of the Pioneer Street intersection.</p> <p>This will include the following two intersections where there have been numerous injury crashes over the past 5 years:</p> <ul style="list-style-type: none"> <li>• Holts Road / Glenella Richmond Road (7 crashes).</li> <li>• Holts Road / Pioneer Street (5 crashes).</li> </ul>



Safety Hazard / Issue	Suggested Action
<p><b>02 Substandard road geometry (3 curves and 1 crest) – Priority B (IMPORTANT)</b></p> <p>The locations of three R180-R200 curves and single crest are shown in the image below, along with an indication of suggested additional Chevron Alignment Markers (CAM's) and TC1530_2 signs (TMR design). The TC1530_2 sign combines the first CAM with the advisory speed in a larger font, providing a reminder to motorist's right up until they enter the curve itself.</p>  <p>Photographs showing the sequence of existing warning signs in both directions along Holts Road are contained in Appendix C. It may be helpful to use these photos and the above image as references.</p> <p><b>Curve 1</b> – There are existing curve warning signs on both approaches (south approach also has 70 km/h advisory) and CAM's spaced around the curve facing both directions. Appears to be missing a 70 km/h advisory sign on the east approach. Would be even better with more prominent signage reinforcing the 70 km/h advisory speed.</p> <p><b>Curve 2</b> – Existing curve warning signs and 50 km/h advisory on both approaches. The existing 'Reverse Curve' (W1-4) sign on the east approach is not considered suitable given the distance between Curves 2 and 3, plus the crest and intersection between them. Some of the existing CAM's are missing in both directions and/or are not spaced around the whole curve.</p> <p><b>Curve 3</b> – Two recorded crashes occurred on this curve. There is only one existing warning sign on the west approach. No other signage at all, not even any REGP's on the outside of the curve to provide guidance to motorists, particularly at night in poor weather conditions where line markings may not be easily visible.</p> <p><b>Crest</b> – The 'Crest' and 'Curve' warning signs on the west approach are out of sequence for some reason.</p>  <p>East approach to crest – looking west          West approach to crest – looking east</p> <p><i>Risk Ranking = High (Occasional, Serious)</i></p>	<p>Suggest the following signage be installed for both completeness and consistency:</p> <p><b>Curve 1</b> – Install additional 70 km/h advisory sign below the existing curve warning sign on the east approach. Also suggest adding 70 km/h TC1530_2 signs on both approaches to complement existing CAM's.</p> <p><b>Curve 2</b> – Suggest removing the existing W1-4 sign and installing a new "Curve" (W1-3R) sign instead. Refer also to suggested action below for the 'Crest'. Also install a new 50 km/h TC1530_2 sign on the east approach only and additional CAM's in both directions so that it will be in general accordance with MUTCD.</p> <p><b>Curve 3</b> – Install new "Curve" (W1-3) and 70 km/h advisory signs on both approaches. Also suggest installing CAM's and 70 km/h TC1530_2 signs, particularly if the speed limit is not reduced to 80 km/h.</p> <p><b>Crest</b> – Suggest swapping the Crest' and 'Curve' warning signs on the west approach so it provides the correct sequence for motorists.</p> <p>Because the crest and curve is close together and the crest demands the 50 km/h advisory speed, it would be desirable combine the crest, curve and advisory speed information on one TC1338_4 sign as shown below, for both directions.</p>  <p>TC1338_4          Eastbound Westbound</p>

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Safety Hazard / Issue	Suggested Action
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Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



## 5 Recommendation and Statement

### 5.1 Recommendations

The road safety audit (existing road stage) in the vicinity of the Holts Road / Palm Ridge Drive intersection has identified a number of safety issues for consideration. These issues have been discussed in the preceding section and suggested actions have been made. Consideration should be given to installing most or all of the following delineation and signage to provide road safety benefits at a relatively low cost:

- reduce the posted speed limit from 100 km/h (existing) to 80 km/h (suggested);
- road edge guide posts (REGP's);
- edge lines, wherever it is practical to do so and the sealed roadway width is sufficient;
- consistent and correct sequencing of all curve / crest signage, including advisory speeds; and
- chevron alignment markers (CAM's), including TC1338\_4 signs at the start of each curve approach.

It is recommended that the client respond to this audit report and consider the allocation of appropriate resources. A completion meeting (or phone conversation) is suggested so that there is opportunity to discuss any specific safety issues that may need clarification.

The suggested actions are not intended to be the only possible actions; rather they have been provided as a guide for remedial action. The responsibility for the selection and implementation of the recommendations rests with the client, and they should decide the appropriate actions for the identified issues and select the appropriate remedial measures.

A template to assist in responding to this road safety audit report is provided electronically as a Microsoft Word document. The file name is identified in Appendix D.

### 5.2 Auditor statement

This road safety audit was carried out by Traffic Plan Pty Ltd based on site inspections and information requested and/or made available to it. Every effort was made to consider all safety issues relating to the road environment. The safety audit findings and suggested actions are opinions related to the judgment of both technical matters and perceived driver behaviour issues.

Trina Saunders – Technical Officer, Traffic Plan Pty Ltd  
(Senior Road Safety Auditor)

Kerry Saunders – Traffic Design Consultant, Traffic Plan Pty Ltd  
(Senior Road Safety Auditor)

Date: 9 June 2021

Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



## Appendix A – Supporting Information

- Chainage along Glendaragh Road and Holts Road within the extents of the Road Safety Audit – (Source: MiMAPS)
- Selected traffic volume and speed data – (Source: MRC)
- Crash Analytics Reporting System (CARS) – Crash Reports (January 2015 to December 2020) – (Source: MRC, TMR data)
- Sight Distance Documentation (Source: MRC, 2015)



**Holts Road / Palm Ridge Drive intersection and surrounds)**  
 Road Safety Audit – MRC Chainage for reference

Mapping Sources  
<https://mimaps.mackay.qld.gov.au>

**Reference Only**  
 31 May 2021

 **Dwg No. PR01**

**MetroCount Traffic Executive**  
**Weekly Vehicle Counts (Virtual Week)**

**VirtWeeklyVehicle-787 -- English (ENA)**

**Datasets:**

**Site:** [10210-01\_C01\_L01\_AB] GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD  
**<100> SA sn**  
**Attribute:** GLENELLA  
**Direction:** 7 - North bound A>B, South bound B>A. **Lane:** 0  
**Survey Duration:** 11:45 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021,  
**Zone:**  
**File:** 03 10210-01\_C01\_L01\_AB 0 2021-02-26 1052 GLENDARAGH ROAD () btw BRUCE HIGHWAY -  
 HOLTS ROAD 100 SA sn.EC0 (Plus B)  
**Identifier:** MJ08QM2F MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default axle (v5.07)  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Profile:**

**Filter time:** 11:46 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021 (20.9665)  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound), P = North, Lane = 0-16  
**Separation:** Headway > 0 sec, Span 0 - 100 metre  
**Name:** Default Profile  
**Scheme:** Vehicle classification (AustRoads94)  
**Units:** Metric (metre, kilometre, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 84273 / 84321 (99.94%)

**Weekly Vehicle Counts (Virtual Week)****VirtWeeklyVehicle-787**

**Site:** 10210-01\_C01\_L01\_AB.0.1NS  
**Description:** GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD <100> SA sn  
**Filter time:** 11:46 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021  
**Scheme:** Vehicle classification (AustRoads94)  
**Filter:** CIs(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages		
								1 - 5	1 - 7	
0000-0100	6.7	11.3	5.7	7.0	5.7	14.3	15.7	7.3	9.5	
0100-0200	3.7	5.3	3.3	4.7	5.7	9.0	10.0	4.5	6.0	
0200-0300	13.3	5.7	8.7	9.3	9.7	6.7	5.7	9.3	8.4	
0300-0400	27.3	16.0	23.0	15.7	16.0	17.3	11.0	19.6	18.0	
0400-0500	69.3	49.7	44.7	41.7	39.7	32.7	23.0	49.0	43.0	
0500-0600	229.7	214.7	215.7	229.3	204.0	72.7	55.7	218.7	174.5	
0600-0700	332.3	305.7	312.7	325.7	278.3	94.7	72.3	310.9	246.0	
0700-0800	<b>372.3</b>	<b>365.0</b>	<b>392.7</b>	<b>357.0</b>	<b>369.3</b>	155.0	127.3	<b>371.3</b>	<b>305.5</b>	
0800-0900	334.7	348.3	328.0	326.3	315.7	208.3	206.7	330.6	295.4	
0900-1000	211.7	219.3	196.0	197.0	228.7	265.7	279.3	210.5	228.2	
1000-1100	180.3	165.7	183.3	180.7	201.7	<b>278.7</b>	328.7	182.3	217.0	
1100-1200	208.3	185.7	191.3	186.7	145.7	278.0	<b>345.0</b>	183.5	220.1	
1200-1300	198.7	165.3	177.3	185.3	221.3	267.0	289.7	189.6	215.0	
1300-1400	189.7	180.7	198.0	189.3	267.3	260.0	294.0	205.0	225.6	
1400-1500	305.3	282.7	312.3	308.7	358.7	<b>273.3</b>	<b>327.0</b>	313.5	309.7	
1500-1600	369.0	395.3	409.0	415.3	<b>443.3</b>	246.3	317.3	406.4	370.8	
1600-1700	<b>403.3</b>	<b>437.0</b>	<b>447.0</b>	<b>417.3</b>	407.3	245.0	271.0	<b>422.4</b>	<b>375.4</b>	
1700-1800	332.3	337.3	354.7	336.3	336.0	226.0	233.3	339.3	308.0	
1800-1900	153.0	192.0	213.0	191.7	194.0	151.7	152.7	188.7	178.3	
1900-2000	86.3	115.3	113.0	115.3	110.7	99.3	87.0	108.1	103.9	
2000-2100	50.0	80.3	71.7	88.0	63.3	65.0	55.3	70.7	67.7	
2100-2200	35.3	45.0	42.3	48.0	67.0	65.0	32.7	47.5	47.9	
2200-2300	18.3	20.7	18.3	19.7	36.7	39.7	16.7	22.7	24.3	
2300-2400	11.3	10.3	11.3	13.3	21.7	28.3	8.0	13.6	14.9	
<b>Totals</b>										
0700-1900	3258.7	3274.3	3402.7	3291.7	3489.0	2855.0	3172.0	3343.3	3249.0	
0600-2200	3762.7	3820.7	3942.3	3868.7	4008.3	3179.0	3419.3	3880.5	3714.4	
0600-0000	3792.3	3851.7	3972.0	3901.7	4066.7	3247.0	3444.0	3916.9	3753.6	
0000-0000	4142.3	4154.3	4273.0	4209.3	4347.3	3399.7	3565.0	4225.3	4013.0	
<b>AM Peak</b>	0700	0700	0700	0700	0700	1000	1100			
	372.3	365.0	392.7	357.0	369.3	278.7	345.0			
<b>PM Peak</b>	1600	1600	1600	1600	1500	1400	1400			
	403.3	437.0	447.0	417.3	443.3	273.3	327.0			

\* - No data.

## MetroCount Traffic Executive Speed Statistics

### SpeedStat-806 -- English (ENA)

#### Datasets:

**Site:** [10210-01\_C01\_L01\_AB] GLENDARAGH ROAD () btw BRUCE HIGHWAY -  
 HOLTS ROAD <100> SA sn  
**Attribute:** GLENELLA  
**Direction:** 7 - North bound A>B, South bound B>A. **Lane:** 0  
**Survey Duration:** 11:45 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021,  
**Zone:**  
**File:** 03 10210-01\_C01\_L01\_AB 0 2021-02-26 1052 GLENDARAGH ROAD () btw  
 BRUCE HIGHWAY - HOLTS ROAD 100 SA sn.EC0 (Plus B)  
**Identifier:** MJ08QM2F MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default axle (v5.07)  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

#### Profile:

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**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound), P = North, Lane = 0-16  
**Separation:** Headway > 0 sec, Span 0 - 100 metre  
**Name:** Default Profile  
**Scheme:** Vehicle classification (AustRoads94)  
**Units:** Metric (metre, kilometre, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 84273 / 84321 (99.94%)

### Speed Statistics

**SpeedStat-806**

**Site:** 10210-01\_C01\_L01\_AB.0.1NS  
**Description:** GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD <100> SA sn  
**Filter time:** 11:46 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021  
**Scheme:** Vehicle classification (AustRoads94)  
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

Vehicles = 84273

Posted speed limit = 100 km/h, Exceeding = 15201 (18.04%), Mean Exceeding = 105.91 km/h

Maximum = 159.1 km/h, Minimum = 10.1 km/h, Mean = 90.3 km/h

85% Speed = 101.16 km/h, 95% Speed = 107.46 km/h, Median = 91.26 km/h

15 km/h Pace = 84 - 99, Number in Pace = 46256 (54.89%)

Variance = 152.76, Standard Deviation = 12.36 km/h

#### Speed Bins (Partial days)

Speed	Bin	Below	Above	Energy	vMult	n * vMult
0 - 10	0 0.000%	0 0.000%	84273 100.0%	0.00	0.00	0.00
10 - 20	30 0.036%	30 0.036%	84243 100.0%	0.00	0.00	0.00
20 - 30	116 0.138%	146 0.173%	84127 99.83%	0.00	0.00	0.00
30 - 40	260 0.309%	406 0.482%	83867 99.52%	0.00	0.00	0.00
40 - 50	641 0.761%	1047 1.242%	83226 98.76%	0.00	0.00	0.00
50 - 60	1060 1.258%	2107 2.500%	82166 97.50%	0.00	0.00	0.00
60 - 70	2138 2.537%	4245 5.037%	80028 94.96%	0.00	0.00	0.00
70 - 80	8279 9.824%	12524 14.86%	71749 85.14%	0.00	0.00	0.00
80 - 90	25161 29.86%	37685 44.72%	46588 55.28%	0.00	0.00	0.00
90 - 100	31387 37.24%	69072 81.96%	15201 18.04%	0.00	0.00	0.00
100 - 110	12593 14.94%	81665 96.91%	2608 3.095%	0.00	0.00	0.00
110 - 120	2106 2.499%	83771 99.40%	502 0.596%	0.00	0.00	0.00
120 - 130	359 0.426%	84130 99.83%	143 0.170%	0.00	0.00	0.00
130 - 140	104 0.123%	84234 100.0%	39 0.046%	0.00	0.00	0.00
140 - 150	26 0.031%	84260 100.0%	13 0.015%	0.00	0.00	0.00
150 - 160	13 0.015%	84273 100.0%	0 0.000%	0.00	0.00	0.00
160 - 170	0 0.000%	84273 100.0%	0 0.000%	0.00	0.00	0.00
170 - 180	0 0.000%	84273 100.0%	0 0.000%	0.00	0.00	0.00
180 - 190	0 0.000%	84273 100.0%	0 0.000%	0.00	0.00	0.00
190 - 200	0 0.000%	84273 100.0%	0 0.000%	0.00	0.00	0.00

Total Speed Rating = 0.00

Total Moving Energy (Estimated) = 0.00

#### Speed limit fields (Partial days)

Limit	Below	Above
0   100 (PSL)	69072 82.0%	15201 18.0%

**MetroCount Traffic Executive**  
**Class Speed Matrix**

**ClassMatrix-807 -- English (ENA)****Datasets:**

**Site:** [10210-01\_C01\_L01\_AB] GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD <100> SA sn  
**Attribute:** GLENELLA  
**Direction:** 7 - North bound A>B, South bound B>A. **Lane:** 0  
**Survey Duration:** 11:45 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021,  
**Zone:**  
**File:** 03 10210-01\_C01\_L01\_AB 0 2021-02-26 1052 GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD 100 SA  
 sn.EC0 (Plus B)  
**Identifier:** MJ08QM2F MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default axle (v5.07)  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Profile:**

**Filter time:** 11:46 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021 (20.9665)  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound), P = North, Lane = 0-16  
**Separation:** Headway > 0 sec, Span 0 - 100 metre  
**Name:** Default Profile  
**Scheme:** Vehicle classification (AustRoads94)  
**Units:** Metric (metre, kilometre, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 84273 / 84321 (99.94%)

### Class Speed Matrix

**ClassMatrix-807**

**Site:** 10210-01\_C01\_L01\_AB.0.1NS  
**Description:** GLENDARAGH ROAD () btw BRUCE HIGHWAY - HOLTS ROAD <100> SA sn  
**Filter time:** 11:46 Friday, 5 February 2021 => 10:57 Friday, 26 February 2021  
**Scheme:** Vehicle classification (AustRoads94)  
**Filter:** Cls(1-12) Dir(NESW) Sp(10,160) Headway(>0) Span(0 - 100) Lane(0-16)

km/h	Class												Total	
	SV 1	SVT 2	TB2 3	TB3 4	T4 5	ART3 6	ART4 7	ART5 8	ART6 9	BD 10	DRT 11	TRT 12		
10- 20	24	.	6	.	.	.	.	.	.	.	.	.	30	0.0%
20- 30	80	2	20	6	4	1	.	1	2	.	.	.	116	0.1%
30- 40	181	8	41	15	5	1	4	1	1	3	.	.	260	0.3%
40- 50	472	18	100	27	3	8	4	1	4	4	.	.	641	0.8%
50- 60	797	33	162	24	.	12	8	2	18	3	1	.	1060	1.3%
60- 70	1642	122	270	44	5	15	12	5	14	7	2	.	2138	2.5%
70- 80	6431	476	984	118	12	80	71	8	69	25	4	1	8279	9.8%
80- 90	19737	1077	3259	285	25	205	134	24	243	162	9	1	25161	29.9%
90-100	24747	798	4764	221	12	286	154	11	203	185	5	1	31387	37.2%
100-110	9043	194	2945	73	3	107	76	3	62	86	1	.	12593	14.9%
110-120	1375	18	674	8	.	22	6	.	1	2	.	.	2106	2.5%
120-130	235	1	122	1	.	.	.	.	.	.	.	.	359	0.4%
130-140	76	1	27	.	.	.	.	.	.	.	.	.	104	0.1%
140-150	22	.	4	.	.	.	.	.	.	.	.	.	26	0.0%
150-160	9	.	4	.	.	.	.	.	.	.	.	.	13	0.0%
<b>Total</b>	<b>64871</b>	<b>2748</b>	<b>13382</b>	<b>822</b>	<b>69</b>	<b>737</b>	<b>469</b>	<b>56</b>	<b>617</b>	<b>477</b>	<b>22</b>	<b>3</b>	<b>84273</b>	
	<b>77.0%</b>	<b>3.3%</b>	<b>15.9%</b>	<b>1.0%</b>	<b>0.1%</b>	<b>0.9%</b>	<b>0.6%</b>	<b>0.1%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.0%</b>		

## Recorded Crashes (Jan 2015 to Nov 2020)

### HOLTS RD (Larkins Rd and west to Glendaragh Rd)

#### Hospitalisation Crash: 201601023987

<b>Crash Number:</b>	201601023987	<b>Units Involved:</b>	1	<b>Load Date:</b>	30 January 2020 02:28
<b>Severity:</b>	Hospitalisation	<b>Fatalities:</b>	0		
<b>Date:</b>	6 June 2016	<b>Hospitalised:</b>	1		
<b>Time:</b>	01	<b>Medically Treated:</b>	0		
<b>Day:</b>	Monday	<b>Minor Injuries:</b>	0		
<b>Street:</b>	Holts Rd	<b>Police Division:</b>	Farleigh	<b>Latitude:</b>	-21.096058
<b>Street Int:</b>	Not applicable	<b>Police Patrol Group:</b>	Mackay Country Stations	<b>Longitude:</b>	149.128314
<b>Landmark:</b>	Unknown	<b>Police District:</b>	Mackay	<b>Link:</b>	<a href="#">Google Map</a>
<b>Suburb:</b>	Richmond	<b>Police Region:</b>	Central		
<b>LGA:</b>	Mackay Regional	<b>CSB Region:</b>	Central Region		
<b>ABS SA2:</b>	Mount Pleasant - Glenella	<b>PDO District:</b>	Mackay/Whitsunday		
<b>ABS SA3:</b>	Mackay	<b>PDO Region:</b>	Central Queensland		
<b>ABS SA4:</b>	Mackay - Isaac - Whitsunday	<b>Road Section ID:</b>	Not applicable		
<b>ABS Rural/Urban:</b>	Rural	<b>Road Section:</b>	Not applicable		
<b>Authority:</b>	Locally controlled	<b>Thru Dist:</b>	Not applicable		
<b>Atmospheric:</b>	Clear	<b>Speed Limit:</b>	100 km/h		
<b>Lighting:</b>	Daylight	<b>Crash Nature:</b>	Hit fixed obstruction or temporary object		
<b>Road Surface:</b>	Sealed (dry)	<b>DCA Code:</b>	803 [Off Path-Curve: Off Cway Rt Bend Hit Obj]		
<b>Horizontal Alignment:</b>	Curved (view open)	<b>DCA Group:</b>	19 [Off carriageway; on curve; hit object]		
<b>Vertical Alignment:</b>	Crest	<b>Roadway Feature:</b>	No feature		
<b>Impact Location:</b>	On road-related area	<b>Traffic Control:</b>	No traffic control		

**Description:**

Unit 1 was travelling at approximately (defendant admissions) 100km/hr on Holts Road, Mackay. Unit 1 has driven over the crest of near the intersection of Woodward's Road, Mackay. U1 has lost control whilst taking the slow right bend. U1 has lost control with the rear wheels of the vehicle. U1 has veered off towards the right and over corrected to the left. U1 has then hit the ditch on the side of the road causing the vehicle to roll approximately 2-3 times.

**Unit 1**


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<b>Unit Type:</b>	Car/station wagon	<b>Registration Status:</b>	Registered	<b>Occupants:</b>	4
<b>Controlled:</b>	Yes	<b>State Registered:</b>	Queensland	<b>Casualties:</b>	1
<b>Age:</b>	19	<b>Intended Action:</b>	Go straight ahead		
<b>Gender:</b>	Male	<b>Direction:</b>	East	<b>Unit Damage:</b>	Extensive; unrepairable
<b>Licence Level:</b>	Learner	<b>On Street:</b>	Holts Road	<b>Towing:</b>	Not towing
<b>Licence State:</b>	Queensland			<b>Dangerous Goods:</b>	Unknown

**Contributing Circumstances:**

401 [Violation - exceeding speed limit]  
 418 [Violation - dangerous driving]  
 502 [Vehicle - tyres (low tread; puncture; blow out; etc)]  
 998 [Driver - fatigue related (by definition)]

**Hit animal/object/cross median:**

Ditch/culvert

**Casualty - Unit 1 - Occupant 1**


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**Severity:** Hospitalised    **Restraint:** Unrestrained  
**Road User:** Car passenger    **Helmet:** Not applicable  
**Age:** 17  
**Gender:** Female

## Hospitalisation Crash: 201900505297

<b>Crash Number:</b>	201900505297	<b>Units Involved:</b>	2	<b>Load Date:</b>	17 June 2020 11:07
<b>Severity:</b>	Hospitalisation	<b>Fatalities:</b>	0		
<b>Date:</b>	12 March 2019	<b>Hospitalised:</b>	1		
<b>Time:</b>	18	<b>Medically Treated:</b>	0		
<b>Day:</b>	Tuesday	<b>Minor Injuries:</b>	0		
<b>Street:</b>	Holts Rd	<b>Police Division:</b>	Farleigh	<b>Latitude:</b>	-21.096007
<b>Street Int:</b>	Not applicable	<b>Police Patrol Group:</b>	Mackay Country Stations	<b>Longitude:</b>	149.12808
<b>Landmark:</b>	Unknown	<b>Police District:</b>	Mackay	<b>Link:</b>	<a href="#">Google Map</a>
<b>Suburb:</b>	Richmond	<b>Police Region:</b>	Central		
<b>LGA:</b>	Mackay Regional	<b>CSB Region:</b>	Central Region		
<b>ABS SA2:</b>	Mount Pleasant - Glenella	<b>PDO District:</b>	Mackay/Whitsunday		
<b>ABS SA3:</b>	Mackay	<b>PDO Region:</b>	Central Queensland		
<b>ABS SA4:</b>	Mackay - Isaac - Whitsunday	<b>Road Section ID:</b>	Not applicable		
<b>ABS Rural/Urban:</b>	Rural	<b>Road Section:</b>	Not applicable		
<b>Authority:</b>	Locally controlled	<b>Thru Dist:</b>	Not applicable		
<b>Atmospheric:</b>	Clear	<b>Speed Limit:</b>	80 km/h		
<b>Lighting:</b>	Darkness (unlit)	<b>Crash Nature:</b>	Hit fixed obstruction or temporary object		
<b>Road Surface:</b>	Unsealed (dry)	<b>DCA Code:</b>	803 [Off Path-Curve: Off Cway Rt Bend Hit Obj]		
<b>Horizontal Alignment:</b>	Curved (view open)	<b>DCA Group:</b>	19 [Off carriageway; on curve; hit object]		
<b>Vertical Alignment:</b>	Grade	<b>Roadway Feature:</b>	No feature		
<b>Impact Location:</b>	On road-related area	<b>Traffic Control:</b>	No traffic control		

### Description:

Unit Involved: Unit 1 Nissan Navara Black, regoxxx. Driver -xxxxxxxxxxxxx. License current: xxxxxxxxxxxx Open C. Unit 2 Nissan Navara Silver, rego xxxxxxxxxxxxxxx. Driver - xxxxxxxxxxxxxxx. License current: xxxxxxxxxxxx open C. Damage: Unit 1 - Extensive damage to front and sides of the vehicle, vehicle observed on its side, collided with a power pole with fluids leaking from the front of the vehicle. Unit 2 - Scratches to the front of the vehicle, caused from unit 2 driving

through the downed power lines on the road. Injury: Unknown at this stage as Unit 1 driver was transported to Mackay Base Hospital by QAS officers. Summary: 1 vehicle traffic crash with injury on Holts Road, Richmond. The road is straight with a bend and no barriers. Unit one was a 2007 Nissan Navara black duel cab bearing QLD registrationxxx. The driver of Unit 1 was a one xxxxxxxxxAt approximately 6:45pm on Tuesday the 12th day of March 2019, Unit 1 was heading east along Holts Road and collided with a power pole on the left side of the road. The vehicle has rolled onto its side and off of the road. The power lines had disconnected from the power pole and were laying exposed on the road. Bystanders had stopped to assist the driver, removing him from the vehicle and phoning emergency services. The Unit 1 driver had provided a positive roadside breath test, being over the high range alcohol limit. The Unit 1 Driver was transported to Mackay Base Hospital for treatment. The road was closed down by police and other emergency service due to the damage to the power pole and the exposed power lines on the road. The Unit 1 driver had provided samples of blood to police for further testing. Unit 2 was involved by driving through the debris of the traffic crash, and damaged her vehicle. Unit 2 was not involved in the initial accident. Officer recommendation/ Action taken: Reporting officer has commenced proceedings against the unit 1 driver in relation to driving whilst under the influence of liquor and the matter is currently before the court. Matter finalised: Penalty 9 month license suspension and \$1,200 fine.

### Unit 1

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<b>Unit Type:</b>	Utility/panel van	<b>Registration Status:</b>	Registered	<b>Occupants:</b>	1
<b>Controlled:</b>	Yes	<b>State Registered:</b>	Queensland	<b>Casualties:</b>	1
<b>Age:</b>	22	<b>Intended Action:</b>	Go straight ahead		
<b>Gender:</b>	Male	<b>Direction:</b>	East	<b>Unit Damage:</b>	Major - towed away
<b>Licence Level:</b>	Open	<b>On Street:</b>	Holts Rd	<b>Towing:</b>	Not towing
<b>Licence State:</b>	Queensland			<b>Dangerous Goods:</b>	No

#### Contributing Circumstances:

104 [Lighting - no street lighting]  
420 [Violation - illegal Blood Alcohol Concentration (BAC)]

#### Hit animal/object/cross median:

Light/power pole

#### Casualty - Unit 1 - Occupant 1

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**Severity:** Hospitalised **Restraint:** Restrained

**Road User:** Car driver    **Helmet:** Not applicable

**Age:** 22

**Gender:** Male

## Unit 2

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<b>Unit Type:</b>	Utility/panel van	<b>Registration Status:</b>	Registered	<b>Occupants:</b>	1
<b>Controlled:</b>	Yes	<b>State Registered:</b>	Queensland	<b>Casualties:</b>	0
<b>Age:</b>	43	<b>Intended Action:</b>	Go straight ahead		
<b>Gender:</b>	Female	<b>Direction:</b>	East	<b>Unit Damage:</b>	Minor
<b>Licence Level:</b>	Open	<b>On Street:</b>	Holts Rd	<b>Towing:</b>	Not towing
<b>Licence State:</b>	Queensland			<b>Dangerous Goods:</b>	No

### Contributing Circumstances:

104 [Lighting - no street lighting]

### Hit animal/object/cross median:

Light/power pole

## **Recorded Crashes (Jan 2015 to Nov 2020)**

### **GLENDARAGH RD (for 500m to the west of Palm Ridge Rd)**

**No recorded crashes**

## Holts Road and Palm Ridge Intersection Sight Distance

### Background

At Council's Traffic Advisory Committee Meeting dated 19 June 2015, Cr Bonaventura advised of concerns raised by residents in the vicinity of the Holts Road and Palm Ridge Drive intersection, due to restricted sight distance.

### Inspection

Sight distance was measured using a laser rangefinder in accordance with Austroads Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections.

<i>Direction</i>	<i>Distance</i>
East Approach	161m
West Approach	171m

The intersection was inspected for road marking and debris consistent with frequent near miss incidents and minor crashes such as skid marks and coloured glass. No evidence was noted consistent with frequent incidents occurring at the intersection.

### Traffic Counts

Traffic Count Data (Copy Attached) was obtained for Holts Road at 180m from Palm Ridge Drive between 12 August 2010 and 30 December 2010, providing the following speed statistics:

Mean Speed	72.3 km/h
85 <sup>th</sup> Percentile Speed	83.9 km/h
95 <sup>th</sup> Percentile Speed	90.0 km/h

### Crash Data

A search of recorded crash history for the Holts Road and Palm Ridge Drive intersection for the period between 1992 and 2015 has revealed no recorded crashes (Copy Attached).

### Discussion

The 95<sup>th</sup> Percentile speed is considered the Design Speed of a road and as such the design speed used to determine required sight distance is 90.0 km/h. The East Approach is on a down grade from a crest and horizontal curve and a correction of 25m has been added to values provided in Table 3.1 and 3.2 of the Austroad standard.

- Safe Intersection Sight Distance (SISD) is the minimum distance which should be provided on the major road at any intersection. The SISD for Holts Road and Palm Ridge Drive intersection is 232m for the East Approach and 214m for the West Approach.
- Stopping Sight Distance (SSD) is the minimum sight distance that must be provided for all locations through the intersection. The SSD for Holts Road and Palm Ridge Drive intersection is 164m for the East Approach and 139m for the West Approach.
- Minimum Gap Sight Distance (MGSD) is the minimum sight distance required for a motorist entering the major road to observe approaching vehicles and enter the traffic stream within a suitable gap. The minimum acceptance gap for Holts Road

and Palm Ridge Drive intersection has been calculated using the 85<sup>th</sup> Percentile Speed of 83.9 km/h and is 116.50m for both approaches.

**Conclusion**

It is noted that SISD is not available, however due to the geometry of the approaches to the intersection it is not possible to provide SISD. The SSD is only just within requirements for the East Approach and as such this will reduce the level of comfort motorists have negotiating the intersection. The 85<sup>th</sup> Percentile Speed and associated MGSD is more than sufficient for motorists to negotiate the intersection. Overall the available sight distance for the intersection of Holts Road and Palm Ridge Drive is appropriate.

The lack of recorded crash history indicates that motorists are negotiating the intersection with an appropriate level of care and attention. This is further supported by the lack of evidence of minor unreported crashes or near miss incidents.

**Recommendation**

No further action is recommended due to the intersection sight distance meeting standards and no evidence of environmental or behavioural factors indicating a deficiency requiring engineering treatment.

Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



## Appendix B – Speed Limit Review (SLR) Results

1. SLR of the 1.7 km segment along part of Glendaragh Road and Holts Road – from 0.7 km west of Palm Ridge Drive to 1.0 km east of Palm Ridge Drive (existing 100 km/h posted speed limit)



Map Source: <https://qldglobe.information.qld.gov.au/>

2. SLR of the 4.14 km segment along part of Glendaragh Road and Holts Road – from 0.7 km west of Palm Ridge Drive to 0.25 km east of Pioneer Street (existing 100 km/h posted speed limit)



Map Source: <https://qldglobe.information.qld.gov.au/>

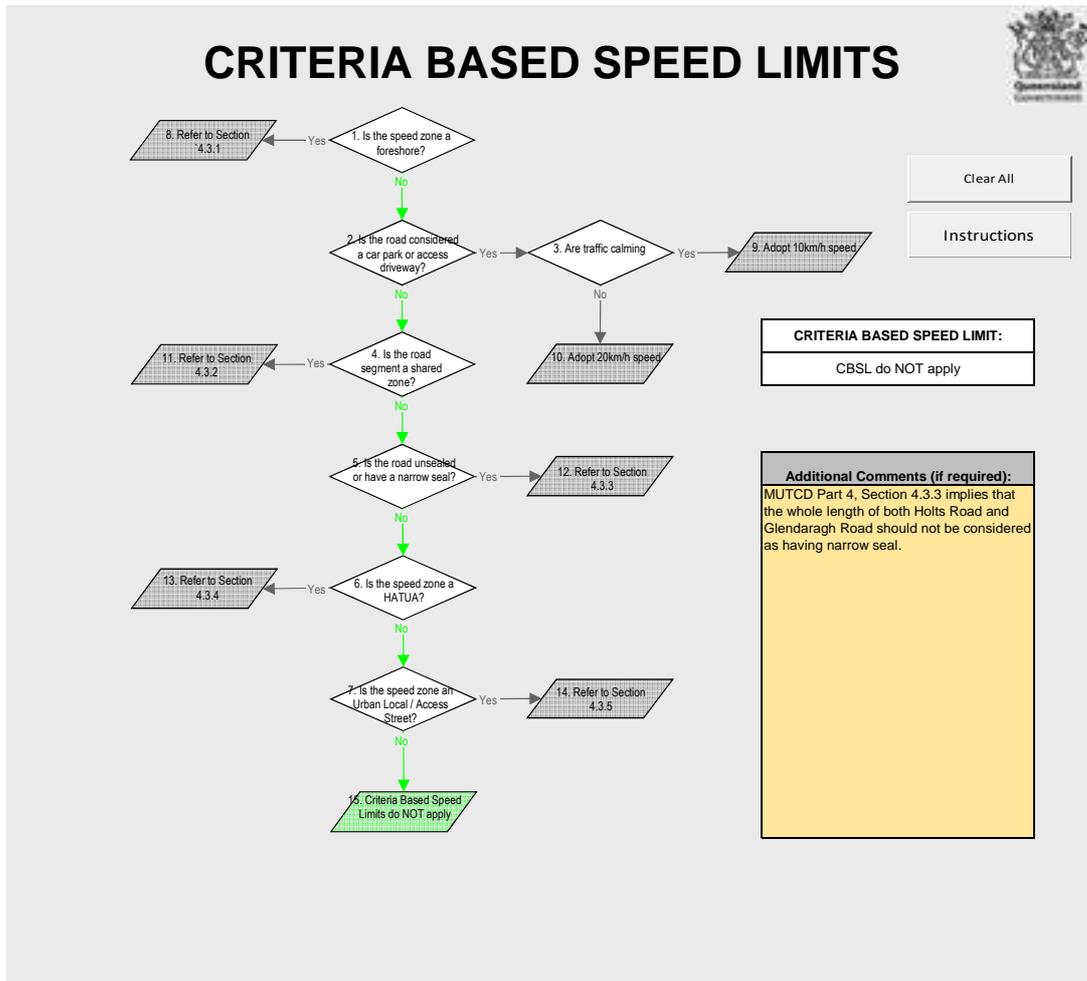
# SITE INPUTS



ROAD AUTHORITY:	Local government
ROAD SECTION ID: <small>(if applicable)</small>	
ROAD NAME:	Holts Road, Glendaragh Road
SUBURB: <small>(where multiple suburbs, separate each with a ",")</small>	Richmond, Farleigh
LOCAL GOVERNMENT: <small>(where multiple, separate each with a ",")</small>	Mackay Regional Council
TMR DISTRICT:	Mackay / Whitsunday District
DIRECTION:	Both Directions
EXISTING SPEED LIMIT: <small>(km/h)</small>	100
DAILY TRAFFIC VOLUME:	4255
SEGMENT LENGTH: <small>(km)</small>	1.7

	TDIST <small>(if applicable)</small>	LATITUDE	LONGITUDE
SEGMENT START:	0	-21.096439	149.131281
SEGMENT END:	1.7	-21.100838	149.119243

ADDITIONAL COMMENTS: <small>(if required)</small>
The extent of this Speed Limit Review is only a total of 1.7 km, from 1.0km east to 0.7 km west of Palm Ridge Road. This is 300m either side of the winding section of roadway and does not include the Holts Road / Woodward's Road intersection.



IDENTIFY ROAD CLASSIFICATION		
	Input	Class
More...	ROAD ENVIRONMENTAL CONTEXT CLASS	Rural
More...	ROAD FUNCTIONAL CLASSIFICATION	Trunk Collector

CRASH RISK RATING (CRR)				
	DCA Group	Description	Casualty Crashes	Risk Score
More...	1	INTERSECTION, FROM ADJACENT APPROACHES		0
More...	2	HEAD-ON		0
More...	3	OPPOSING VEHICLES, TURNING		0
More...	4	REAR-END		0
More...	5	LANE CHANGE		0
More...	6	PARALLEL LANES, TURNING		0
More...	7	U-TURN		0
More...	8	ENTERING ROADWAY		0
More...	9	OVERTAKING, SAME DIRECTION		0
More...	10	HIT PARKED VEHICLE		0
More...	11	HIT TRAIN		0
More...	12	PEDESTRIAN		0
More...	13	PERMANENT OBSTRUCTION ON CARRIAGEWAY		0
More...	14	HIT ANIMAL		0
More...	15	OFF CARRIAGEWAY, ON STRAIGHT		0
More...	16	OFF CARRIAGEWAY, ON STRAIGHT, HIT OBJECT		0
More...	17	OFF CARRIAGEWAY, ON STRAIGHT		0
More...	18	OFF CARRIAGEWAY, ON CURVE		0
More...	19	OFF CARRIAGEWAY, ON CURVE, HIT OBJECT	2	1.42
More...	20	OUT OF CONTROL, ON CURVE		0
More...	21	OTHER		0

# RISK ASSESSED SPEED LIMIT

INFRASTRUCTURE RISK RATING (IRR)				
	Item	Description	Input	Risk Score
More...	1	ROAD STEREOTYPE	Two lane undivided	3.7
More...	2	ALIGNMENT	Winding	3.5
More...	3A	SEALED SHOULDER WIDTH	Very narrow shoulder	1.58
More...	3B	LANE WIDTH	Wide	
	4a	ROADSIDE HAZARD RISK - LEFT SIDE	Moderate	1.43
	4b	ROADSIDE HAZARD RISK - RIGHT SIDE	Moderate	1.43
	5	LAND USE	Rural residential	1.5
	6	AT-GRADE INTERSECTION DENSITY	1 to <2 intersections/km	1.15
	7	ACCESS DENSITY	5 to <10 accesses/km	1.06
More...	8	TRAFFIC VOLUME	1000 to <6000 vpd	1.4

Clear All

Estimate Risk Assessed Speed Limit

Instructions

ROAD RISK METRIC (RRM)		
Input	Risk Levels	Risk Score
Crash Risk Rating (Step 2)	Medium	10.75664881
Infrastructure Risk Rating (Step 3)	High	1.874485893

<b>ROAD RISK METRIC:</b>	High
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RISK ASSESSED SPEED LIMIT (RASL)	
Input	Result
Road Environmental Context Class	Rural
Road Functional Classification	Trunk Collector
Road Risk Metric	High

<b>RISK ASSESSED SPEED LIMIT:</b>	80km/h
-----------------------------------	--------

ADDITIONAL COMMENTS
<p><b>Additional Comments (if required):</b></p> <p>1. 2 injury crashes (both DCA 803) recorded along the section of Holts Road in the vicinity of Larkins Road in the past 5 years.</p> <p>2. Holts Road and Glendaragh Road are both designated as Traffic Distributor roads as part of the MRC road hierarchy maps. Road functional "Trunk Collector" classification was selected for this Speed Limit Review as this fits the MUTCD Part 4 description accurately.</p> <p>3. Decreasing the Roadside Hazard Risk from Moderate to Minor reduces the RRM from High to Medium. As a result the RASL increases from 80 km/h to 100 km/h.</p>

# SPEED DATA SPEED LIMIT



SPEED DATA INPUTS		
	Item	Input
More...	MEAN SPEED (km/h)	90.3
More...	UPPER LIMIT OF 15km/h PACE SPEED	99
More...	PERCENTAGE WITHIN PACE SPEED	54.9

SPEED DATA SPEED LIMIT	
Input	Result
Speed Data Conforms with Speed Limit?	Y
Speed Limit Suggested by Speed Data	N/A
<b>SPEED DATA SPEED LIMIT:</b>	100km/h

**ADDITIONAL COMMENTS**

**Additional Comments (if required):**

UPPER LIMIT OF 15km/h PACE SPEED of 101 km/h is taken from MRC survey in Feb 2021 located along the straight section of Glendaragh Road between Holts Road and the Bruce Highway. If the range between 97-104km/h is used then SDSL = 100 km/h. Anything over 105 km/h will result in suggested SDSL = 110 km/h, which of course is not appropriate at all. It appears to make no difference to the result when the "Mean Speed" and "Percentage within Pace Speed" are radically changed to either values of 0 or 100.

The formula used to calculate the SDSL results is therefore quite 'rigid', not allowed any flexibility for judgment of any other factors in determining the SDSL. For this reason, it is my opinion that the RASL result is a much better indicator of the 'safe speed' for the section of road as it factors in a large range of inputs, not just one.



# OPTION SELECTION

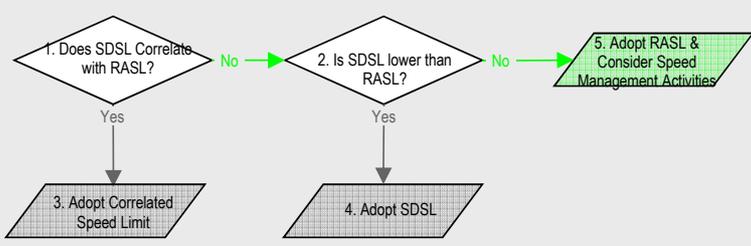
Clear All

Undertake Option Selection

Instructions

### OPTION SELECTION INPUTS

Inputs	Result
Risk Assessed Speed Limit	80km/h
Speed Data Speed Limit	100km/h



```

graph TD
    Q1{1. Does SDSL Correlate with RASL?}
    Q2{2. Is SDSL lower than RASL?}
    R1[/3. Adopt Correlated Speed Limit/]
    R2[/4. Adopt SDSL/]
    R3[/5. Adopt RASL & Consider Speed Management Activities/]

    Q1 -- Yes --> R1
    Q1 -- No --> Q2
    Q2 -- Yes --> R2
    Q2 -- No --> R3
    
```



# ENGINEER'S RECOMMENDATION

Clear AllSummarise Findings of  
SLR Technical  
AssessmentsInstructions

### SUMMARY OF TECHNICAL ASSESSMENTS

The Criteria Based Speed Limit assessment determined that no Criteria Based Speed Limits apply.

Accordingly, Risk Assessed Speed Limit and Speed Data Speed Limit assessments were undertaken.

The Risk Assessed Speed Limit assessment indicated a speed limit of 80km/h was appropriate for the speed zone.

The Speed Data Speed Limit assessment indicated a speed limit of 100km/h is appropriate for the speed zone.

As the Speed Data Speed Limit is greater than the Risk Assessed Speed Limit the results of the technical assessment indicate that the speed limit of 80km/h be adopted along the road corridor and that speed management activities along the corridor be undertaken that this speed limit is considered credible by road users.

Additionally, the Road Risk Metric for the speed zone was assessed as being High. Therefore, works should be programmed to reduce the risk along the speed zone, however, this is not part of the speed limit review process.

# ENGINEER'S RECOMMENDATION



## ENGINEER'S RECOMMENDATIONS

Name	RPEQ Number	Date

Accept Recommendations of Technical Process?	
--	--

Alternate Recommendations (if Applicable) or Other Circumstances (Section 7.2) to be Provided:

Additional Comments / Justification for Alternate Recommendations:

## RESPONSIBLE OFFICER'S ACCEPTANCE

Name	Position	Date

Do you (the Responsible Officer) Accept the Engineers Recommendations?	
--	--

Clear All

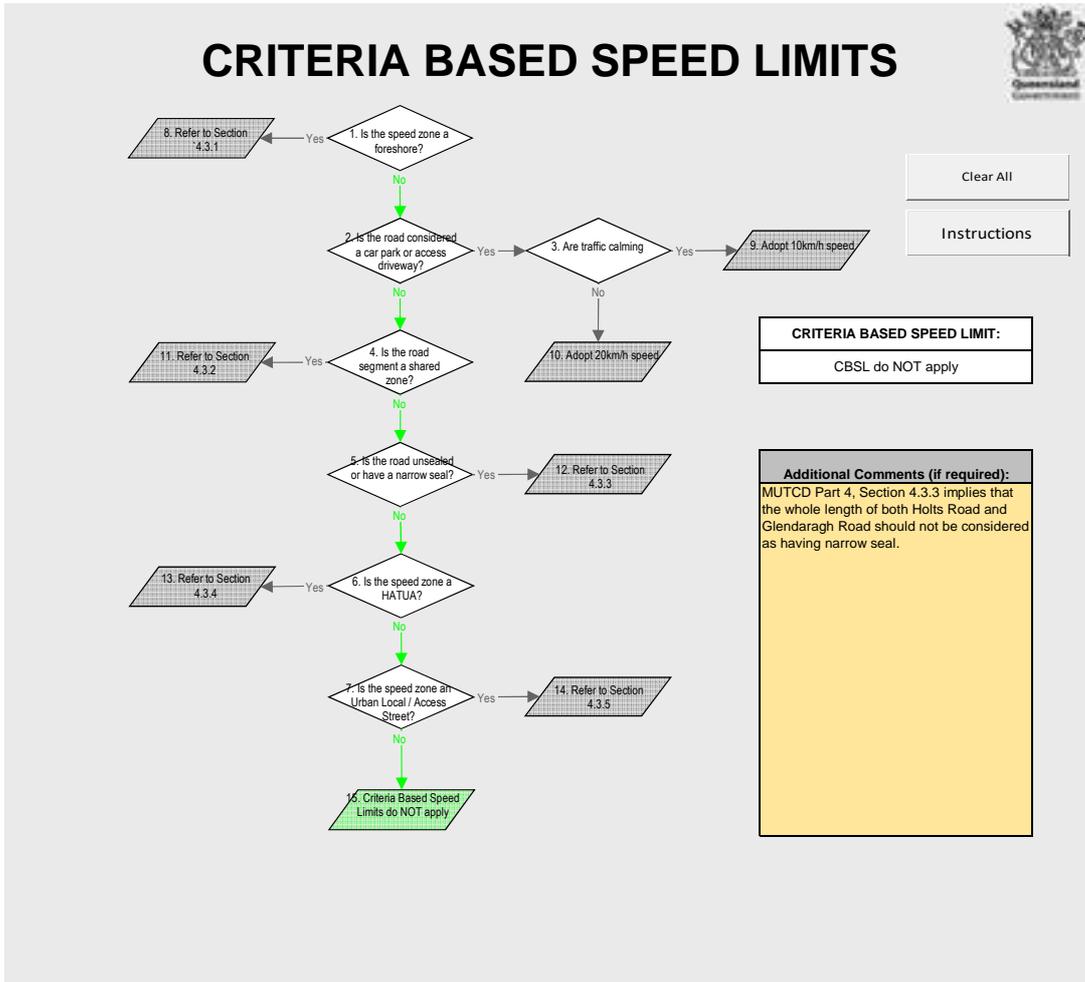
# SITE INPUTS



ROAD AUTHORITY:	Local government
ROAD SECTION ID: <small>(if applicable)</small>	
ROAD NAME:	Holts Road, Glendaragh Road
SUBURB: <small>(where multiple suburbs, separate each with a ",")</small>	Richmond, Farleigh
LOCAL GOVERNMENT: <small>(where multiple, separate each with a ",")</small>	Mackay Regional Council
TMR DISTRICT:	Mackay / Whitsunday District
DIRECTION:	Both Directions
EXISTING SPEED LIMIT: <small>(km/h)</small>	100
DAILY TRAFFIC VOLUME:	4255
SEGMENT LENGTH: <small>(km)</small>	4.14

	TDIST <small>(if applicable)</small>	LATITUDE	LONGITUDE
SEGMENT START:	0	-21.09924	149.15472
SEGMENT END:	4.14	-21.100838	149.119243

ADDITIONAL COMMENTS: <small>(if required)</small>
The extent of this Speed Limit Review is only a total of 4.14 km, from 0.25 km east of Pioneer Street to 0.7 km west of Palm Ridge Road.



IDENTIFY ROAD CLASSIFICATION		
	Input	Class
More...	ROAD ENVIRONMENTAL CONTEXT CLASS	Rural
More...	ROAD FUNCTIONAL CLASSIFICATION	Trunk Collector

CRASH RISK RATING (CRR)				
	DCA Group	Description	Casualty Crashes	Risk Score
More...	1	INTERSECTION, FROM ADJACENT APPROACHES	11	8.03
More...	2	HEAD-ON		0
More...	3	OPPOSING VEHICLES, TURNING		0
More...	4	REAR-END		0
More...	5	LANE CHANGE		0
More...	6	PARALLEL LANES, TURNING		0
More...	7	U-TURN		0
More...	8	ENTERING ROADWAY		0
More...	9	OVERTAKING, SAME DIRECTION		0
More...	10	HIT PARKED VEHICLE		0
More...	11	HIT TRAIN		0
More...	12	PEDESTRIAN		0
More...	13	PERMANENT OBSTRUCTION ON CARRIAGEWAY		0
More...	14	HIT ANIMAL		0
More...	15	OFF CARRIAGEWAY, ON STRAIGHT		0
More...	16	OFF CARRIAGEWAY, ON STRAIGHT, HIT OBJECT	3	1.98
More...	17	OFF CARRIAGEWAY, ON STRAIGHT		0
More...	18	OFF CARRIAGEWAY, ON CURVE		0
More...	19	OFF CARRIAGEWAY, ON CURVE, HIT OBJECT	2	1.42
More...	20	OUT OF CONTROL, ON CURVE		0
More...	21	OTHER		0

# RISK ASSESSED SPEED LIMIT

INFRASTRUCTURE RISK RATING (IRR)				
	Item	Description	Input	Risk Score
More...	1	ROAD STEREOTYPE	Two lane undivided	3.7
More...	2	ALIGNMENT	Curved	1.5
More...	3A	SEALED SHOULDER WIDTH	Very narrow shoulder	1.79
More...	3B	LANE WIDTH	Medium	
	4a	ROADSIDE HAZARD RISK - LEFT SIDE	Minor	0.67
	4b	ROADSIDE HAZARD RISK - RIGHT SIDE	Minor	0.67
	5	LAND USE	Rural residential	1.5
	6	AT-GRADE INTERSECTION DENSITY	1 to <2 intersections/km	1.15
	7	ACCESS DENSITY	5 to <10 accesses/km	1.06
More...	8	TRAFFIC VOLUME	1000 to <6000 vpd	1.4

Clear All

Estimate Risk Assessed Speed Limit

Instructions

**ROAD RISK METRIC (RRM)**

Input	Risk Levels	Risk Score
Crash Risk Rating (Step 2)	High	35.55358969
Infrastructure Risk Rating (Step 3)	Medium	1.231443817

<b>ROAD RISK METRIC:</b>	High
--------------------------	------

**RISK ASSESSED SPEED LIMIT (RASL)**

Input	Result
Road Environmental Context Class	Rural
Road Functional Classification	Trunk Collector
Road Risk Metric	High

<b>RISK ASSESSED SPEED LIMIT:</b>	80km/h
-----------------------------------	--------

**ADDITIONAL COMMENTS**

Additional Comments (if required):
1. 16 injury crashes (6 x DCA101, 5 x DCA104, 3 x DCA703, 2 x DCA803) recorded along the section of Holts Road in the past 5 years. 2. Holts Road and Glendaragh Road are both designated as Traffic Distributor roads as part of the MRC road hierarchy maps. Road functional "Trunk Collector" classification was selected for this Speed Limit Review as this fits the MUTCD Part 4 description accurately. 3. Changing the Alignment from 'Curved' to 'Straight or gentle' reduces the IRR from 'Medium' to 'Low Medium'. However the RASL remains at 80 km/h because the CRR is fixed on 'High'.



# SPEED DATA SPEED LIMIT

SPEED DATA INPUTS		
	Item	Input
More...	MEAN SPEED (km/h)	90.3
More...	UPPER LIMIT OF 15km/h PACE SPEED	99
More...	PERCENTAGE WITHIN PACE SPEED	54.9

SPEED DATA SPEED LIMIT	
Input	Result
Speed Data Conforms with Speed Limit?	Y
Speed Limit Suggested by Speed Data	N/A
<b>SPEED DATA SPEED LIMIT:</b>	100km/h

**ADDITIONAL COMMENTS**

**Additional Comments (if required):**

UPPER LIMIT OF 15km/h PACE SPEED of 101 km/h is taken from MRC survey in Feb 2021 located along the straight section of Glendaragh Road between Holts Road and the Bruce Highway. If the range between 97-104km/h is used then SDSL = 100 km/h. Anything over 105 km/h will result in suggested SDSL = 110 km/h, which of course is not appropriate at all. It appears to make no difference to the result when the "Mean Speed" and "Percentage within Pace Speed" are radically changed to either values of 0 or 100.

The formula used to calculate the SDSL results is therefore quite 'rigid', not allowed any flexibility for judgment of any other factors in determining the SDSL. For this reason, it is my opinion that the RASL result is a much better indicator of the 'safe speed' for the section of road as it factors in a large range of inputs, not just one.

# OPTION SELECTION



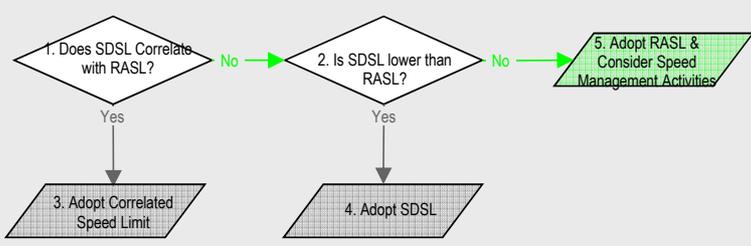
Clear All

Undertake Option Selection

Instructions

### OPTION SELECTION INPUTS

Inputs	Result
Risk Assessed Speed Limit	80km/h
Speed Data Speed Limit	100km/h



```

graph TD
    D1{1. Does SDSL Correlate with RASL?}
    D2{2. Is SDSL lower than RASL?}
    R1[/3. Adopt Correlated Speed Limit/]
    R2[/4. Adopt SDSL/]
    R3[/5. Adopt RASL & Consider Speed Management Activities/]

    D1 -- Yes --> R1
    D1 -- No --> D2
    D2 -- Yes --> R2
    D2 -- No --> R3
    
```



# ENGINEER'S RECOMMENDATION

Clear AllSummarise Findings of  
SLR Technical  
AssessmentsInstructions

### SUMMARY OF TECHNICAL ASSESSMENTS

The Criteria Based Speed Limit assessment determined that no Criteria Based Speed Limits apply.

Accordingly, Risk Assessed Speed Limit and Speed Data Speed Limit assessments were undertaken.

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Additionally, the Road Risk Metric for the speed zone was assessed as being High. Therefore, works should be programmed to reduce the risk along the speed zone, however, this is not part of the speed limit review process.

# ENGINEER'S RECOMMENDATION



## ENGINEER'S RECOMMENDATIONS

Name	RPEQ Number	Date

Accept Recommendations of Technical Process?	
--	--

Alternate Recommendations (if Applicable) or Other Circumstances (Section 7.2) to be Provided:

Additional Comments / Justification for Alternate Recommendations:

## RESPONSIBLE OFFICER'S ACCEPTANCE

Name	Position	Date

Do you (the Responsible Officer) Accept the Engineers Recommendations?	
--	--

Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



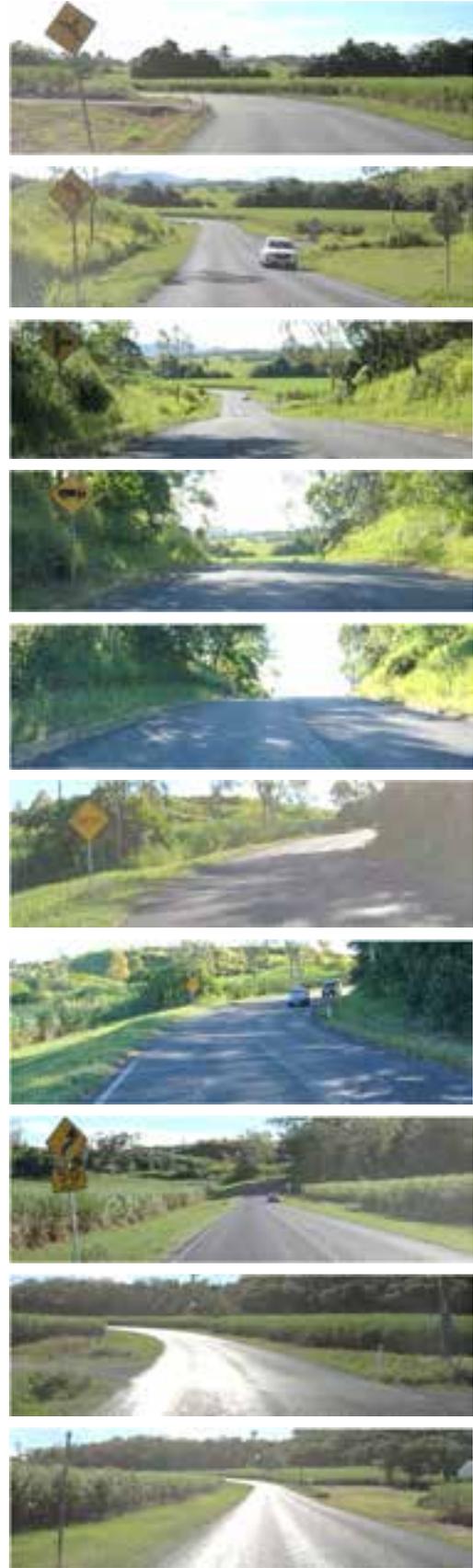
## Contents

<b>1</b>	<b>Project Introduction</b> .....	<b>3</b>
	Figure 1    Locality Plan .....	3
	Figure 2    Extents of Road Safety Audit .....	4
<b>2</b>	<b>Background Information</b> .....	<b>5</b>
2.1	Audit team .....	5
2.2	Audit process .....	5
2.3	Documentation reviewed .....	5
2.3.1	Traffic volumes .....	5
Table 1	Daily traffic volumes (both directions) – February 2021, MRC data .....	6
2.3.2	Crash data .....	6
Table 2	Summary of crash details (January 2015 to November 2020) .....	6
2.3.3	Other references .....	6
2.3.4	Previous RSA report .....	7
2.4	Extent of audit .....	7
2.5	Site inspections .....	7
2.6	Adopted clear zone .....	7
2.7	Special road users .....	9
2.8	Observations .....	10
2.9	Consultation .....	11
<b>3</b>	<b>Risk Assessment Methodology</b> .....	<b>12</b>
Table 3.1	Frequency of the safety issue leading to a crash .....	12
Table 3.2	Severity of resulting crash type .....	12
Table 3.3	Risk level .....	12
<b>4</b>	<b>Audit Findings</b> .....	<b>13</b>
Table 4.1	Relationship between priority, risk and treatment approach .....	13
Table 4.2	Audit Findings .....	13
<b>5</b>	<b>Recommendation and Statement</b> .....	<b>27</b>
5.1	Recommendations .....	27
5.2	Auditor statement .....	27
	<b>Appendix A – Supporting Information</b> .....	<b>28</b>
	<b>Appendix B – Speed Limit Review (SLR) Results</b> .....	<b>29</b>
	<b>Appendix C – Sequence of Existing Warning Signs</b> .....	<b>30</b>
	<b>Appendix D – Client Response Template</b> .....	<b>31</b>

Warning Signs – West to East (from bottom to top)



Warning Signs – East to West (from bottom to top)



Road Safety Audit (Existing Road Stage)  
Holts Road / Palm Ridge Drive intersection and surrounds



## Appendix D – Client Response Template

Refer to the Microsoft Word copy of the response template provided electronically.

The file name is:

***App D - Client Response Template - Holts-PalmRidge (Rev01).docx***

## 11.6. ORGANISATIONAL SERVICES

### **11.6.1. LEASE OF LAND - MACKAY AND DISTRICT HACK AND PONY CLUB INC.**

**Author** Acting Manager Property Services (Andrew Bobeldyk)  
**Responsible Officer** Director Organisational Services (Kylie Lamb)  
**File Reference** Current Securities Lease 161, Telegraph Street, Eton

**Attachments** 1. MADI Image - Mackay & District Hack & Pony Club  
[11.6.1.1 - 1 page]

#### **Purpose**

To approve a new Trustee lease for Mackay and District Hack and Pony Club Inc. (MDHPC), for a total area of approx. 4.834ha being part of Lot 1 on E11113, known as 2A Telegraph Street, Eton for a period of 10 years.

#### **Related Parties**

Executive Committee - Mackay and District Hack and Pony Club Inc.

#### **Corporate Plan Linkage**

Priority: Community Health & Wellbeing

*Strategy: Active and healthy community* - Promote active and healthy lifestyles by providing equitable access and encouraging sporting, recreational and outdoor activities throughout the region.

Priority: Community Pride

*Strategy: Community facilities* - Provide community facilities to improve the liveability of the region ensuring equitable focus.

#### **Background/Discussion**

MDHPC have had a long history with this site, with their current lease commencing in June 2001, the lease is due to expire on 30 June 2021.

The club utilise the area to hold pony club rally days, cross country and competition events and they also allow the Mackay Dressage Club to run their competition days at the grounds, which brings in riders from around the region to Eton and the Mackay area.

MDHPC did request additional land with a vision to increase their cross-country course and elevate it to an official ranking which would not only benefit the Club but all equestrian riders within the region and Northern Queensland.

The request was tabled at the March Land & Road Use (L&RU) Committee, with the L&RU Committee not supporting the request for additional land, for the following reasons:

1. *Sports/Recreation area to service Eton population catchment:*

*The site in question is the only sports and recreation area for local Eton township as well as the surrounding community and should not be limited to a Pony Club.*

*The area in question has been formally developed to accommodate a cricket field and/or other oval sports, and the area around the cricket pitch serves a local park function with park equipment and embellishments.*

*The proposed Pony Club activity will potentially damage this asset and its use as parkland for locals and travellers.*

*The recreational and liveability value of this precinct should be protected.*

**2. Existing Pony Club Use Area:**

*The existing 3.5 ha area is sufficient to accommodate the Pony Club activities.*

*Other Pony Clubs areas are of similar or smaller size (i.e. the Pony Club on the North bank of the Pioneer River is 3.5ha, or the Pioneer River Valley Hack & Pony Club Pony in Balnagowan at around 2.5 ha usable space)*

The club are extremely disappointed with the decision, however, would still like to renew the lease for the existing lease area.

According to Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, “a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation.” Therefore, Council is not required to tender this before leasing the property.

**Consultation and Communication**

Consultation has occurred between representatives of MDHPC, Acting Manager Property Services and Supervisor Land Operations - Property Services, Sport & Recreation Development Officer - Community Lifestyle and members of the L&RU Committee.

**Resource Implications**

All costs incurred in respect to the preparation and lodgement of the lease documentation will be borne by the Lessee.

The lease will be a standard 'Trustee' lease inclusive of rental in accordance with the Community Leasing Policy and other like conditions. According to current financial reports the MDHPC would fit under the category of (1) meaning annual rental of (\$20.00). The lease will be subject to lease review.

**Risk Management Implications**

MDHPC are a well-known and well-established sporting group in the Mackay region, should the lease not be approved, both the community and region would not be able to benefit from the opportunities that arise from such a group and facility.

**Conclusion**

That approving the new lease to the Mackay and District Hack and Pony Club who has shown a long-term commitment to the land, its infrastructure and the local community is the most advantageous outcome to Council.

The lease will be signed under delegation once finalised.

**Officer's Recommendation**

THAT Council resolves that an exemption applies under Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, “a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation.”

AND THAT Council approves a new lease for Mackay and District Hack and Pony Club Inc. for a total area of approx. 4.834ha being part of Lot 1 on E11113, 2A Telegraph Street, Eton for a period of ten (10) years commencing 1 July 2021 and be a standard 'Trustee' lease.

**Council Resolution ORD-2021-205**

**THAT Council resolves that an exemption applies under Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, “a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation.”**

**AND THAT Council approves a new lease for Mackay and District Hack and Pony Club Inc. for a total area of approx. 4.834ha being part of Lot 1 on E11113, 2A Telegraph Street, Eton for a period of ten (10) years commencing 1 July 2021 and be a standard 'Trustee' lease.**

**Moved Cr Mann**

**Seconded Cr Townsend**

**CARRIED**



**11.6.2. LEASE OF BUILDING - LAGOONS HUT - MACKAY & DISTRICT AUSTRALIAN SOUTH SEA ISLANDERS ASSOCIATION INC**

**Author** Acting Manager Property Services (Andrew Bobeldyk)  
**Responsible Officer** Director Organisational Services (Kylie Lamb)  
**File Reference** South Sea Islander Hut, 12 Ram Chandra Place, West Mackay and Botanic Gardens, 9 Lagoon Street, West Mackay

**Attachments**

1. Sketch Plan - MADASSIA [11.6.2.1 - 1 page]
2. Lagoons Hut MADI Image [11.6.2.2 - 1 page]

**Purpose**

To approve a new trustee lease over building on reserve land described as part of Lot 3 on SP143210 and reserve land described as part of Lot 2 on SP135633 for the purpose of South Sea Islander Meeting Hut and associated activities.

**Related Parties**

Mackay and District Australian South Sea Islanders Association Inc (MADASSIA)

**Corporate Plan Linkage**

Priority: Community Pride

Strategy: Community facilities - Provide community facilities to improve the liveability of the region ensuring equitable focus.

Strategy: Cultural diversity - Support cultural activities and pursuits which seek to recognise and celebrate diverse backgrounds within our community.

**Background/Discussion**

In 1990, Mackay Regional Council (MRC) invited South Sea Island organisations to put forward ideas on developing the lagoons area and the Australian South Sea Islander Meeting Hut which was built by MRC in 1993. The hut sits within the ground of the Mackay Regional Botanic Gardens (MRBG). The grounds are maintained by MRBG staff and the meeting hut is maintained by MADASSIA.

A licence deed between MRC and MADASSIA was in place between 2003 and 2013, following such time tenders were invited from Australian South Sea Islander organisations for the lease of the building and area used for an underground cooking pit. The submission made by MADASSIA was successful and a lease was entered into in 2016 with an initial one year term and 2 x two year option terms. The final term expired on 14 February 2021.

The meeting hut is used for community meetings and functions and is available for hire by the wider community.

According to Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, “a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation.” Therefore, MRC is not required to tender this before leasing the property.

**Consultations and Communication**

Consultation occurred between Mackay and District Australian South Sea Islander Association Inc., Manager Property Services, Supervisor Land Operations and Commercial Lease & Property Officer.

## Resource Implications

All costs incurred in respect to the preparation and lodgement of the lease documents are to be borne by the Lessee.

The lease will be a "Trustee" lease inclusive of rental in accordance with the Community Leasing Policy and other like conditions. According to current financial reports MADASSIA would fit under Category 1 – Tenant has limited ability to generate income (income between \$0 and \$20,000) meaning an annual rental of \$20.00.

Rental may be reviewed during the term of the lease.

## Risk Management Implications

### Conclusion

That approving the new lease to Mackay and District Australian South Sea Islander Association Inc who have shown a long term commitment to the land, its infrastructure and the local community is the most advantageous outcome to MRC.

It is to be noted that Lease A is described as Lot 1 on SP170019 on the attached sketch plan. The property description has changed to Lot 2 on SP135633 and this amendment will be updated on the new lease plan pending endorsement by Council.

The lease will be signed under delegation once finalised.

### Officer's Recommendation

THAT Council resolves that an exemption applies under Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, "a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation".

AND THAT Council approves a new lease for Mackay and District Australian South Sea Islander Association Inc. for a total area of approximately 468m<sup>2</sup> being part of Lot 3 on SP143210 and part of Lot 2 on SP135633, for a period of ten (10) years with such lease to commence from 15 February 2021 and be a "Trustee" lease.

Mayor Williamson noted that under Section 236 (1) (b) (ii) of the Local Government Regulation 2012, a local government may dispose of a valuable non-current asset other than my tender or auction if the valuable non-current assets is disposed of to a community organisation.

### Council Resolution ORD-2021-206

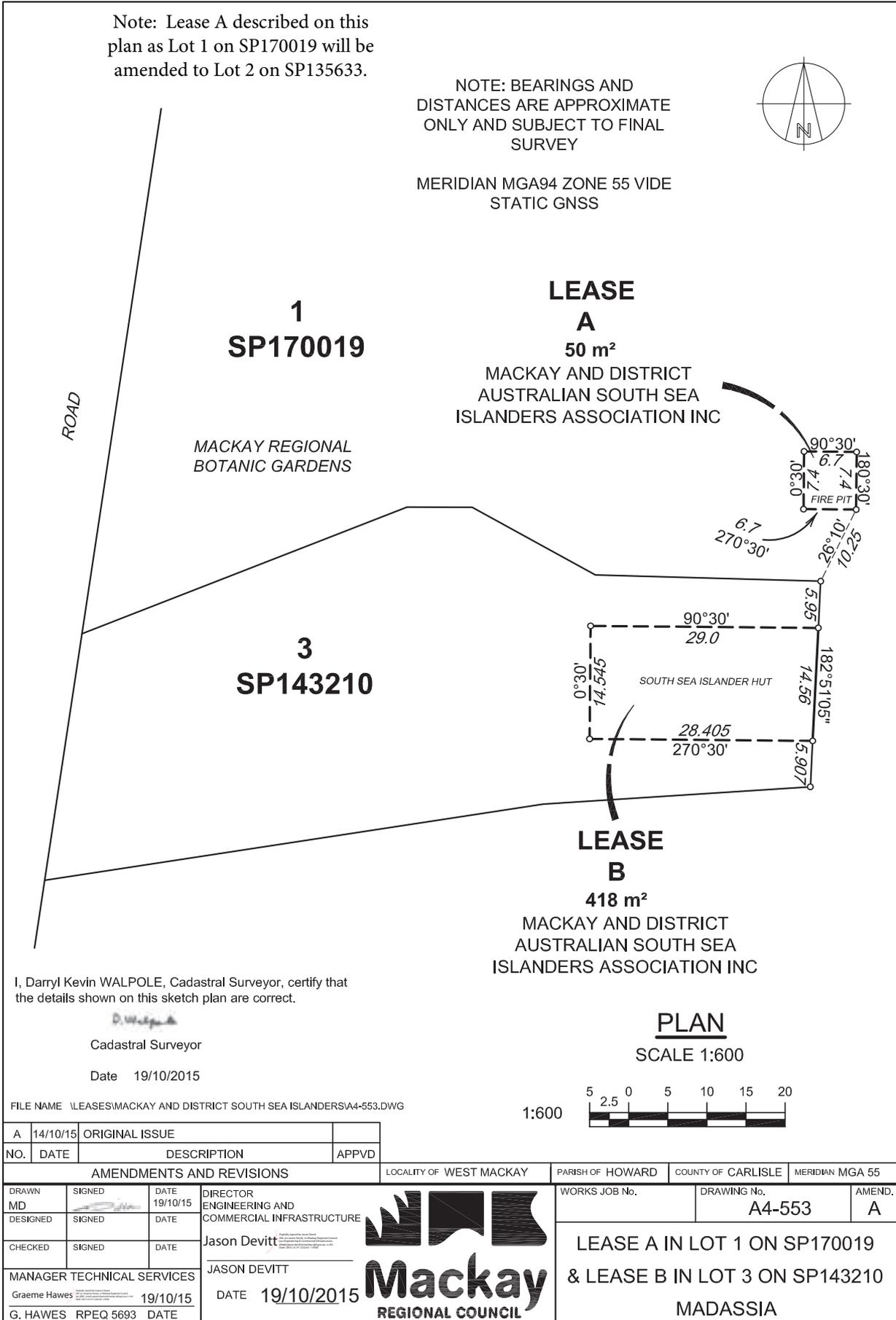
**THAT Council resolves that an exemption applies under Section 236 (1) (b) (ii) of the *Local Government Regulation 2012*, "a local government may dispose of a valuable non-current asset other than by tender or auction if – the valuable non-current is disposed of to a community organisation".**

**AND THAT Council approves a new lease for Mackay and District Australian South Sea Islander Association Inc. for a total area of approximately 468m<sup>2</sup> being part of Lot 3 on SP143210 and part of Lot 2 on SP135633, for a period of ten (10) years with such lease to commence from 15 February 2021 and be a "Trustee" lease.**

Moved Cr Jones

Seconded Cr May

**CARRIED**





### **11.6.3. PETITION RESPONSE REPORT - PROPOSED TELECOMMUNICATIONS TOWER, GILLHAMS PARK, ANDERGROVE**

<b>Author</b>	Executive Officer (David McKendry)
<b>Responsible Officer</b>	Director Corporate Services (Kylie Lamb)
<b>File Number</b>	Parks General, 5 Gemini Drive
<b>Attachments</b>	Council report receiving Petition – 9 June 2021 Petition to Mackay Regional Council – Community Consultation proposed telecommunications tower Gillhams Park Andergrove

#### **Purpose**

To present to Council a report in response to the petition as received requesting that Council gives due consideration to community consultation regarding a proposed telecommunications tower for Gillhams Park Andergrove.

#### **Related Parties**

- Stilmark Holdings Pty Ltd
- Optus Mobile Pty Limited
- Telstra Corporation Ltd
- TPG Telecom Limited (previously Vodafone Hutchison Australia Pty Limited)
- Petition signatories

#### **Corporate Plan Linkage**

Priority: Community Pride

Strategy: Community facilities - Provide community facilities to improve the liveability of the region ensuring equitable focus.

#### **Background/Discussion**

Council received a request from Stilmark Holdings Pty Ltd (Stilmark) for a lease over an approximate area of 80 square metres on part of Lot 1 on RP734177, known as 5 Gemini Drive, Andergrove, for the purpose of a telecommunications facility comprising of a 35 metre high monopole to house 4G and 5G equipment and associated cabinet.

Initially being presented to Council's Ordinary Meeting of 12 May 2021, the following resolution was passed -

***THAT the matter be laid on the table until the next Ordinary Council Meeting.***

At the subsequent Meeting of 26 May, the item was re-tabled with updated information, and noting that whilst not received prior to the agenda report being distributed, it was noted that the Petition had at that time been received by Council. The following resolution of Council was made at the meeting of 26 May 2021, noting that the decision at that time related solely to the lease, and not the actual development thereon which would require a development application. Resolution –

***THAT the Council resolves that an exemption applies under Section 236(1)(c)(vi) of the Local Government Regulation 2012, "a local government may dispose of a valuable non-current asset other than by tender or auction if – the disposal is for the purpose of a lease for a telecommunications tower."***

***AND THAT the Council approve a new lease agreement for a period of ten (10) + ten (10) + ten (10) years with for an approximate area of 80 square metres on part of Lot 1 on RP734177, 5 Gemini***

***Drive, Andergrove for the purpose of a telecommunication tower and associated equipment for the rental consideration of \$20,000 per annum net plus GST for a single carrier and \$5,000 per annum net plus GST for each additional carrier, subject to Stilmark Holdings Pty Ltd meeting the conditions of a Development Application.***

Council formally received the Petition at it's Meeting of 9 June 2021, with the subject of the Petition being –

***We the undersigned request that Council give consideration to undertaking and giving due consideration to community consultation of all residents within at least a 500 metre radius of the 4G and 5G Mobile telecommunications tower proposed to be erected in Gillhams Park Andergrove before voting on the proposal to approve the lease of land to Stilmark Pty Ltd for erection of such tower.***

As detailed earlier in this report, Council has already approved the lease, noting that such lease is only applicable subject to a development application being assessed and approved.

From a development viewpoint, such an application is considered a “code assessable” application, meaning no requirement for community or public consultation.

Council has yet to formally receive the associated application for development approval, however has had pre-lodgement discussions with the applicant.

Despite being code assessable, the applicant has offered to undertake community consultation, and has identified the marked properties(31) per the below plan and an approx. radius of 200m (cited as all immediate neighbouring dwellings, as well as the large undeveloped parcel to the west of the site). The applicant has cited this as a similar approach to consultation they undertook for a site at Eimeo.





## **Risk Management Implications**

Related to the matter of the Petition, risk is limited to community satisfaction or other with Council decisions (noting that this is not an assessment of the telecommunications tower or technologies).

## **Conclusion**

There is no legislative requirement from a Planning perspective to require community consultation for the erection of a telecommunications tower in this instance, so any consultation undertaken is outside any conditioned requirements.

Despite this, the level of community interest in this project is noted, as is the offer from the applicant to undertake consultation. Noting also that the Petition requests consultation with residents within a 500m radius, given that any consultation is above that required under legislation, direct consultation by way of advice as suggested with identified residents within 200m would appear reasonable.

Further, Council would consider all comments received during the assessment process (noting that Code assessment applications can only be assessed against the assessment benchmarks nominated in the planning scheme or other relevant statutory instrument, and applications must be approved if complying with all of the assessment benchmarks in a code, or able to be reasonably conditioned to achieve compliance with a code. Also, a person who provides comments on a code assessable application does not hold any legal rights against the ultimate decision)

## **Officer's Recommendation**

**THAT that despite such consultation not being a legislative requirement from a planning perspective, noting the community interest in this matter resulting in the Petition that Council accepts the applicants offer to undertake direct consultation advice with neighbouring residents within an approx. 200m radius of the proposed telecommunications tower being proposed for 5 Gemini Drive, Andergrove.**

**FURTHER THAT despite not being a statutory requirement, Council considers all comments received during the assessment process for the development application (noting that Code assessment applications can only be assessed against the assessment benchmarks nominated in the planning scheme or other relevant statutory instrument, and applications must be approved if complying with all of the assessment benchmarks in a code, or able to be reasonably conditioned to achieve compliance with a code. Also, a person who provides comments on a code assessable application does not hold any legal rights against the ultimate decision)**

**ALSO THAT the principal petitioner be advised of Council's determination.**

Cr Jones queried if it was possible for Councillors to be advised when the applicant commences consultation.

Mayor Williamson asked the Chief Executive Officer to ensure that this occurs.

## **Council Resolution ORD-2021-207**

**THAT that despite such consultation not being a legislative requirement from a planning perspective, noting the community interest in this matter resulting in the Petition that Council accepts the applicants offer to undertake direct consultation advice with neighbouring residents within an approx. 200m radius of the proposed telecommunications tower being proposed for 5 Gemini Drive, Andergrove.**

**FURTHER THAT despite not being a statutory requirement, Council considers all comments received during the assessment process for the development application (noting that Code assessment**

**applications can only be assessed against the assessment benchmarks nominated in the planning scheme or other relevant statutory instrument, and applications must be approved if complying with all of the assessment benchmarks in a code, or able to be reasonably conditioned to achieve compliance with a code. Also, a person who provides comments on a code assessable application does not hold any legal rights against the ultimate decision)**

**ALSO THAT the principal petitioner be advised of Council's determination.**

**Moved Cr Townsend**

**Seconded Cr May**

**CARRIED**

## **12. RECEIPT OF PETITIONS**

Nil

## **13. TENDERS**

Nil

## **14. CONSIDERATION OF NOTIFIED MOTIONS**

Nil

## **15. PUBLIC PARTICIPATION**

Catrina Corrie addressed Council in relation to the Beaconsfield Andergrove Flood Mapping and advised that the notice she had that this was being carried out was the letter she received and she had been unaware of any consultation. Ms Corrie found the visual showing flooding over the whole area very worrying and expressed concern that the literacy required to read the letter may not have been as inclusive as it could have been and did not easily show that she could access the website to view her property. Ms Corrie believed that the consultation for the flood mapping should have been better advertised.

Mayor Williamson said he would refer the matter to the Chief Executive Officer for follow-up of an explanation from the Council's perspective.

Carol Schofield addressed Council in relation to the Beaconsfield Andergrove Flood Mapping and advised that she had not received a letter and was surprised that her area had been included as she was on a rise. Ms Schofield queried why there hadn't been more consultation or a meeting called and felt Council could have done better. Ms Schofield also expressed concern about the rate rise noting that many people do not have very high incomes and her daughter who lives in Ipswich, advised that Mackay's rates are double her rates.

Margaret Airoldi addressed Council in relation to the Beaconsfield Andergrove Flood Mapping and advised that she had built on her property in 1984 and since 2007 there had been no flooding whatsoever. Mrs Airoldi printed out the map but felt it did not give a good picture and felt that the way the information was presented wasn't wise and caused alarm.

Barry Scoble addressed Council in relation to the Beaconsfield Andergrove Flood Mapping and advised that he used to live near the Gooseponds and in 2008 was flooded and lost almost everything. Mr Scoble advised that he had used Council's flood zone mapping to determine where to purchase his next property and expressed concern in relation to whether he would be able to get flood insurance or whether it would be significantly increased because the area is now called a flood zone. Mr Scoble asked if it was possible that the infrastructure built in the Beaconsfield area is changing where flood water goes and how fast it travels. Mr Scoble expressed disappointment in the lack of community consultation.

Mayor Williamson advised that the Chief Executive Officer would take all those points on board and noted that Council has an extensive community connection process but in the case of this very complex issue, this may need to be revisited.

Clinton Begg addressed Council and noted that he lives in the Beaconsfield area and didn't receive a letter. Mr Begg raised the issue of questions on notice from the gallery and advised that from observation, there was no reply at the next meeting. He stated that this meeting provided the first information in about 5 years and queried why it had taken so long to provide responses from the public gallery to be published in the meeting Minutes.

Mayor Williamson advised that questions are not answered during public participation and that these are not questions taken on notice, rather they are taken on board with staff responding to the participants. Mayor Williamson advised that what was in the Agenda today, was responses to questions from Councillors regarding agenda items taken on notice by the Directors.

## 16. LATE BUSINESS

Cr Bella spoke of the worsening situation with regards COVID-19 and the fact that it will cause long lasting effects in the community with many people maimed by the disease, which will cause a drain on the health system. Cr Bella advised that he would appreciate people getting their vaccination and advised that he had his first injection recently. Cr Bella noted that at the last Council in Community day, 2 Councillors who had been in a lockdown area did not attend the day. Cr Bella advised that he truly appreciated the actions of the 2 Councillors in not attending, even though it means a black mark on their attendance records. Cr Bella urged the community to consider vaccination and follow the health guidelines.

Cr May advised that Saturday is the Mackay Regional Council home game of the Gold Coast Suns and she will be representing the Mayor at that event. Cr May advised that she will be promoting Mackay and the Mackay Region and is looking forward to interactions with other sponsors of the Suns and will do her best to sell Mackay and what it has to offer to those people if they want to do business, have a nice place to live or have job opportunities.

## 17. CONFIDENTIAL REPORTS

The meeting did not close to the public.

### 17.1. PIONEER GOOSEPONDS LEVEE TENURE RESUMPTION REPORT - GAZETTAL APPLICATION

#### **Confidential**

*Confidential Report to be forwarded separately.*

This report is **CONFIDENTIAL** in accordance with the Section 254J (3) (e) of the *Local Government Regulation 2012* which permits the meeting to be closed to the public to discuss a matter relating to **legal advice obtained by Council or legal proceedings involving Council including for example, legal proceedings that may be taken by or against Council.**

#### **Council Resolution ORD-2021-213**

**THAT Council notes no objections were received for the proposed resumption of –**

- 1. Part of Lot 12 on RP748855 for an area of 828m<sup>2</sup> (per plan A4-00646)**
- 2. Part of Lot 14 on RP713287 for an area of 276m<sup>2</sup> (per plan A4-00648)**
- 3. Part of Lot 19 RP748850 for an area of 413m<sup>2</sup> (per plan A4-00651); and**
- 4. Part of Lot 20 on RP748849 for an area of 467m<sup>2</sup> (per plan A4-00652).**

**AND THAT a Gazettal Application be made to the Minister for Department of Resources under the Acquisition of Land Act 1967 (Qld) to take an interest in part of the land described below, being an easement for drainage purposes -**

- 1. Lot 12 on RP748855 for an area of 828m<sup>2</sup> (per plan A4-00646)**
- 2. Lot 14 on RP713287 for an area of 276m<sup>2</sup> (per plan A4-00648)**
- 3. Lot 19 RP748850 for an area of 413m<sup>2</sup> (per plan A4-00651); and**
- 4. Lot 20 on RP748849 for an area of 467m<sup>2</sup> (per plan A4-00652).**

Moved Cr Townsend

Seconded Cr Mann

**CARRIED**

**17.2. PIONEER GOOSEPONDS LEVEE TENURE RESUMPTION REPORT - NOTICE OF INTENTION TO RESUME (NIR)**

**Confidential**

*Confidential Report to be forwarded separately.*

This report is **CONFIDENTIAL** in accordance with the Section 254J (3) (e) of the *Local Government Regulation 2012* which permits the meeting to be closed to the public to discuss a matter relating to **legal advice obtained by Council or legal proceedings involving Council including for example, legal proceedings that may be taken by or against Council.**

**Council Resolution ORD-2021-214**

**THAT Council resolve to issue Notices of Intention to Resume for drainage easement purposes upon the owner of –**

**1. Lot 13 on RP713287 for an area of 211m2 (per plan SP323568)**

**AND THAT Council resolve if no objections are received within the formal timeframes for objections, a Gazettal Application be made to the Minister for Department of Resources under the Acquisition of Land Act 1967 (Qld) to take an interest in part of the land described below, being an easement for drainage purposes -**

**1. Lot 13 on RP713287 for an area of 211m2 (per plan SP323568)**

Moved Cr Townsend

Seconded Cr Hassan

**CARRIED**

**18. MEETING CLOSURE**

Meeting closed at 11:37 am.

**19. FOR INFORMATION ONLY**

Nil

Confirmed on Wednesday 28 July 2021.

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MAYOR