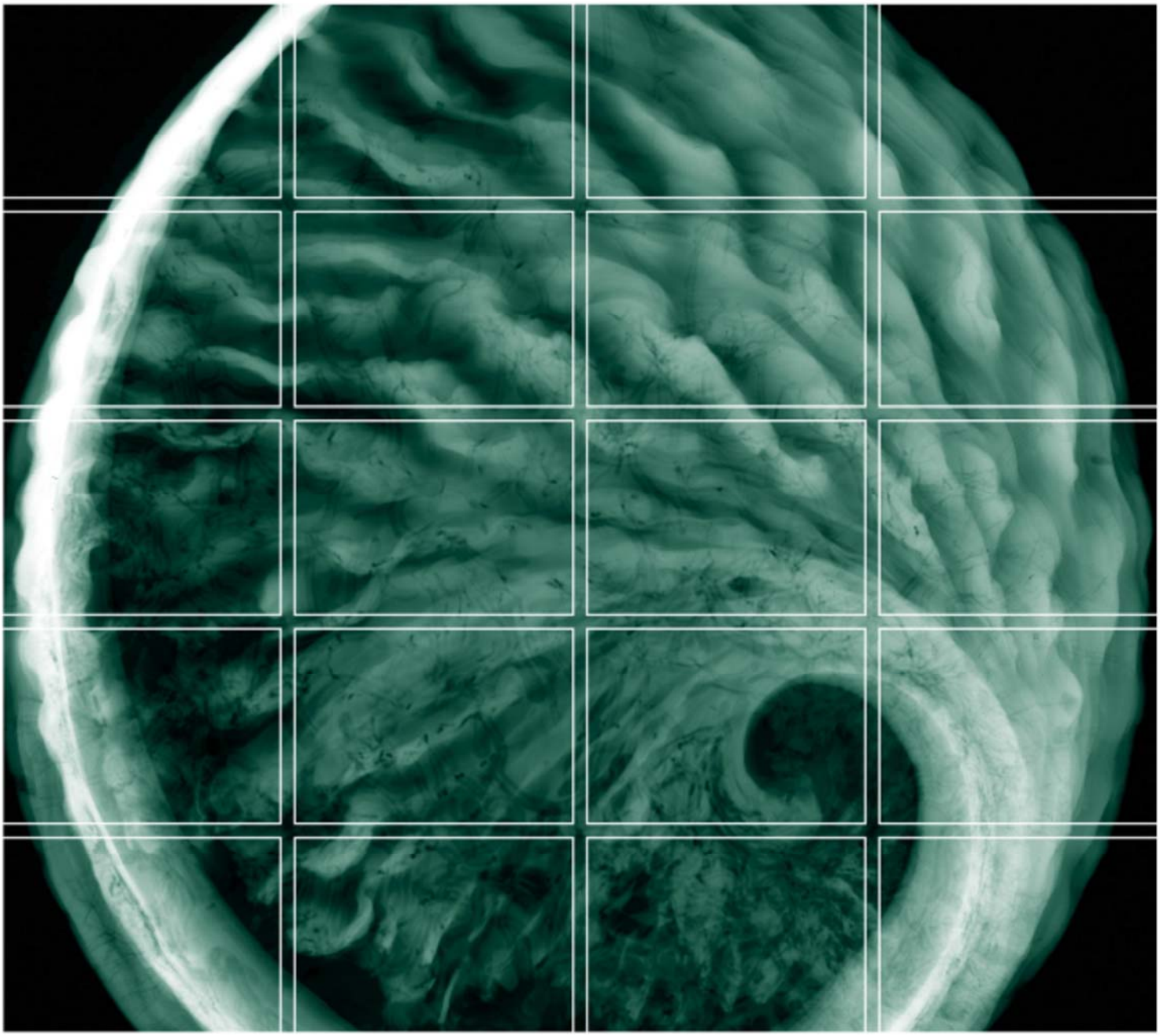
Volume 2

A7 - Social Impact Assessment

MULTICOM RESOURCES

epic ENVIRONMENTAL

Page Intentionally Left Blank



Saint Elmo Vanadium Project

Social Impact Assessment

FINAL

Multicom Resources Limited
MAY 2020

0457991_SEVP SIA

www.erm.com

The business of sustainability

ERM

Saint Elmo Vanadium Project

Social Impact Assessment

FINAL

Prepared by:	*Louis Penny*
Position	*Project Manager*
Signed:	
Date:	*28 May 2020*
Approved by:	*Alan Simonic*
Position:	Partner
Signed:	
Date:	*28 May 2020*

Multicom Resources Limited

May 2020

0457991_SEVP SIA

www.erm.com

This disclaimer, together with any limitations specified in the report, apply to use of this report. This report was prepared in accordance with the contracted scope of services for the specific purpose stated and subject to the applicable cost, time and other constraints. In preparing this report, ERM relied on: (a) client/third party information which was not verified by ERM except to the extent required by the scope of services, and ERM does not accept responsibility for omissions or inaccuracies in the client/third party information; and (b) information taken at or under the particular times and conditions specified, and ERM does not accept responsibility for any subsequent changes. This report has been prepared solely for use by, and is confidential to, the client and ERM accepts no responsibility for its use by other persons. This report is subject to copyright protection and the copyright owner reserves its rights. This report does not constitute legal advice.

CONTENTS

EXECUTIVE SUMMARY		III
1.0	INTRODUCTION	1
1.1	Background	1
1.2	Terms of Reference	1
1.3	Purpose and Objective	2
1.4	Scope of the Assessment	2
1.5	Limitations	3
1.6	Document Structure	4
2.0	PROJECT DESCRIPTION	5
2.1	Project Description	5
3.0	METHODOLOGY	9
3.1	Phase 1: Scoping	9
3.2	Phase 2: Stakeholder and Community Consultation	10
3.3	Phase 3: Baseline Analysis	11
3.4	Phase 4: Impact Assessment	12
3.5	Phase 5: Impact Mitigation and Management	15
4.0	SCOPING (STUDY AREA)	17
4.1	Study Area	17
5.0	COMMUNITY AND STAKEHOLDER MANAGEMENT	26
5.1	Stakeholder Identification	26
5.2	Consultation Tools	30
5.3	Community Consultation	32
5.4	Issues Raised	33
5.5	Ongoing Community Consultation	35
6.0	BASELINE ANALYSIS	36
6.1	Project Context	36
6.2	Population and Demographics	41
6.3	Housing and Accommodation	46
6.4	Labour Force	52
6.5	Income and Employment	65
6.6	Socio-Economic Index	66
6.7	Social Infrastructure and Services	70
6.8	Transport Infrastructure	82
6.9	Water	87
6.10	Indigenous Cultural Heritage	89
6.11	Land Tenure and Land Use	93
6.12	Economic Activities	96
6.13	Summary of Baseline IndicAtors	98
7.0	IMPACT ASSESSMENT, MITIGATION AND MANAGEMENT MEASURES	104
7.1	Workforce Management	104
7.2	Housing and Accommodation	112
7.3	Health and Community Wellbeing	117
7.4	Local Business and Industry Procurement	137
7.5	Cumulative Impacts	140

7.6	*DECOMMISSIONING IMPACTS*	*140*
7.7	*IMPACT MITIGATION AND MANAGEMENT SUMMARY*	*142*
8.0	*SOCIAL IMPACT MANAGEMENT PLAN*	*149*
8.1	*INTRODUCTION*	*149*
8.2	*PROJECT SUMMARY*	*150*
8.3	*COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN*	*154*
8.4	*WORKFORCE MANAGEMENT PLAN*	*160*
8.5	*HOUSING AND ACCOMMODATION PLAN*	*165*
8.6	*LOCAL BUSINESS AND INDUSTRY PROCUREMENT PLAN*	*169*
8.7	*HEALTH AND COMMUNITY WELLBEING PLAN*	*173*
8.8	*MONITORING AND EVALUATION*	*178*
8.9	*INTEGRATION OF THE SIMP*	*178*
9.0	*REFERENCES*	*180*
ANNEX	*A*	*188*
ANNEX	*B*	*189*
ANNEX	*C*	*190*
ANNEX	*D*	*191*
ANNEX	*E*	*192*
ANNEX	*F*	*193*
ANNEX	*G*	*194*

TABLE OF FIGURES

FIGURE 2-1	PROJECT WORKFORCE 2021-2030	7
FIGURE 2-2	LOCALITY PLAN	8
FIGURE 3-1	IAP2 SPECTRUM	10
FIGURE 3-2	SOCIAL IMPACT ASSESSMENT EVALUATION AND PREDICTION PROCESS	13
FIGURE 3-3	ASSESSING LEVEL OF MAGNITUDE	13
FIGURE 3-4	MITIGATION AND CONTROL HIERARCHY	15
FIGURE 4-1	PRIMARY STUDY AREA INCLUDING DIRECTLY-AFFECTED AND ADJOINING LANDOWNERS	22
FIGURE 4-2	STUDY AREA CONTEXT PLAN	23
FIGURE 4-3	ECONOMIC CATCHMENT PLAN	24
FIGURE 4-4	2016 ABS BOUNDARY PLAN	25
FIGURE 6-1	2011 POPULATION AGE DISTRIBUTION	43
FIGURE 6-2	2016 POPULATION AGE DISTRIBUTION	43
FIGURE 6-3	ACCOMMODATION CAMP	48
FIGURE 6-4	ACCOMMODATION CAMP EXTENT	49
FIGURE 6-5	JULIA CREEK MORTGAGE AND RENTAL COSTS, 2011	50
FIGURE 6-6	JULIA CREEK MORTGAGE AND RENTAL COSTS, 2016	50
FIGURE 6-7	NORTH WEST HOSPITAL HEALTH SERVICE (STATE)	70
FIGURE 6-8	TOWNSVILLE HOSPITAL AND HEALTH SERVICE (STATE)	70
FIGURE 6-9	SERVICE CONTACTS, MOUNT ISA	75
FIGURE 6-10	SERVICE CONTACTS, MOUNT ISA REGION	75
FIGURE 6-11	SERVICE CONTACTS, NORTHERN HIGHLANDS	76
FIGURE 6-12	QUEENSLAND POLICE BOUNDARIES	80
FIGURE 6-13	CRIME IN JULIA CREEK DIVISION, 2011-2017	81
FIGURE 6-14	TOTAL CRIME IN MOUNT ISA DIVISION, 2011-2017	81
FIGURE 6-15	KEY ROADS	83
FIGURE 6-16	REX NETWORK MAP	85
FIGURE 6-17	THE ISLANDER RAIL SERVICE	86
FIGURE 6-18	NUMBER OF ROAD CRASHES 2011-2017	86
FIGURE 6-19	REGISTERED CULTURAL HERITAGE BODIES QLD, 2016	91
FIGURE 6-20	NATIVE TITLE APPLICATIONS AND DETERMINATION AREAS	92
FIGURE 6-21	NATIVE TITLE CLAIM QC2015/009	92
FIGURE 6-22	NATIVE TITLE CLAIM QC2015/007	93
FIGURE 6-23	LAND USES, JULIA CREEK	94
FIGURE 6-24	LAND USES, RICHMOND	94
FIGURE 6-25	LAND USES, CLONCURRY	95
FIGURE 6-26	LAND USES, MOUNT ISA	95
FIGURE 7-1	PROJECT WORKFORCE 2021-2030	105
FIGURE 7-2	WORKFORCE BY HOME LOCATION	108
FIGURE 7-3	CUMULATIVE HOUSING DEMAND 2022-2031	113
FIGURE 7-3	CUMULATIVE POPULATION IMPACT 2022-2031	119
FIGURE 8-1	PROJECT WORKFORCE 2021-2030	152

LIST OF TABLES

Table 1-1	TOR Requirements	1
Table 2-1	Estimated Employment	7
Table 3-1	Designation of Magnitude	14
Table 3-2	Levels of Vulnerability	14
Table 3-3	Impact Significance	15
Table 4-1	Sensitive Receptors in the Immediate Vicinity of the Project Site	18
Table 5-1	Stakeholder Description and Identification	27
Table 5-2	Consultation Technique Summary	30
Table 5-3	Stakeholder Issues and Concerns Summary	34
Table 6-1	Population Size	41
Table 6-2	Indigenous Population Size	42
Table 6-3	Median Age	42
Table 6-4	Number of Family Types, 2011	44
Table 6-5	Number of Family Types, 2016	44
Table 6-6	Country of Birth, 2011	45
Table 6-7	Country of Birth, 2016	45
Table 6-8	Private Dwelling Numbers, 2011	46
Table 6-9	Private Dwelling Numbers, 2016	46
Table 6-10	Housing Tenure, 2011	51
Table 6-11	Housing Tenure, 2016	51
Table 6-12	Highest Level of Educational Attainment, 2011	52
Table 6-13	Highest Level of Educational Attainment, 2016	53
Table 6-14	Number Attending Educational Institution	53
Table 6-15	Industry of Employment, 2011	54
Table 6-16	Industry of Employment, 2016	55
Table 6-17	Occupation, 2011	57
Table 6-18	Occupation, 2016	57
Table 6-19	Indigenous Population, 2011	58
Table 6-20	Indigenous Population, 2016	58
Table 6-21	Median Age of Indigenous Population, 2011 and 2016	58
Table 6-22	Indigenous Highest Level of Educational Attainment, 2016	59
Table 6-23	Indigenous Employment Status, 2016	59
Table 6-24	Top Occupations of Indigenous People, 2016	60
Table 6-25	Top Responses, Industry of Employment, 2016	60
Table 6-26	Indigenous Businesses in the Study Area	61
Table 6-27	Employment Status, 2011	65
Table 6-28	Employment Status, 2016	66
Table 6-29	Median Income, 2011	66
Table 6-30	Median Income, 2016	66
Table 6-31	SEIFA, 2011	68
Table 6-32	SEIFA, 2016	69
Table 6-32	Regional Hospital and Health services	71
Table 6-33	Number of Admissions Per Hospital	72
Table 6-34	Emergency Care Hospital Data, February 2019	73
Table 6-35	Quarterly Hospital Activity Information for October, November and December 2018	73
Table 6-36	AEDC Domains	78
Table 6-37	NAPLAN Enrolments	79

TABLE 6-38 SUMMARY OF KEY BASELINE INDICTORS 98
TABLE 7-1 ESTIMATED EMPLOYMENT 105
TABLE 7-2 OPERATIONAL WORKFORCE SOURCING ESTIMATES 107
TABLE 7-1 IMPACT MITIGATION AND MANAGEMENT MEASURES 142
TABLE 8-1 PROJECT STAKEHOLDERS 154

LIST OF ABBREVIATIONS

ACH	Aboriginal Cultural Heritage
ALARP	As low as reasonably practicable
ABS	Australian Bureau of Statistics
BIBO	Bus-In Bus-Out
CEMP	Construction and Environmental Management Plan
CHMP	Cultural Heritage Management Plan
CIR	Code Industry Report
DES	Department of Environment and Science (Queensland Government)
DATSIP	Department of Aboriginal and Torres Straight Island Partnerships
DIDO	Drive-In Drive-Out
DSDMIP	Department of State Development, Manufacturing, Infrastructure and Planning (Queensland Government)
DTMR	Department of Transport and Main Roads (Queensland Government)
EA	Environmental Authority
EAP	Employee Assistance Program
EIS	Environmental Impact Statement
ELC	Early Learning Centre
ERM	Environmental Resources Management Australia Pty Ltd
ESA	Equivalent Standard Axles
FIFO	Fly-In Fly-Out
FSE	Full-time Service Equivalents
FTEs	Full Time Equivalents
GAB	Great Artesian Basin
GP	General Practitioner
GRP	Gross Regional Product
IARE	Indigenous Areas
ILUA	Indigenous Land Use Agreements
JCWC	Julia Creek Work Camp
Km	Kilometre
LGA	Local Government Area
MISOTA	Mount Isa School of the Air
MRV	Medium Rigid Vehicle
mtpa	Metric Tonnes per Annum
Multicom	Multicom Resources Limited

NMS	National Minimum Standard
NAPLAN	National Assessment Program – Literacy and Numeracy
QCS	Queensland Corrective Services
QRC	Queensland Resources Council
QSNTS	Queensland South Native Title Services
RATSIB	Representative Aboriginal and Torres Strait Islander Body
ROM	Run of Mine
SA1	Statistical Area 1
SEVP	Saint Elmo Vanadium Project
SIMP	Social Impact Management Plan
SIA	Social Impact Assessment
SIMF	Social Impact Management Framework
SIMP	Social Impact Management Plan
SSRC Act	Strong and Sustainable Resource Communities Act 2017
TOR	Terms of Reference
TAFE	Technical and Further Education
tpa	Tonnes per annum
UCL	Urban Centre/Locality
VRFB	Vanadium Redox Flow Battery
WPE	Wall Planning and Environmental Consulting

EXECUTIVE SUMMARY

PROJECT OVERVIEW

Multicom Resources Limited (**Multicom**) is a Queensland based company that has operated in the North-Queensland region since 2014. Multicom is planning to develop the Saint Elmo Vanadium Project (**SEVP**) ('**the Project**'). The Project, which is located approximately 25 km east of the Julia Creek township, will involve the development of an open cut mine to obtain Vanadium Pentoxide (**$V_2 0_5$**) product. Multicom is seeking to fill a supply gap in the market in the production of vanadium redox flow batteries to serve the domestic and international markets.

It is anticipated that the Project will have a mine life of at least 30 years. The Project will create over 200 jobs during construction, 250 jobs at peak operations, and over 75 jobs during decommissioning. The workforce is expected to consist of predominantly local and regional contractors, labourers and suppliers from within the Economic Catchment, which includes communities from Townsville to Mount Isa. Where required, the construction workforce will be supplemented with a fly-in-fly-out (**FIFO**) contingent from regional Queensland centres (Wave International 2018). Buses will be utilised to transport people to and from the Project site (Wave International 2018), and to and from regional centres at the end of each rostered period. While these workers from regional areas may travel by bus-in-bus-out (**BIBO**) to mitigate safety and traffic concerns, for the sake of simplicity they will be referred to as drive-in-drive-out (**DIDO**) in this report.

Wall Planning and Environmental Consulting (**WPE**) and Environmental Resources Management Australia Pty Ltd (**ERM**) have jointly been engaged by Epic Environmental Pty Ltd (**Epic Environmental**) to undertake a Social Impact Assessment (**SIA**) for the Project as part of the Environmental Impact Statement (**EIS**).

As part of the EIS, the Department of Environment and Science (**DES**) has identified within the Final Terms of Reference (**TOR**) (June 2018) that a SIA is to be carried out to ensure that:

- Adverse social impacts arising from the Project are avoided or mitigated; and
- Benefits for local and regional communities are enhanced.

To this end, the SIA has been prepared in order to document the social impacts of the Project, whilst satisfying the requirements of the TOR issued for the Project. Specifically, the SIA is required to meet the requirements of the Strong and *Sustainable Resource Communities Act 2017* (**SSRC Act**) and the provisions of the Coordinator-General's SIA Guideline (**SIA Guideline**), dated March 2018.

The SIA will also have the added benefit of assisting Multicom in obtaining its 'Social Licence to Operate', which is important to the success of any resource-related project.

KEY SOCIAL IMPACTS

The SIA assessed the potential impacts that may be experienced by direct and adjoining landowners to the Project site, Julia Creek township residents, visitors and businesses. This area is defined as the primary Study Area for the SIA. The Study Area includes five sensitive receptors (dwellings) in proximity to the Project site. Additionally, Cloncurry, Richmond and Mount Isa townships are considered to be located within a secondary Study Area for the Project, as they may experience indirect impacts from the Project, particularly as key potential sources of employees and suppliers. The SIA also considers the economic impact across the corridor between Mount Isa and Townsville, referred to as the Economic Catchment.

The key positive and negative social impacts identified in this SIA are summarised below, and discussed in further detail in **Chapter 7.0**:

- **Employment:** The Project will create employment opportunities, with over 200 jobs during peak construction, up to 250 jobs during peak operation, and approximately 75 jobs during decommissioning;
- **Revenue:** Revenue will be generated by the Project in various forms, including the purchase of goods and services, the workforce living in/around Julia Creek, and royalties and taxes;
- **Workforce Integration:** It is anticipated that 75 percent of the workforce will be sourced from within the Economic Catchment, including on a DIDO basis, it is anticipated that up to 25 percent of whom will reside in Julia Creek. This 25 percent will include both existing residents and new residents relocating to the community for employment. The remainder of the workforce will be sourced from other regional Queensland centres. Given the introduction of new people to the area, there is the potential for the local community to feel a sense of disruption to community cohesion, sense of place, and cultural identity;
- **Local Property Values:** Due to the limited number of properties for sale within the Study Area and Julia Creek, and the expectation that new residents will relocate to Julia Creek ("new locals"), it is anticipated that the Project will contribute to an increase in property values, and landowners may benefit from the sale or rent of their properties;
- **Housing Affordability:** The Project has the potential to increase property sale and rental prices which could impact on the ability of existing and prospective tenants to afford housing;
- **Accommodation Availability:** Due to the anticipated relocation of some Project related personnel to Julia Creek ("new locals"), the availability of accommodation for non-Project visitors may be reduced;
- **Increased Pressure on Health and Emergency Services:** The increased population expected in Julia Creek, particularly during the *operations phase*, has the potential to intensify demand for health and emergency services;
- **Increased Demand on Educational Services:** Should workers decide to relocate to Julia Creek with their families during the *operations phase*, there is the potential for an increase in demand for schools, child care centres and other educational facilities in Julia Creek;

- **Increased Rate of Traffic-related Accidents:** While the volume of traffic generated by the Project has been reduced on the road network, due to the use of rail, there is still the potential for increased accidents to occur as a result of the Project;
- **Dust:** Dust generated by the Project, predominantly during periods of clearing/earthworks, has the potential to impact the health and amenity of persons in the surrounding area, particularly direct and adjoining landowners;
- **Noise and Vibration:** There is the potential for noise emissions from the Project related to the operation of on-site vehicles and the mining activities, to negatively impact direct and adjoining landowners;
- **Indirect Economic Benefits:** Existing accommodation providers in Julia Creek and surrounding areas may experience an increase in patronage associated with the Project through use by contractors and other suppliers, particularly while the Workforce Accommodation Village is being developed. An increase in population through the attraction of a "new local" workforce will also lead to an increase in the purchase of goods and services locally;
- **Mining Industry:** The mining industry will be the greatest beneficiary of the Project, with moderate beneficiaries including electricity and water, trade and business services, and business activity for the Port of Townsville;
- **Non-Mining Industries:** The manufacturing industry is likely to experience less growth than would otherwise be the case as a result of reduced industry output. Additionally, the grazing industry will be impacted through the removal of grazing land.

The impacts identified are based on an understanding of the Project and baseline conditions at the time of drafting the SIA. As the Project is still in the planning stages, changes may occur; if changes are made, it is recommended any significant modifications to impacts should be reviewed considering these changes. Prior to construction, the management measures will need to be confirmed, and the Social Impact Management Plan (**SIMP**), provided in **Chapter 8.0**, reviewed.

1.0 INTRODUCTION

1.1 BACKGROUND

Wall Planning and Environmental Consulting (**WPE**) and Environmental Resources Management Australia Pty Ltd (**ERM**) have jointly been engaged by Epic Environmental Pty Ltd (**Epic Environmental**) to undertake a Social Impact Assessment (**SIA**) for the Saint Elmo Vanadium Project (**SEVP**) (**'the Project'**) as part of the Environmental Impact Statement (**EIS**).

Epic Environmental is the EIS consortia for Multicom Resources Limited (**Multicom**). Generally site-specific Environmental Authority (**EA**) applications for new large-scale resource activities ("greenfield" sites) with removal of 2 mtpa run of mine ore, trigger an EIS. Sections 69 to 72 of the *Environment Protection Act 1994* (**EP Act**) allow a proponent to apply for approval to voluntarily prepare an EIS. As the Project Run of Mine (**ROM**) volume exceeds this trigger, Multicom commenced the voluntary process to ensure all environmental risks were adequately assessed in a programmed manner, providing certainty of timeframes and levels of assessment. In preparing this EIS, and associated SIA, Multicom and Epic Environmental have engaged with the Department of Environment and Science (**DES**) on a regular basis, as the lead Government agency for this process.

1.2 TERMS OF REFERENCE

As part of the EIS, DES has identified within the Final Terms of Reference (TOR) that a SIA is to be carried out to ensure that:

- Adverse social impacts arising from the Project are avoided or mitigated; and
- Benefits for local and regional communities are enhanced.

The SIA will also have the added benefit of assisting Multicom in obtaining a 'Social Licence to Operate', which is important to the success of any resource-related project. Requirements from the TOR are outlined in ***Table 1-1***.

Table 1-1 TOR Requirements

Requirements from the TOR	Addressed in this Report
Prepare a social impact assessment (SIA) for the project that is consistent with the requirements of the Strong and Sustainable Resource Communities Act 2017 (SSRC Act) and the Coordinator-General's SIA guideline (March 2018).	This report has been prepared in accordance with the SSRC Act and Coordinator-General's SIA Guideline. See breakdown below.
The SIA is to be developed in consultation with the Coordinated Project Delivery Division in the Office of the Coordinator-General, Department of State Development, Manufacturing Infrastructure and Planning. The SIA is to describe the potential social impacts (both positive and negative) of the proposed project, and must identify relevant and effective impact mitigation and benefit enhancement measures.	**Chapter 7.0 –** Impact Assessment, Mitigation and Management Measures **Chapter 8.0** – Social Impact Management Plan
In accordance with Part 12 of the SSRC Act, the information provided in the EIS (including the SIA) will assist the Coordinator-General in deciding whether	This report has been prepared in accordance with the SSRC Act and

Requirements from the TOR	Addressed in this Report
personnel employed during the construction phase of the project will be workers for the purposes of the SSRC Act.	Coordinator-General's SIA Guideline. See breakdown below.
Social Impact Assessment Guideline	
Scoping	**Chapter 4.0** – Scoping (Study Area)
Baseline analysis	**Chapter 6.0** – Baseline Analysis
Community and stakeholder engagement	**Chapter 5.0** – Community and Stakeholder Management
Impact assessment	**Chapter 7.0** – Impact Assessment, Mitigation and Management Measures
Impact mitigation and benefit enhancement	**Chapter 7.0** – Impact Assessment, Mitigation and Management Measures
Social impact management plan	**Chapter 8.0** – Social Impact Management Plan
Monitoring, review and update	**Section 8.8** – Monitoring and Evaluation

1.3 PURPOSE AND OBJECTIVE

The SIA has been prepared in order to document the social impacts of the Project, whilst satisfying the requirements of the TOR issued for the Project, outlined above.

The objectives of the SIA are:

- To establish a baseline of the key aspects necessary to assess the impacts of the Project;
- To assess the known and potential impacts (positive and negative) of the Project on the communities located within the identified Project Study Area; and
- To identify relevant and effective impact avoidance, mitigation and management options, and explore benefit enhancement measures.

Furthermore, in accordance with Part 12 of the SSRC Act, the information provided in the SIA (and the wider EIS) will assist the Coordinator-General in deciding whether personnel employed during the construction phase of the Project will be workers for the purposes of the SSRC Act.

1.4 SCOPE OF THE ASSESSMENT

In order to best understand the potential impacts associated with Project, the SIA focuses on the key matters identified within the SIA Guideline:

- Community and stakeholder engagement;
- Workforce management;
- Housing and accommodation;

- Local business and industry procurement; and
- Health and community wellbeing.

As required by the SIA Guideline, the following SIA Principles have been incorporated into the assessment:

- **Lifecycle-focused:** The full Project lifecycle is to be considered;
- **Reasonable:** The nature and scale of the Project are to be considered, along with the sensitivities of the local environment, and the scope and significance of social impacts;
- **Participatory:** The assessment is to be inclusive, respectful and meaningful to impacted individuals and groups, with mitigation and management outcomes appropriately tailored to the needs of stakeholders;
- **Rigorous:** The assessment is to be objective and comprehensive, utilising the most appropriate, up-to-date datasets;
- **Effective Management:** The mitigation and management measures are to be effective; and
- **Adaptive:** The mitigation and management measures identified are to be monitored, reviewed, and adjusted to ensure ongoing effectiveness.

The cumulative social impacts and implications (positive and negative) on the community as a result of the Project are also considered in this SIA, considering surrounding resource industry developments and associated infrastructure works.

1.5 LIMITATIONS

As the SIA has been undertaken early in the development of the Project a number of key Project decisions are still in the detailed design phase, which limits the quantum of data available to assess some of the potential impacts. The SIA is based on the Project description provided in **Chapter 2.0**.

Where aspects of the Project are still being developed, future actions may be used to describe how these aspects will be progressed beyond the terms of the SIA. These actions will be addressed in ongoing, planned reviews of the SIMP (refer to **Chapter 8.0**), which will be a "living document".

1.6 DOCUMENT STRUCTURE

The subsequent sections of the SIA are as follows:

Chapter	Description
Chapter 2.0: Project Description	Provides an understanding of the Project and provides the development context for the SIA.
Chapter 3.0: Methodology	Details the SIA approach undertaken to establish the baseline and evaluate the potential social impacts of the Project.
Chapter 4.0: Scoping (Study Area)	Identifies the SIA Study Area and provides a detailed explanation as to the selection of the datasets relevant to this area.
Chapter 5.0: Community and Stakeholder Engagement	Provides detail as to the community and stakeholder engagement carried out as part of the SIA.
Chapter 6.0: Baseline Analysis	Provides a snapshot of the directly impacted communities, existing and proposed surrounding land uses.
Chapter 7.0: Impact Assessment, Mitigation and Management Measures	Describes the potential social impacts and their significance with respect to the key matters identified in the SIA Guideline, and details strategies to avoid, mitigate, or manage impacts associated with the Project, as well as strategies to enhance Project benefits.
Chapter 8.0: Social Impact Management Plan	Provides the Social Impact Management Framework to outline the requirements of a specific Social Impact Management Plan for the Project.
Chapter 9.0: References	

2.0 PROJECT DESCRIPTION

Multicom is a Queensland based company that has operated in the North-Queensland region since 2014. Project studies conducted during 2015-16 confirmed the feasibility of the Saint Elmo Vanadium Project. Multicom is now working with strategic partners, including Epic Environmental, to develop the Project.

The Project proposes to take advantage of the increasing supply gap associated with high-strength steel production, the growth market of vanadium batteries and the emergence of vanadium based compounds as a revolutionary metal in new technologies. There is an increasing global demand for lighter weight and higher strength steels as well as an increasing global demand for renewable and reliable energy, making vanadium pentoxide a valuable resource. Ultimately, it is envisaged that Vanadium Redox Flow Batteries (**VRFBs**) will be manufactured in Queensland to serve the domestic and international market, however this is beyond the scope of the current Project.

2.1 PROJECT DESCRIPTION

The Saint Elmo Vanadium Project is located on Mining Lease Application (MLA) 100162 and is a greenfield site located approximately 25 kilometres (km) east of Julia Creek in the priority North West Minerals Province of north western Queensland, within the McKinlay Local Government Area (LGA).

The Project will consist of a shallow open cut mine, ranging in depth from 20 to 40 m (depending on depth of overburden), with associated dump and haul operations in order to obtain access to larger known deposits of vanadium bearing sedimentary material. Strip mining is proposed to be carried out sequentially from mining panels along the north-south axis of MLA100162. Once the material is removed, the panel will be back filled with beneficiated gangue and overburden material, then contoured and sheeted with topsoil. Subsequently, revegetation with native species or as otherwise agreed with relevant stakeholders will take place.

Operational production is scalable and based on market demand, with an initial target of 5,000-10,000 tonnes per annum (**tpa**) and a maximum tonnage of 20,000 tpa vanadium pentoxide (V_2O_5) product over at least a 30 year mine life. Run of Mine (**ROM**) operations to produce the maximum 20,000 tpa will be up to 15 million tpa. Mine processing will occur on-site, with overburden and process tailings that are unsuitable to go directly into the mined pit, managed in a Tailings Storage Facility (**TSF**). A Progressive Rehabilitation and Closure Plan (**PRCP**) has been included as part of the EIS to ensure rehabilitation requirements are appropriately addressed, the assessment of impacts within this Social Impact Assessment is based on the conservative maximum tonnage of 20,000 tpa. A Locality Plan is provided in ***Figure 2-2***.

The Project will consist of:

- Shallow (on average 20 m, however in some areas may reach depths of up to 40 m depending on the depth of overburden) open cut pits, with north-south aligned strip mining panels to be sequentially mined, backfilled and rehabilitated;
- A ROM stockpile area, with adequate storage capacity to stockpile at least three days mine production;
- Overburden and topsoil storage and management areas;

- A processing plant, to extract V_20_5;
- Access for semi or B-double trucks to deliver reagents to the processing plant and pick up product for transport off-site;
- A rail spur line into the site, connected to the pre-existing Northern Rail Line;
- An infrastructure area, including security and administrative offices, laboratories, workshops and stores;
- A sewerage treatment plant and effluent disposal area;
- A water management network including a potable water treatment plant, potable water storage and a reverse osmosis plant as required;
- An water supply for operations stored in an Offsite Water Storage Facility (OWSF). The OWSF and associated infrastructure are located approximately 21 km to the east of MLA100162;
- A tailings storage facility;
- Progressive rehabilitation of disturbed areas;
- Electrical transmission infrastructure, located to minimise distance between major power demand elements and existing grid power infrastructure;
- Suitable electricity generator from a third-party supplier, located near to primary infrastructure with sufficient access for fuel delivery and storage or appropriate considerations for solar power generation; and
- Workforce Accommodation Village within the Julia Creek township.

If approved, construction of the Project will commence in early 2021, with production of the first vanadium expected in 2022. There are two phases of construction: phase 1 will enable construction of the mine to process 10,000 tpa of product and phase 2 will be an expansion of the processing facility to enable processing to 20,000 tpa of product.

In summary, the Project workforce will include:

- Up to 200 jobs during phase 1, which will involve construction of the MIA and processing facility able to produce 10,000 tpa of product. This phase would be over a period of 12 months starting in early 2021;
- Approximately 150 operational jobs commencing in 2022 to support the first 10,000 tpa of processed ore;
- A further 150 construction jobs is expected for phase 2 to enable the expansion of the processing facility to 20,000 tpa. The expansion will require an additional 100 operational roles once construction finishes. For the purposes of assessing a maximum development case, phase 2 is assumed to begin construction in 2023 with a peak operating workforce of 250 in 2024; and
- Approximately 75 jobs during mine decommissioning, estimated to occur in 2053.

The construction phase 1 of the Project is expected to occur over a 12 month period and commence in in January 2021. Expansion to 20,000 tpa (phase 2) in approximately Year 3 (2023) would require construction of a second processing train, which would create an additional 150 construction jobs construction over a further 12 months and an additional 100 operational roles. Figure 2-1 outlines the estimated peak annual employment over the

first 10 years of the Project, including overlap of the construction and operations phases. During construction of the expanded processing facility to allow 20,000 tpa of product, up to 300 construction and operational workers are anticipated to be employed by the Project.

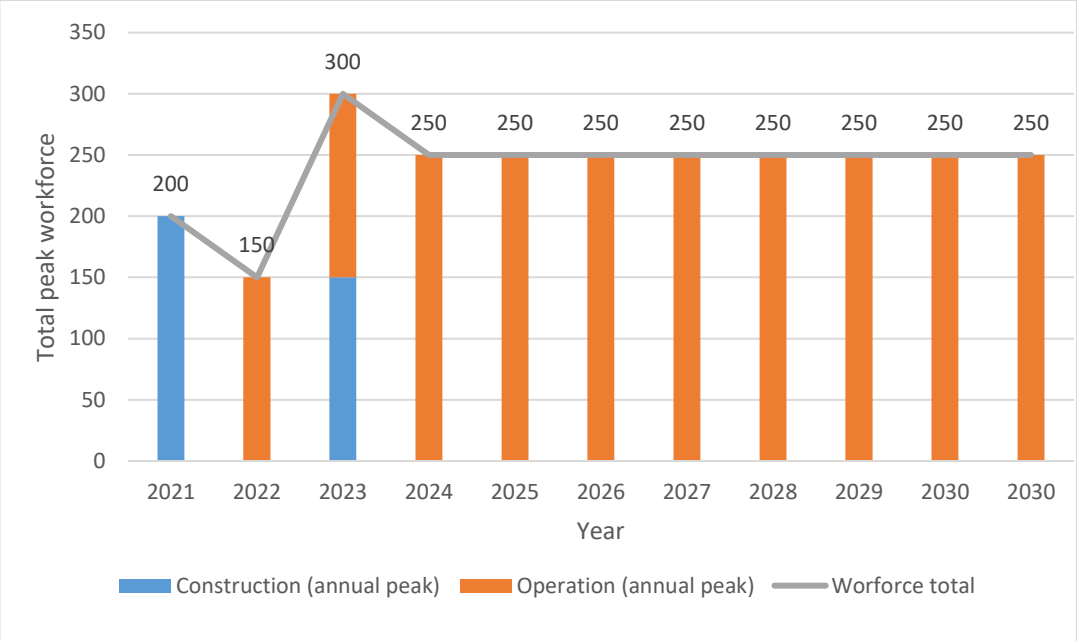
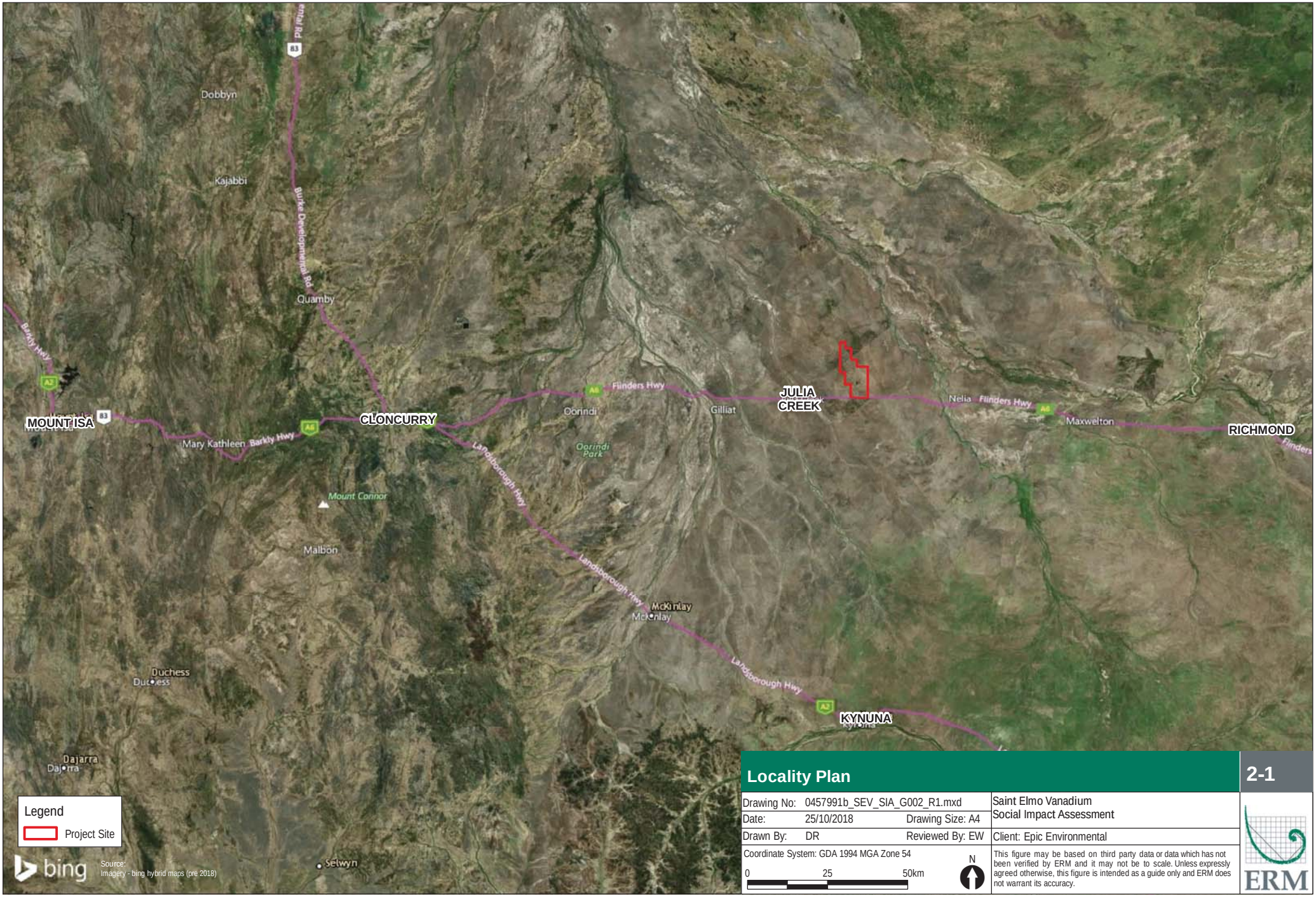


Figure 2-1 ***Project workforce 2021-2030***

Table 2-1 ***Estimated Employment***

	Construction	Operation		Decomm.	Total
		Phase 1	Phase 2		
Initial Construction	200	A – a	–	–	200
10,000 tpa Operation	–	150	–	–	150
10,000 tpa Operation plus Phase 2 Construction	150	150	–	–	300
20,000 tpa Operation	–		100	–	250
Decommissioning (Post Mining)	–	–	–	75	75

Further information regarding workforce skills, sourcing and roster and transport arrangements are provided in **Chapter 7.0.**



Locality Plan

2-1

Drawing No:	0457991b_SEV_SIA_G002_R1.mxd		Saint Elmo Vanadium Social Impact Assessment
Date:	25/10/2018	Drawing Size: A4	
Drawn By:	DR	Reviewed By: EW	Client: Epic Environmental

Coordinate System: GDA 1994 MGA Zone 54

0 25 50km

N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM

3.0 METHODOLOGY

An SIA is a systematic identification and evaluation of the potential impacts, both positive and negative, of a development. It includes the identification of mitigation measures and involves the participation of those receptors likely to be impacted (e.g. surrounding community members and businesses). Ultimately, *"its primary purpose is to bring about a more sustainable and equitable biophysical and human environment"* (IAIA 2003).

The SIA was completed in five phases:

- **Phase 1:** Scoping;
- **Phase 2:** Community and Stakeholder Engagement
- **Phase 3:** Baseline Analysis;
- **Phase 4:** Impact Assessment; and
- **Phase 5:** Impact Mitigation and Management.

Each of these phases is outlined in the sections below.

3.1 PHASE 1: SCOPING

Phase 1 establishes the scope of the SIA, ensuring that it is consistent with the requirements of the Draft TOR, SIA Guidelines, and international best practice.

The first step is to agree on the Project description and define the Study Area, as this will provide the appropriate grounding and content from within which the direct and indirect impacts of the Project can be readily identified.

The Study Area for direct impacts takes into account the following:

- The nature and scale of the proposed Project, including associated infrastructure;
- The scope of the potential social impacts (throughout the Project lifecycle);
- The location and characteristics of potentially affected communities – including urban/rural centres and land use patterns;
- Infrastructure;
- Native Title rights and other interests held by Indigenous peoples; and
- Location of other projects in the region which may contribute to cumulative social impacts over time.

The Study Area will also typically consider populations that will experience indirect or induced impacts that may not be within the direct control of the Project, such as:

- Economic opportunities associated with employment and economic spend;
- Interaction with the workforce;
- Use of services by the workforce; and
- In-migration.

The Study Area for indirect impacts is more geographically extensive than for direct impacts but will commonly focus on larger population centres within this broader geographic extent.

3.2 PHASE 2: STAKEHOLDER AND COMMUNITY CONSULTATION

As identified in the SIA Guideline, community and stakeholder engagement for an SIA is undertaken to:

- Understand who is likely to be impacted and how they are to be impacted;
- Understand the values and characteristics of potentially affected communities;
- Identify and assess potential social impacts;
- Develop management measures to mitigate adverse impacts and enhance benefits; and
- Support monitoring and reporting.

Accordingly, in line with best practice, a Social Engagement Strategy was prepared and adopted for the purposes of the SIA. The strategy adopted the IAP2 'Public Participation Spectrum' when designing and developing the appropriate techniques for each individual stakeholder group (refer to ***Figure 3-1***).

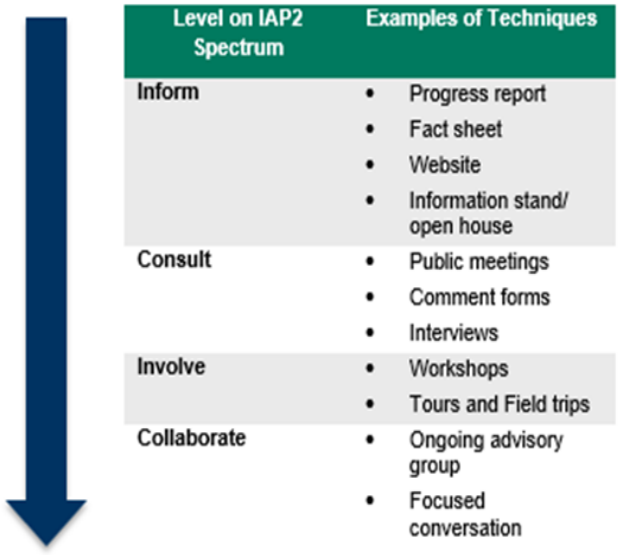


Figure 3-1 IAP2 Spectrum

In developing the Social Engagement Strategy for the Project, the specific nature of the Project was considered, as well as the different stakeholder groups identified during the Scoping and Baseline Analysis Phases. These groups included: local residents and landholders, State Government Agencies and Local Government, non-governmental organisations, Traditional Owners, industry groups and businesses, and community groups.

The extent of community and stakeholder consultation undertaken is detailed in **Chapter 5.0**, with the Wall Planning and Environmental Consulting Social Engagement Strategy developed, and provided in ***Annex A*****.** The results of the engagement have been incorporated into the Impact Assessment, Mitigation and Management Measures (refer to **Chapter 7.0**).

3.3 PHASE 3: BASELINE ANALYSIS

The baseline provides a starting point for predicting and analysing the potential social impacts (or changes) likely to occur as a result of the Project. This involves the collection and interpretation of a range of data. This data will include information about the existing social and community health conditions. The collection of Project and baseline information is informed by the specific context of the Project.

As per the SIA Guideline, the following is included in the baseline analysis:

- A demographic profile of potentially affected communities;
- An analysis of community characteristics (such as: community culture and values, community history, community well-being, land/property ownership and utilisation of natural resources);
- Details of the capacity of those potentially affected to participate in the community and stakeholder engagement;
- An overview of land use and key industries in the region, as well as relevant local and state government plans;
- The capacity and accessibility of infrastructure, facilities and services, including education, health and emergency services;
- An analysis of the existing housing and accommodation market, including availability, capacity and affordability;
- A profile of the local and regional labour market, including an assessment of the likely availability of personnel with skills relevant to the Project; and
- Details of other resource and infrastructure projects in the area, both planned and currently operating, based on publicly accessible information.

The data used in the baseline analysis comes from both primary and secondary data sources. A desktop review of secondary data was undertaken, which included a review of the construction process, environmental data, statistical data, and government publications.

Although the desktop review provided a substantial amount of information relating to the communities within the Study Area, gaps were identified, which needed to be filled through primary data collection. Primary data collection occurred as part of the community and stakeholder engagement component of the SIA. Specifically, the objectives of the primary data collection were to:

1. Obtain additional local level information to confirm the scoping carried out in Phase 1;
2. Verify the existing secondary data (were possible);
3. Identify other data sets or studies that are not routinely published; and
4. Better understand community issues and concerns in relation to the Project.

Phase 2 and Phase 3 can be seen as iterative processes within the Project.

3.4 PHASE 4: IMPACT ASSESSMENT

The impact assessment component of the SIA is to identify and assess the potential social impacts of the Project on the previously identified people and communities. The SIA Guideline identifies the following issues that affect people and communities that have been considered in the impact assessment component:

- Changes to community values and/or the way the community functions;
- Impacts on how people live, work, play and interact with one another on a day-to-day basis;
- Impacts on culture, history, and ability to access cultural resources;
- Impacts on communities' physical safety, exposure to hazards or risks, and access to and control over resources;
- Impacts on communities' quality of life including liveability and aesthetics, as well as the condition of their environment;
- Impacts on communities' access to, and quality of, infrastructure, services and facilities;
- Impacts on communities' physical and mental health and well-being, as well as their social, cultural and economic well-being; and
- Changes to livelihoods, for example, whether peoples' jobs, properties or businesses are affected, or whether they experience advantage/disadvantage.

In order to appropriately address the TOR for the Project, the impacts for the Project have been assessed, and present in this SIA, as per the key matters identified in the SIA Guideline:

- Community and stakeholder engagement;
- Workforce management;
- Housing and accommodation;
- Local business and industry procurement; and
- Health and community wellbeing.

3.4.1 *Impact Assessment Process*

In accordance with the SIA Guideline, and internationally recognised standards of assessment for SIA, the significance of the predicted impacts was determined by comparing the magnitude of the impact against the vulnerability of the affected receptors. This assessment process was iterative and made a clear distinction between predicted impacts and perceived impacts (refer to ***Figure 3-2***).

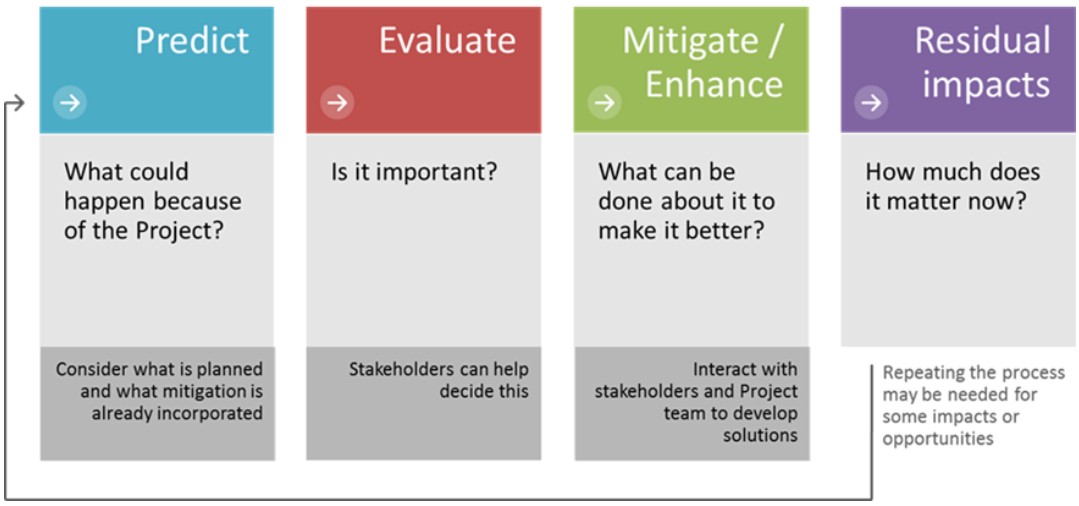


Figure 3-2 ***Social Impact Assessment Evaluation and Prediction Process***

Magnitude

Figure 3-3 provides a visual representation of how impact characteristics culminate in a rating for magnitude.

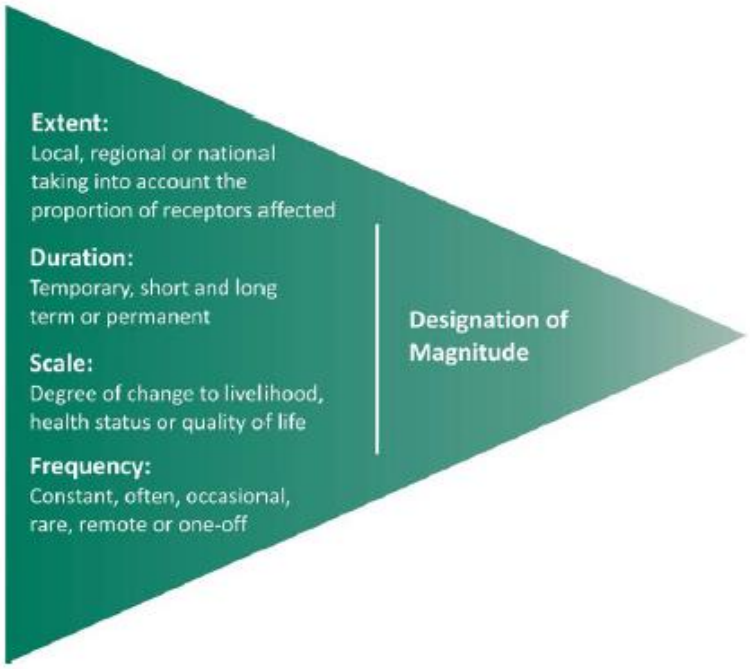


Figure 3-3 ***Assessing Level of Magnitude***

The magnitude is a reflection of the 'size' or degree of change caused by the impact. It is a function of one or more characteristics including the extent, duration, scale and frequency of the impact. This designation of magnitude is outlined in ***Table 3-1***.

Table 3-1 Designation of Magnitude

Designation	Description
Negligible	The change that occurs remains within the range commonly experienced by households.
Low	Perceptible difference from baseline conditions. Tendency is that impact is local, rare and affects a small proportion of households and is of a short duration.
Moderate	Clearly evident difference from baseline conditions. Tendency is that impact affects a substantial area or number of people and/or is of medium duration. Frequency may be occasional and impact may be regional in scale.
High	Change dominates over baseline conditions. Affects the majority of the area or population in the Study Area and/or persists over many years. The impact may be experienced over a regional or national area.
Positive	In the case of positive impacts, it is generally recommended that no magnitude be assigned, unless there is ample data to support a more robust characterisation. It is usually sufficient to indicate that the Project will result in a positive impact, without characterising the exact degree of positive change likely to occur.

Vulnerability

Vulnerability reflects the ability of receptors to adapt to change. The levels of vulnerability for receptors used in the SIA are outlined in ***Table 3-2***.

Table 3-2 Levels of Vulnerability

Level	Description
Low	Minimal areas of vulnerabilities; consequently, with a high ability to adapt to changes brought by the Project
Moderate	Some but few areas of vulnerability; but still retaining an ability to at least in part adapt to change brought by the Project
High	Profound or multiple levels of vulnerability that undermine the ability to adapt to changes brought by the Project

Impact Significance

The significance for social and health impacts is evaluated taking into account the magnitude of the impact and vulnerability of affected receptors. The matrix in ***Table 3-3*** is used to assign social and community health impact significance for both negative and positive impacts.

Table 3-3 ***Impact Significance***

		Vulnerability of Receptors		
		Low	**Moderate**	**High**
Magnitude	**Negligible**	Negligible	Negligible	Negligible
	Low	Negligible	Minor	Moderate
	Moderate	Minor	Moderate	Major
	High	Moderate	Major	Major
	Positive	Positive		

3.5 PHASE 5: IMPACT MITIGATION AND MANAGEMENT

Once the significance of the social impacts has been identified, the impact mitigation and management measures (including measures to mitigate predicted negative impacts and enhance predicted impacts) and benefit enhancement measures can be determined.

The SIA provides management measures for all potentially significant negative impacts and is adherent to a hierarchy of avoid and mitigate. Accordingly, the potential impacts that were confirmed during the SIA to be of moderate or of greater significance are to be mitigated in accordance with the mitigation control measures identified in ***Figure 3-4***.

Avoid at Source / Reduce at Source: Avoiding or reducing at source is essentially 'designing the project so that a feature causing an impact is designed out or altered. **Abate on Site:** This involves adding something to the basic design to abate the impact – pollution controls fall within this category. **Abate at Receptor:** If an impact cannot be abated on-site then measures can be implemented off-site. **Repair or Remedy:** Some impacts involve unavoidable damage to a resource. Repair involves restoration and reinstatement type measures. **Compensate in Kind / Compensate Through Other Means:** Where other mitigation approaches are not possible or fully effective, then compensation for loss or damage might be appropriate.	**Mitigation**
Control: The objective is to reduce the risk to ALARP which can be achieved by reducing the likelihood of the initiating event or by reducing the consequence by a combination of both. **Recovery:** Typical contingency measures include Emergency Response Plans and Procedures and Spill Contingency Plan and Equipment.	**Control**

Figure 3-4 ***Mitigation and Control Hierarchy***

Impacts assessed as Insignificant or Minor will require no additional management or mitigation measures on the basis that the magnitude of the impact is sufficiently small, or that the receptor is of low sensitivity and/or that adequate controls are already included in the Project design.

Impacts evaluated as Moderate or Major will require the implementation of further management or mitigation measures. Moderate and major impacts will therefore be deemed to be **significant.**

Major impacts will require further management or mitigation measures to minimise or reduce the impact to an acceptable level. An **acceptable** level is the reduction of a Major impact to a Moderate one or lower after mitigation.

In seeking to mitigate moderate and major impacts, the emphasis is on demonstrating that the impact has been reduced to a level that is acceptable. It will not always be practical to reduce impacts to Minor in consideration of the cost-ineffectiveness of such an approach (due to the diminishing return of a reduction of impact versus cost).

Assessing impacts is an iterative process, meaning that where an impact is considered significant mitigation measures are applied and then reassessed. This is done to determine the significance of the impact once mitigation and management measures have been applied. This is done to help determine whether the mitigation and management measures are sufficient to lower the impact to the respective receptors. Where a residual impact is deemed Major, this may require specific negotiation with the receptor or amendment in design.

Any management measure determined is to be outcomes focused, reasonable, relevant, transparent and able to be monitored. The management measures that are developed through the SIA process are to be embedded within the proponent's internal social management systems and will inform the development of the Social Impact Management Plan (**SIMP**), discussed in **Chapter 8.0**.

4.0 SCOPING (STUDY AREA)

4.1 STUDY AREA

The Study Area for this SIA was defined with reference to the SSRC Act's definition of nearby regional communities and the SIA Guideline's requirement to consider the characteristics of potentially affected communities as part of the scoping stage. Factors considered included:

- The characteristics of the different communities and their relative proximities to the Project;
- The availability of housing and other social infrastructure to attract and support a local workforce;
- The local and regional availability of suitably skilled and experienced mining industry personnel;
- The location of suppliers and service operators who could supply the Project; and
- The potential for these local and/or regional communities to be affected by the Project.

4.1.1 *Primary Study Area*

Given the large geographic spread between towns in the region, a primary and secondary Study Area have been defined. The primary Study Area, depicted in ***Figure 4-1***, encompasses the Project site (defined as the mining lease area), includes five sensitive receptors (direct and adjacent landholders) in the immediate vicinity of the Project site, and the Julia Creek township.

Julia Creek is located approximately 25 km to the west of the Project site and the only town within daily driving distance, accounting for driver fatigue. Julia Creek can be characterised as a family-oriented rural township of approximately 400 people. The McKinlay LGA has a population of approximately 800 people, falling from approximately 1,000 persons in 2011. In order to promote population growth across the Shire, the McKinlay Shire Council is actively seeking economic diversification to improve the resilience of the area (McKinlay Shire Council 2018a).

The 2016 Census data indicates that the local population has skills relevant to the mining industry, and there is existing underutilised housing as well as plans for new subdivisions in the town, which may provide options for longer-term accommodation. The viability of local businesses also has the potential to increase through having new sources of revenue, through both direct and indirect spending associated with the Project.

Directly Affected and Adjacent Landowners

The MLA areas including Off-site Water Storage Infrastructure are located over two stations and a number of reserves, including a stock route. The primarily affected landowner is Saint Elmo Station where the majority of the MLA is located. The second affected landowner is Lindfield Station where the Off-site Water Storage Facility will be located. These stations incorporate several lots each and are presently being utilised for cattle grazing, with unimproved pastures across the site. A further three adjacent landowners (sensitive receptors) are located in the immediate vicinity of the Project Site, as identified in ***Table***

4-1. Given the proximity of these sensitive receptors, they have been specifically considered as part of the assessment undertaken.

Table 4-1 ***Sensitive Receptors in the Immediate Vicinity of the Project Site***

ID	Name/Lot & Plan	Receptor Type	Primary Use	Approximate Distance from Project Site
A	St Elmo, Lot 13 EN89	Residence	Cattle grazing	270 m west
B	Argyle, Lot 4 EN30	Residence	Cattle grazing	4.2 km west
C	Garomna, Lot 11 EN105	Residence	Cattle grazing	6.2 km south-west
D	Burwood, Lot 4 MF16	Residence	Cattle grazing	6.8 km north
E	Lindfield, Lot 2 MF3	Residence	Cattle grazing	10 km north-east

4.1.2 Secondary Study Area

The secondary Study Area encompasses the 'nearby regional community', as defined by the provisions of the SSRC Act (DSDMIP 2018a) as:

"…a town, the name which is published on the department's website undersection 13—

(a) Any part which is within—

(i) A 125km radius of the main access to the project; or

(ii) A greater or lesser radius decided by the Coordinator-General and notified in writing by the Coordinator-General to the owner of the project;

and

(b) that has a population of more than—

(i) 200 people; or

(ii) a smaller population decided by the Coordinator-General and notified in writing by the Coordinator-General to the owner of the project."

While a 125 km radius has been identified in ***Figure 4-2*** to correspond with the aforementioned provision of the SSRC Act, a more realistic secondary Study Area is proposed, and depicted in the same figure. This secondary Study Area has been defined based on the potential extent of impact, and includes the nearby townships of Cloncurry, Richmond and Mount Isa. It is important to note that fatigue management requirements will limit the distance that employees can travel to and from work daily, and all three towns are located more than a one hour[1] drive from the Project site.

Despite this however, these townships are of importance to the Project as they:

- Comprise larger communities than Julia Creek, and therefore have increased community infrastructure and housing opportunities. For example, the Mount Isa Hospital is the nearest major hospital to the Project site. As such, these communities (particularly Cloncurry and Mount Isa) have the potential to attract and support a regional workforce, and therefore are likely to be a source of DIDO personnel for the Project;

[1] The Department of Natural Resources and Mine's Guidance Note for Fatigue Risk Management (2013) consideration that a commute time of one hour, with a 12 hour shift length, can influence the opportunity for sleep and fitting in other daily activities.

- Have access to a large skilled mining workforce (particularly Cloncurry and Mount Isa); and
- Increase the range of suitable suppliers and service operators who can support the Project.

While the townships of McKinlay, Nelia and Kyuna are within a 125 km radius of the Project, and contain populations of less than 20 people, they do not offer a significant source of population or social infrastructure. As such, these townships have not been directly considered, however the populations of these townships have been indirectly considered as part of the data for McKinlay LGA.

4.1.3 Economic Catchment

As the materials will be imported and exported by road and rail along the corridor between Townsville and the Project site, the economic impact has the potential to extend through the LGAs of not only Mount Isa, Cloncurry, McKinlay, Richmond but also to Flinders, Charters Towers and Townsville. This greater region, depicted in ***Figure 4-3***, is referred to as the Economic Catchment, and referenced within the Economic Impact Assessment (AEC 2020).

Other than potential economic impacts, it was considered unlikely that significant material social impacts or benefits would extend to towns to the east beyond Richmond. For example, the next closest town to the east is Hughenden which has a population of around 1,100 (less than half that of Cloncurry) and is around 260 km to the Project, it is not considered to be of relevance to the Project in terms of offering significant infrastructure, social or workforce opportunities to the Project. It has therefore not been the subject of more detailed study, beyond the assessment of economic impact.

4.1.4 Neighbouring Projects

The closest major mine to the Project is the South 32 Cannington Mine which is located approximately 185 km south east of Julia Creek (205 km from the Project). The mine is located in the McKinlay Shire and the road to rail transfer is located in the Cloncurry Shire. The Cannington Mine employs about 550 full-time employees and up to 300 contractors. However, most of these workers are FIFO with flights from Townsville and Brisbane. There are some local workers who currently DIDO to Cannington from both Cloncurry and Julia Creek. These workers, who reside locally, would potentially form part of the skilled local workforce base for the Project, particularly as the Cannington Mine reduced its workforce numbers in 2015.

Outside the Saint Elmo Vanadium Project, the CopperString Project is the only other project which is located in the McKinlay LGA (in addition to seven other LGAs). The CopperString Project is currently undertaking its EIS and at the time of writing this had not been made public. Once operational, the CopperString Project is only anticipated to have a workforce of approximately 30 people (DSDMIP 2019). These workers will likely primarily work at proposed substations which are not proposed to be situated in Julia Creek. The 400-worker construction workforce is expected to be accommodated in multiple temporary accommodation camps throughout the region. The location of these have not been confirmed. Based on current approvals timeframes, it is likely that the CopperString project construction will start after the Saint Elmo Project.

4.1.5 Study Area Boundaries

In establishing the primary and secondary Study Area, the Australian Bureau of Statistics (**ABS**) boundaries have been used. This includes:

- Julia Creek UCL ('Julia Creek');
- Cloncurry UCL ('Cloncurry');
- Richmond UCL ('Richmond');
- Mount Isa UCL ('Mount Isa');
- McKinlay LGA ('McKinlay LGA'); and
- Queensland (STE) ('Queensland').

The McKinlay LGA and Queensland STE datasets have been used in order to place the UCL data for each of the townships in context – i.e. the wider geopolitical area. ***Figure 4-4*** illustrates the defined 2016 ABS boundaries for the datasets used in this SIA, relevant to the primary and secondary Study Areas.

It should be noted that whilst a specific ABS Statistical Area 1 (**SA1**) covers the extent of the Project site (SA1:314073) this SA1 dataset has not been used in the baseline. The rationale for excluding the SA1 data from the baseline is that the ABS data recorded is considered unreliable due to the influence of external factors. These external factors relate to the skewed population data recorded, and the ABS requirements pertaining to confidentiality.

Additionally, data obtained from three Indigenous Areas (**IAREs**) which overlap the secondary Study Area have been incorporated into this Chapter. This is to ensure a thorough assessment has been carried out on populations potentially affected by the Project. The IAREs used were:

- **Mount Isa IARE**, which covers the area from Mount Isa to the Queensland boarder;
- **Cloncurry – McKinlay IARE**, which covers the Cloncurry and McKinlay LGAs; and
- **Flinders – Richmond – Dalrymple IARE**; which covers the Richmond; Flinders and Dalrymple LGAs to the east of the Project.

4.1.6 Population Data

The ABS data has a number of anomalies which influence the population data presented. In 2011, SA1:314073 contained 289 persons, however in 2016 the population decreased to 153. The substantial number of persons, as well as the substantial change in population within the five year census period, led to a detailed investigation into the SA1 data. From this investigation, it was found that the population change may stem from a Queensland Corrective Services (**QCS**) Work Camp Program (refer to **Box 1**).

As the presence of the JCWC has influenced the SA1:314073 data for both 2011 and 2016, there is the potential that the SA1 data does not provide an accurate picture of the population located within the primary Study Area. As such, it was considered that the data be excluded from specific reference in the SIA.

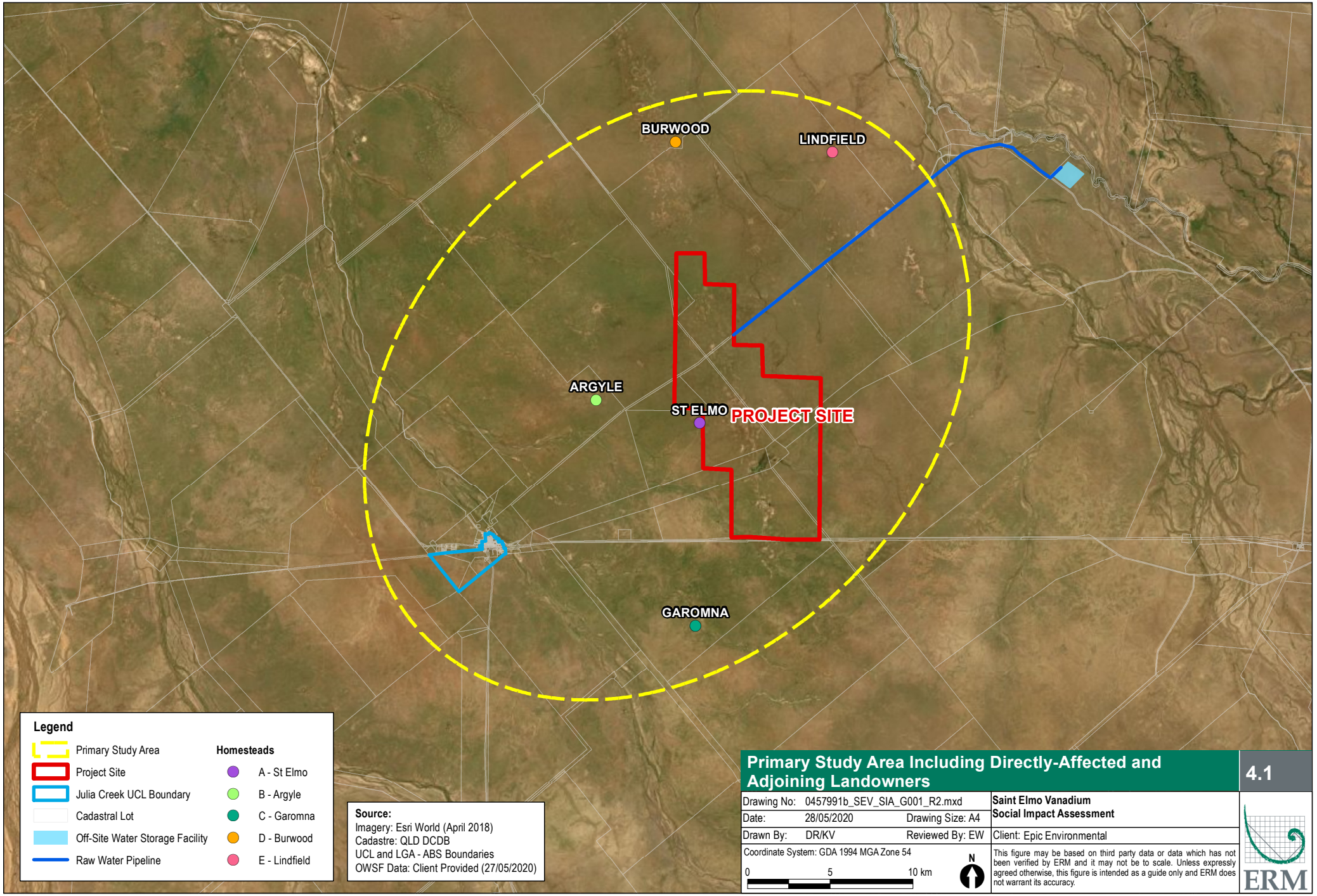
In addition, it is noted that adjustments have been made by the ABS in the population data in order to protect confidentiality of participants. This is often done in statistical areas that contain small populations. As SA:3140713 covers a smaller extent of population, the data contained therein has likely been adjusted, and therefore is not an accurate reflection of the Project site. Accordingly, the SA1 ABS data will not be utilised to inform the baseline.

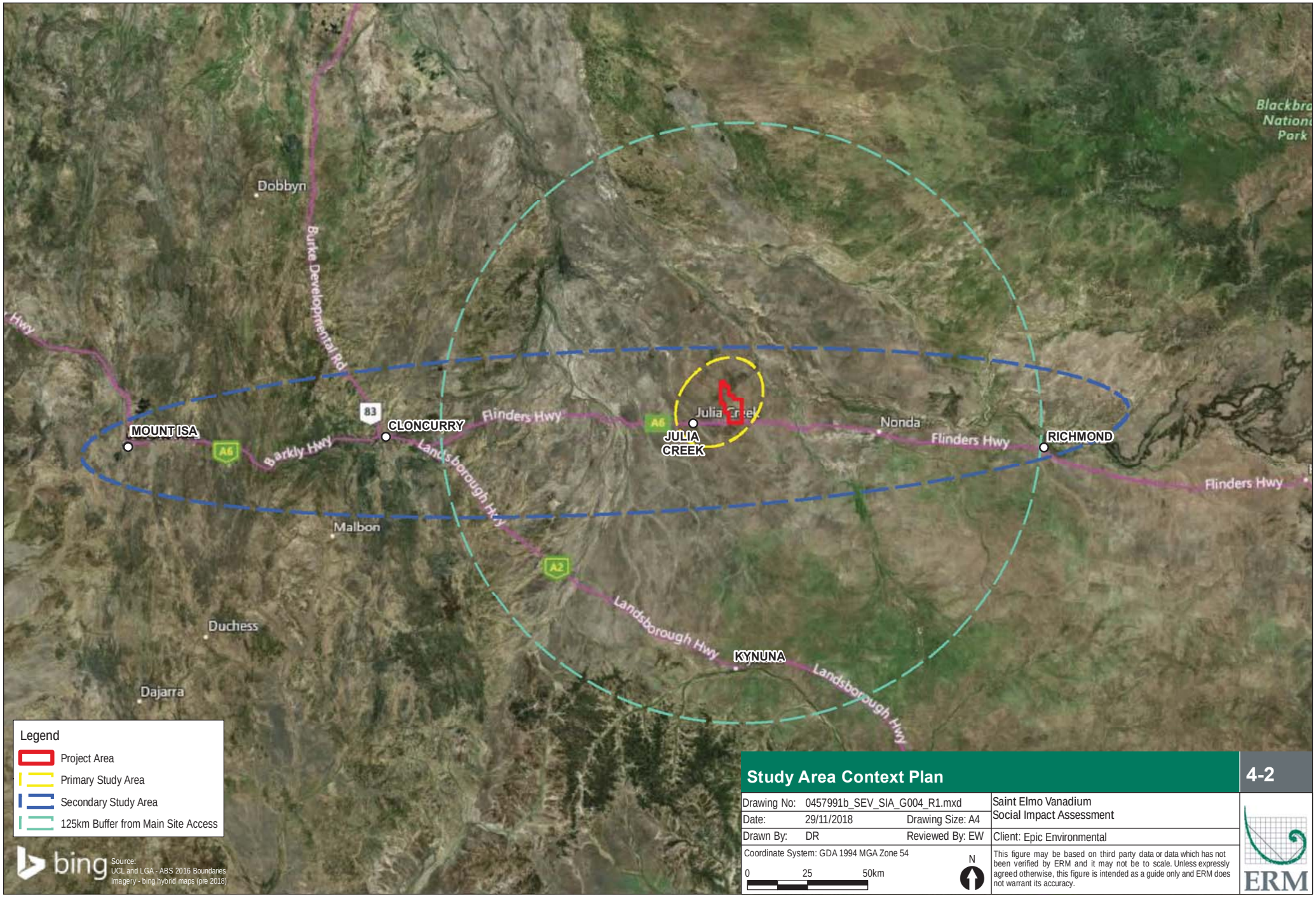
During consultation McKinlay Shire highlighted concerns regarding the accuracy of population data for McKinlay Shire and Julia Creek. Although this concern is recognised, for the purposes of the baseline assessment, the ABS Census provides the most accurate data that can consistently be compared with other communities. As the project develops, Multicom will work with McKinlay Council to develop a better understanding of population and housing numbers.

Box 1 ***QCS Work Camp***

The QCS Work Camp Program is a prisoner rehabilitation scheme which began in 1990, where low-risk prisoners are sent to various work camps in order to assist with community service projects in regional Queensland (Queensland Corrective Services 2008 and 2016a). The Julia Creek Work Camp (**JCWC**) is aligned with the Townsville Correction Centre.

While the specific date of establishment of the JCWC could not be ascertained, it is clear that it was active at the time of the 2011 and 2016 censuses, evidenced by the May 2011 McKinlay Shire Council Meeting Brief (McKinlay Shire Council 2018c) and the Camp receiving a highly commended in the 'leadership' category of the 2016 Premier's Awards for Excellence. Due to the JCWC involving prisoners, the location of the Camp and demographic within the Camp (e.g. males only) is confidential but does risk skewing the nature of the ABS data.


BURWOOD
LINDFIELD
ARGYLE
ST ELMO
PROJECT SITE
GAROMNA
Legend
Primary Study Area
Project Site
Julia Creek UCL Boundary
Cadastral Lot
Off-Site Water Storage Facility
Raw Water Pipeline
Homesteads
A - St Elmo
B - Argyle
C - Garomna
D - Burwood
E - Lindfield
Source:
Imagery: Esri World (April 2018)
Cadastre: QLD DCDB
UCL and LGA - ABS Boundaries
OWSF Data: Client Provided (27/05/2020)
Primary Study Area Including Directly-Affected and Adjoining Landowners
4.1
Drawing No: 0457991b_SEV_SIA_G001_R2.mxd
Date: 28/05/2020
Drawing Size: A4
Drawn By: DR/KV
Reviewed By: EW
Coordinate System: GDA 1994 MGA Zone 54
0
5
10 km
N
Saint Elmo Vanadium
Social Impact Assessment
Client: Epic Environmental
This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.
ERM



Study Area Context Plan

4-2

Drawing No:	0457991b_SEV_SIA_G004_R1.mxd		Saint Elmo Vanadium Social Impact Assessment
Date:	29/11/2018	Drawing Size: A4	
Drawn By:	DR	Reviewed By: EW	Client: Epic Environmental

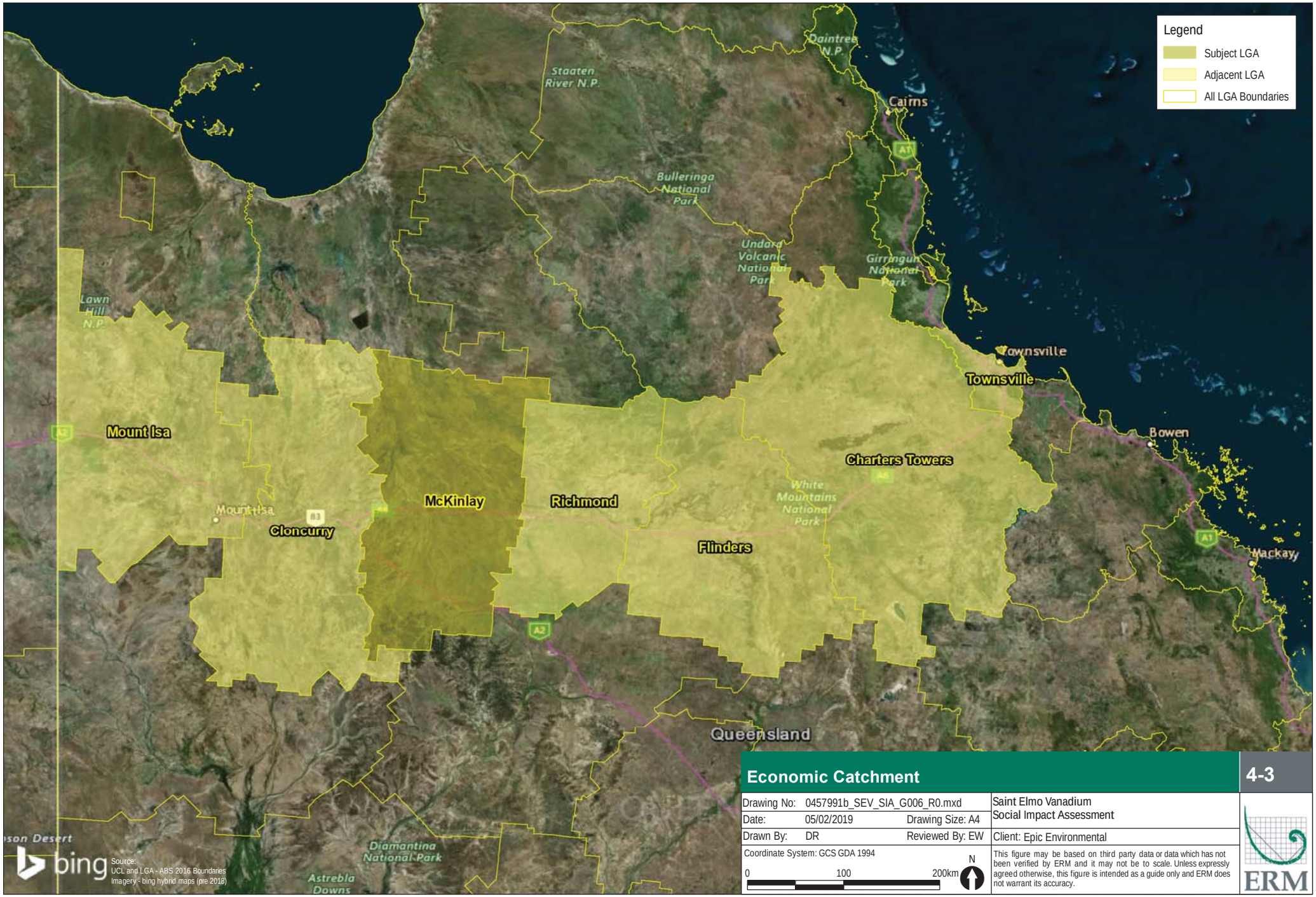
Coordinate System: GDA 1994 MGA Zone 54

0 25 50km

N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM



Economic Catchment

4-3

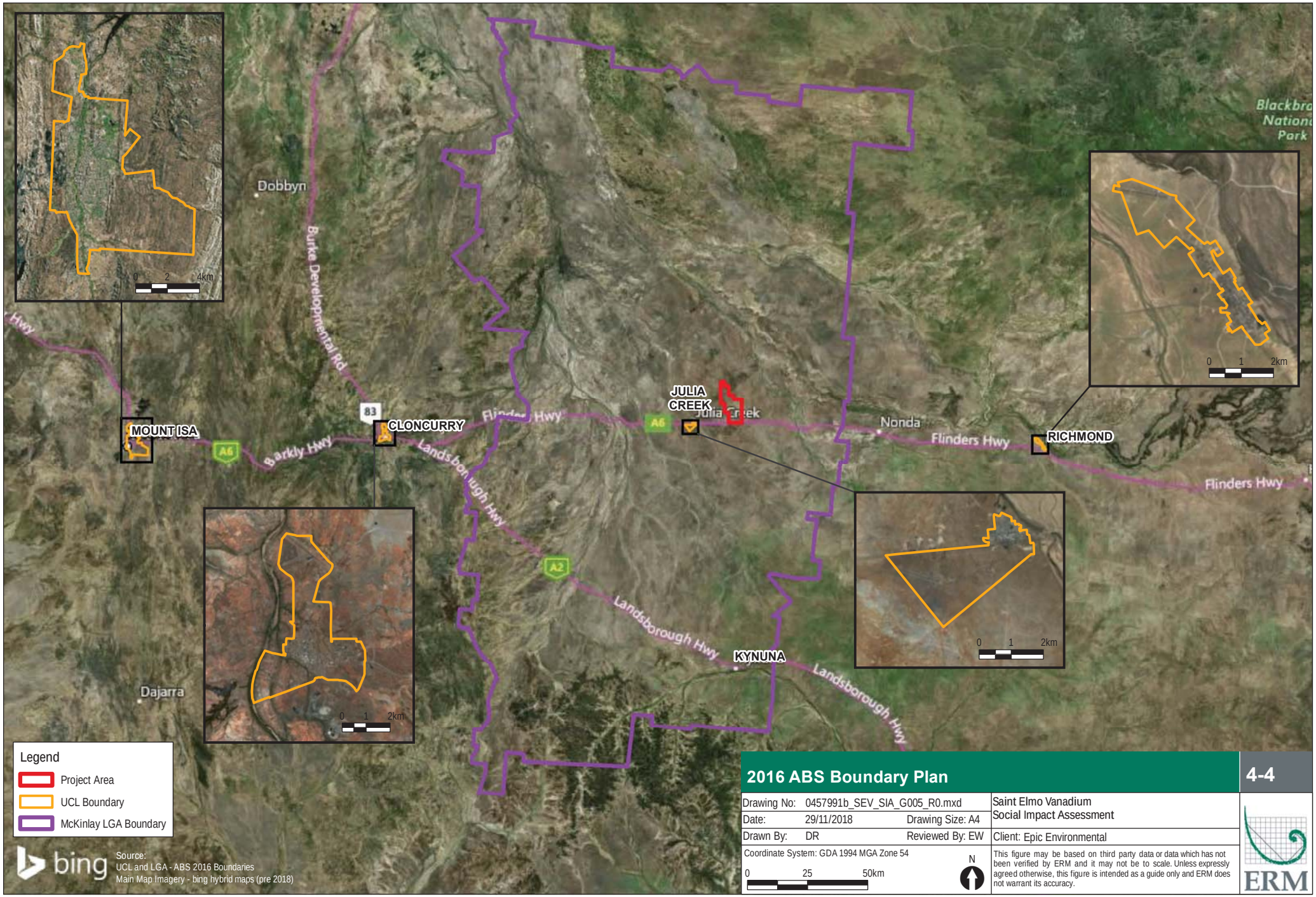
Drawing No:	0457991b_SEV_SIA_G006_R0.mxd		Saint Elmo Vanadium Social Impact Assessment
Date:	05/02/2019	Drawing Size: A4	
Drawn By:	DR	Reviewed By: EW	Client: Epic Environmental

Coordinate System: GCS GDA 1994

0 100 200km N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM



2016 ABS Boundary Plan

4-4

Drawing No:	0457991b_SEV_SIA_G005_R0.mxd		Saint Elmo Vanadium Social Impact Assessment
Date:	29/11/2018	Drawing Size: A4	
Drawn By:	DR	Reviewed By: EW	Client: Epic Environmental

Coordinate System: GDA 1994 MGA Zone 54

0 25 50km

N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM

5.0 COMMUNITY AND STAKEHOLDER MANAGEMENT

A community consultation process was undertaken by Epic Environmental (2018),

> *"…to enable opportunities for ongoing community and stakeholder feedback during the preparation of the SIA and EIS"*. Stakeholders are defined as *"persons or groups who are directly or indirectly affected by a project as well as those who have interests and/or the ability to influence its outcomes, either positively or negatively"* (IFC 2007, pp. 10).

As such, this term includes direct and adjoining landholders, all levels of government and governmental agencies, Indigenous groups, local community, elected representatives, business and commercial leaders and representatives, and special interest groups.

The preliminary community consultation process commenced in April 2017, and initially focussed on consulting with directly impacted landholders and key government agencies. Broader consultation from September 2018 was guided by the Social Engagement Strategy, provided in ***Annex A***. All additional consultation will be developed in accordance with this SIA and SIMP (**Chapter 8.0**).

5.1 STAKEHOLDER IDENTIFICATION

A scoping study was undertaken by WPE to define key stakeholders. This list was reviewed and expanded throughout the consultation process. ***Table 5-1*** captures the Project stakeholders.

In addition, Multicom and Epic have worked with the North West Region – Regional Economic Development Division of the Department of State Development, Manufacturing, Infrastructure and Planning (**DSDMIP**) to identify local stakeholders, particularly those in the business community, and to deliver joint consultation programs with these stakeholders (refer to **Section 5.2**). Additionally, the program of consultation has been refined as a result of ongoing feedback from stakeholders. For example:

- While local stakeholders appreciated phone calls, landlines are often in use during the day for children undertaking distance education, and mobile phone coverage is limited. Therefore, pre-arranged face to face meetings are preferred for longer discussions.
- Given the high degree of private vehicle ownership, access to attend face to face meetings is generally timed with a visit to town for other reasons (such as visiting the post office);
- Hard copy materials were distributed, including via the Julia Creek post office to every post office box in the McKinlay Shire. However, given the distance required to collect mail, this is sometimes not collected for several weeks. As such, email provides a more immediate way of communicating.

Traditionally underrepresented stakeholders, including women and youth, were consulted via special interest groups (e.g. Country Women's Association, and Lady Lionesses) and educational service providers (e.g. Julia Creek ELC, and Julia Creek State School).

As all consultation was undertaken outside of the school holiday period, as is good practice, it was not possible to engage directly with the youth population.

Table 5-1 Stakeholder Description and Identification

Category	Description	Stakeholder
Direct landholders	Landholders whose property the mine infrastructure may be located. Property owners within Mine Lease Area (MLA100162).	The three landholders whose property the mine infrastructure may be located, including the McKinlay Shire Council. Property owners within Mine Lease Area (MLA100162).
Adjoining landholders	Residents located adjoining the Project site which may experience impacts during construction and operation (visual impact, noise, dust, traffic). Adjoining neighbours to Mine Lease Area (MLA100162).	Landholders whose property is adjoining the Project site. There are four identified landholders.
Federal, Federal, State and Local Government Representatives	Government representatives at the Federal, Federal, State and Local level, including, local representatives and Government agencies responsible for the regulation of the Project. Police, emergency services, drug and alcohol services, housing, Indigenous, employment and social services. Many of these are provided by the McKinlay Shire Council due to the size of the town. All infrastructure and utilities providers that the Project could have an impact on during either construction or operation. Rail, electricity, port, telecommunication, airport, road usage.	**Federal** • Department of Environment and Energy • Kennedy Federal Division **State** • Department of Environment and Science • Department of Natural Resources, Mines and Energy • Department of Communities, Disability Services and Seniors • Department of Child Safety, Youth and Women • Department of State Development, Manufacturing, Infrastructure and Planning • Department of Environment and Science • Department of State Development Infrastructure and Planning (including Northwest Minerals Province Taskforce and Office of the Coordinator General) • Department of Housing and Public Works • Department of Employment, Small Business and Training • Department of Aboriginal and Torres Straight Island Partnerships • Department of Education • Traeger State Electorate

Category	Description	Stakeholder
		Local Government • McKinlay Shire Council • Cloncurry Shire Council • Mount Isa City Council • Richmond Shire Council • Townsville City Council
		Government Service Representatives • Queensland Police • Queensland Ambulance Service • Queensland Fire and Emergency Services • Queensland Health
		Infrastructure and Utilities Providers • Aurizon • Queensland Rail • Cloncurry Airport • Department of Natural Resources, Mines and Energy • Department of Transport and Main Roads • Ergon Energy • Julia Creek Airport (McKinlay Shire Council) • Mount Isa Airport • Port of Townsville • Telstra • Townsville City Council
Indigenous Stakeholders	Traditional owner groups, local land councils, other Indigenous organisations, where these are related to the Project site.	• Department of Aboriginal and Torres Strait Islander Partnerships Mount Isa • Gidgee Healing, Mount Isa • Queensland South Native Title Services • Regional indigenous businesses, including training providers

Category	Description	Stakeholder
Business Operators and Representatives	Business operators and employees in the locality may experience indirect impacts on business operations (e.g. increased trade during construction). Regional business organisations, local accommodation operators and local Chambers of Commerce.	• Queensland Resources Council • North West Chamber of Commerce • Mount Isa Townsville Economic Zone • Townsville Enterprise • Short term accommodation providers including: Julia Creek Caravan Park, Julia Creek Villas; Corella Creek Country Farm Stay; Cloncurry Discovery Parks; Gannon's Hotel. • Retail businesses, including Elders Rural, Information Centre, Julia Creek News, Pharmacy and Gift Shop; Corina's Catering; Grocery shops; hardware shops, roadhouse tyre distributor. • Contractors including bulk haulage, plumbers, construction companies, distribution companies; field mining services, mobile workshops; electrical contractors; grader and water tanker hire.
Special Interest Groups	Community organisations and groups such as local the Lions Clubs, Country Women's Association, Schools and Childcare facilities etc.	• Community associations such as Country Women's Association, Julia Creek Lions Club and Julia Creek Lions Ladies • Educational providers such as Julia Creek Early Learning Centre and Julia Creek State School • Various sporting and social groups such as Julia Creek Pony Club, Julia Creek Campdraft Association, Julia Creek Sporting Shooters Association, Julia Creek Swimming Club • Major event organisers such as Dirt N Dust Festival • Relevant groups associated with natural area management and species protection such as Southern Gulf NRM and the University of Queensland as research partners • Emergency Service Committees such as the Julia Creek Local Ambulance Committee and Fire Captain
Local Community	Residents or visitors to the McKinlay Shire region may have an interest in the Project.	Other interested members of the McKinlay, Cloncurry and Richmond shires and North West broader region

Source: Epic Environmental 2019

5.1.1 *Indigenous Stakeholders*

A desktop study of cultural heritage records and databases did not find any places of cultural heritage significance or Indigenous Land Use Agreements, native title determinations or claims over the Project site.

As there is no native title claim registered, there is a requirement to advertise the mining lease under s29 of the Native Title Act 1993. Multicom advertised its notification for s29 for MLA100162 in the Koori Mail, on 27 June 2018 and in the North West Star on 28 June 2018. The notification date was advertised as 11 July 2018. As well as the public advertising process, a copy of the Section 29 notice was provided to Queensland South Native Title Services (**QSNTS**), as Representative Aboriginal and Torres Strait Islander Body for the Project site. There were no responses to this advertisement. The OWSF (MLA100244) has been determined to be located on exclusive land, therefore a s29 notification will not apply. The associated infrastructure (MLA 100245 and MLA 100246) are currently undergoing native title assessment. Whilst no native claims are lodged over these areas, the MLA's will progress through a s24MD notification process.

Furthermore, verification of baseline data for primary Indigenous organisations was undertaken through discussions with Department of Aboriginal and Torres Strait Islander Partnerships (**DATSIP**) Mount Isa and various local businesses, such as training organisations. This consultation was primarily undertaken by phone, as well as emails, newsletters and the Project website. The main issue of interest for these stakeholders was the prospect of future direct and indirect employment and associated training opportunities. Also refer to **Section 6.6**.

5.2 *CONSULTATION TOOLS*

A summary of the consultation techniques for stakeholder groups is outlined in ***Table 5-2***, with details as to these consultation tools provided in the subsequent subsections.

Table 5-2 Consultation Technique Summary

Consultation Technique	Direct Landholders	Adjoining Landholders	Surrounding Region	Local Community	Government and Elected Representatives	Special Interest Groups
Landholder Agreements	✓					
One on one meetings	✓	✓			✓	✓
Newspaper Advertisement	✓	✓	✓	✓	✓	✓
Newsletter	✓	✓	✓	✓	✓	✓
Project Website/ Phone/ Email	✓	✓	✓	✓	✓	✓

Source: Epic Environmental 2018

Direct Stakeholder Contact (including telephone calls and face-to-face meetings)

Meetings were held targeting key individuals and groups and included:

- Project overview given;
- EIS approvals process outlined; and

- Feedback sought on potential issues or concerns.

Project Newsletters and Fact Sheets

Fact sheets and newsletters were produced, including the following information:

- Project background;
- A map of the Project site;
- Information about the proponent;
- Timetable detailing Project milestones;
- An outline of the EIS process;
- Answers to frequently asked questions;
- Opportunities for the community to be involved in the EIS process, and
- Contact details for the Project team to encourage community input (email address, free call number).

It is intended that additional fact sheets will be prepared and include frequently asked questions and details on key topics of interests.

Public Information Sessions

A number of public information sessions have been held, including:

- **Business Workshop –** Co-hosted by Multicom, the DSDMIP and the McKinlay Shire Council in Julia Creek on 5 July 2018 which provided local businesses with information on how to participate in future tendering opportunities.
- **Business Workshop** – Co-hosted by the DSDMIP and the McKinlay Shire Council in Julia Creek on 15 August 2018 to provide small business with information on safety requirements for a future project.
- **Public Information Session** – Co-hosted by Multicom and Epic Environmental in Julia Creek on 19 September 2018 to provide all interested members of the community an opportunity to learn more about the Project, the timeline and address any questions or concerns they had. This event was also promoted by the DSDMIP and the McKinlay Shire Council. More than forty members of the local community attended the event.

Additionally, Multicom and Epic Environmental have attended a number of existing public and industry forums over this period in order to provide additional information and Project updates, without contributing to consultation fatigue. These have included:

- Attendance at and sponsorship of the Julia Creek Dirt and Dust Festival (April 2019) and Julia Creek Camp draft (May 2019);
- Presentation by Multicom at the Department of State Development's MineX Industrial Breakfast (Mt Isa, May 2019). Both Multicom and Epic also had booths at the expo, allowing access to get the latest updates on the Project;
- On 5 June 2019, Epic Environmental presented an update on the Project to the Townsville Enterprise Mining and Resources Industry Forum; and
- Multicom presented to the Mining and Energy Services Council Project Briefing and Networking event in Townsville on 22 July 2019.

Additional information sessions will be held in the lead-up to and during the EIS public comment period, across the region.

Project Email Address

An email address has been established and advertised on promotional material. Emails sent to this address are received and responded to by the Project team.

Free Call Number

A free call number was featured on materials and communications regarding the Project. It provides an opportunity for community members to go directly to the people involved with the EIS process. The free call number has nation-wide coverage and is answered in Brisbane by Project staff.

Website

A Project specific webpage on the Multicom website was developed to provide information on the Project, and included:

- A general overview of the Project;
- Information about vanadium
- Links to Project newsletters; and
- Contact details for the Project Team.

The Queensland Department of Environment and Science (**DES**) website also carries information and documents relating to the EIS, such as the Initial Advice Statement and EIS Terms of Reference.

Advertisements and Media - TOR

The Draft TOR for the EIS was released in March 2018 and open for public comment from 19 February 2018 to close of business 02 May 2018. Advertisements were placed by DES in local, State and National newspapers to solicit public comment.

A total of 22 submissions were received from government agencies and organisations during the submission period.

Nine respondents had no comment to make on the Draft TOR. Many of the comments received were administrative, apart from technical comments related to hazards and safety, surface and groundwater use, associated infrastructure impacts and social and economic impacts. Terminology in the TOR was changed as per suggestions by relevant government agencies.

Advertisements and Media – Public Information Event

Advertisements were placed in the North West Star and Townsville Bulletin for the Public Information event in September 2018.

Media releases were made to support the consultation process. Key stakeholders were directly advised of announcements, by letter, email or telephone call, before any public announcements were made. Media releases were an additional communication tool, not the main source of information for stakeholders.

5.3 COMMUNITY CONSULTATION

Following the identification of stakeholders, a consultation program was developed in order to meet specific needs of each stakeholder group.

An initial community consultation period commenced in April 2017 with directly impacted landholders and key government agencies. This consultation increased from March 2018 and included briefings with stakeholders concerning the public announcement of the EIS and consultation with community stakeholders. This was further increased from July 2018 onwards and has continued with regular engagement through 2019. In addition to the initial consultation period, comments were received from community stakeholders throughout the preparation of the EIS.

The feedback provided throughout the consultation process was recorded on event logs, collated and analysed by stakeholder group.

As part of the engagement process, consultation has taken place with over 150 members of the community and region, in addition to consultation with Local, State and Federal Government or agencies. Given the small population of Julia Creek, almost 20 percent of the population of the McKinlay LGA have had direct opportunity to provide feedback.

5.4 ISSUES RAISED

Feedback from all consultation sessions were analysed by Epic Environmental. A summary of the issues raised during community consultation is provided in ***Table 5-3***. It was determined that across all stakeholder groups, the issues and opportunities of greatest significance were:

- Potential increases in dust and other air emissions;
- Quantity of water required, source of water and impact on neighbouring users;
- Opportunities for social and economic enhancement of the area;
- Opportunities for local employment and suppliers;
- Likelihood of Project proceeding; and
- Potential impact on traffic on the Flinders Highway.

Table 5-3 Stakeholder Issues and Concerns Summary

Issues and Concern	Stakeholder					
	Direct Landholder	Adjoining Landholder	Government	Business Operators and Representatives	Special Interest Groups	Local Community
Landowner Agreements	✓					
Water requirements and source of water	✓	✓	✓	✓	✓	✓
Impact of water use on neighbouring properties	✓	✓	✓			
Water requirements and impact on Great Artesian Basin			✓			
Impact of dust on cattle grazing	✓					
Potential increase in dust		✓			✓	✓
Any toxicity from dust					✓	✓
Opportunities to directly invest in Project	✓				✓	✓
Opportunities for the community and direct employment		✓		✓	✓	✓
Improved community amenities from a larger town (e.g. schooling)		✓		✓		
Planning for infrastructure needs to support increased population			✓			✓
Local versus FIFO / external contractors				✓		
Increased traffic on Flinders Highway		✓	✓	✓	✓	✓
Landscape scale improvements in Prickly Acacia		✓	✓		✓	✓
Impact on Julia Creek Dunnart, Star Finch and offsets			✓			
Likelihood of Project proceeding	✓	✓	✓	✓	✓	✓
Landholder Agreements	✓					
Ability of Project to ramp up quickly	✓					
Final land use		✓				
EIS and SIA process requirements			✓			
DSDMIP support for business facilitation in North West Minerals Province			✓			
Emergency / Disaster Management Coordination			✓			

5.5 ONGOING COMMUNITY CONSULTATION

Consultation and engagement will continue throughout the EIS process, and throughout the Project lifecycle, commensurate with the requirements of the SIMP (refer to **Chapter 8.0**).

In particular, it is recognised that the public comment period is an important opportunity for stakeholders to provide formal input into the EIS process. As such, there will continue to be opportunities for stakeholders to access information about the Project and EIS throughout the public comment period. This will be via public meetings and displays, and on the Multicom website. A free call information telephone line and Project email address will continue to be provided.

A program of consultation will be undertaken by Multicom to address community issues as the Project progresses. Interaction with stakeholders who have already been consulted as part of the Project planning phase will continue over the remainder of the EIS process and throughout the Construction and Operation Phases (refer to **Section 8.3**).

This will continue to include newsletters and fact sheets so that consistent information is provided, especially given the broad local community interest, and specific information sessions, including those in conjunction with the State Government and McKinlay Shire Council to support business readiness.

6.0 BASELINE ANALYSIS

This section outlines the Project context, and key demographic characteristics of the Project site to provide an understanding of the population potentially impacted by the Project, and includes a consideration of the population characteristics, gender, family composition, religion, ethnicity, and population growth projections.

6.1 PROJECT CONTEXT

The Project is located within Queensland's North West Minerals Province. Centred around Mount Isa and Cloncurry, the North West Minerals Province is one of the world's richest mineral-producing regions and has delivered significant economic benefits to Queensland for decades.

North West Queensland's remoteness and reliance on mining and agriculture means that it is disproportionately vulnerable to external impacts such as fluctuations in commodity prices, highly variable climate conditions and rising energy and transport costs. These impacts challenge new investment in the region and place pressure on existing business and industry.

While fluctuating commodity prices and mining activities have presented challenges for the resources sector, positive economic signs are emerging. These include a significant number of new regional projects and growing global demand for the minerals and rare earths in this highly prospective region.

The environmental values of the region are limited. Whilst the McKinlay LGA is dominated by black soil plains characteristic of the Mitchell Grass Downs Bioregion with largely treeless plains and occasional rivers and gorges, the landscape has been influenced by the invasion of the prickly acacia. The prickly acacia is a thorny small tree which encourages erosion, threatens biodiversity, decreases pastures, and forms dense, thorny thickets that interfere with stock movement. This issue was raised as a key concern for the various township communities throughout the McKinlay LGA.

The four major towns within the primary and secondary Study Areas of most relevance to the Project, comprise: Julia Creek; Richmond, Cloncurry and Mount Isa.

6.1.1 *Julia Creek*

Julia Creek, as it is known today, was the first European Settlement in North West Queensland (McKinlay Shire Council 2018b). Donald and Duncan McIntyre took up Dalgonally Station near Julia Creek in 1862 and brought cattle up from Coopers Creek (At The Creek 2017). Julia Creek was established as a maintenance town for the railway line in 1890 and continued to grow as the railway line was extended. In that time, Julia Creek began to replace McKinlay as the main centre in the Shire, which was reaffirmed when McKinlay Shire Council moved from McKinlay to Julia Creek in 1932 (Centre for the Government of Queensland 2018).

Today, Julia Creek supports a population of over 400 people and is the primary service hub for the McKinlay Shire's population of around 800 people. According to the Queensland Government Population Projections (Queensland Treasury 2019), the

medium scenario sees the population for the McKinlay Shire is forecast to decline to approximately 728 people in 2021, and 668 people in 2031.

The town is historically largely rural, with the dominant land use comprising cattle and sheep grazing; however, it is increasingly becoming a tourist destination along the Overlander's Way between Townsville and Tennant Creek.

Recent innovations in the town's tourist offerings include the upgraded Julia Creek Caravan Park to showcase artesian bath houses, as well as more traditional hotels and motels. Tourists are welcomed to attend weekly (April until September) Bush Dinners, where the locals cook an outback feed under a blanket of stars. Additionally, the town offers free "camping" for recreational vehicles along the water's edge of Julia Creek for up to four days. The Punchbowl waterhole, located on the Flinders River, approximately 45 kilometres north-east of Julia Creek, is used as a spot for swimming, fishing and picnicking for local community members.

In 2019, McKinlay Shire Council released its 2019-2026 Community Plan which outlined its vision for the Shire and townships. The Vision for a sustainable community is:

> *"Retaining the population and attracting young families is critical to the ongoing sustainability of the region. The community seeks to maintain the friendly, family-oriented, and close-knit nature of the communities, while overcoming challenges inherent to living in a remote community.*
>
> *McKinlay Shire Council acknowledge it is important that existing agriculture, tourism and mining industries are maintained, expanded and diversified, including establishment of the proposed St Elmo Mine, to create new business and employment opportunities.*
>
> *Community facilities, infrastructure, services and events are to be maintained, improved and activated, and gaps in provision across the Shire addressed to advance overall quality of life for the community.*
>
> *As pointed out by a questionnaire respondent, 'People are the [shire's] best asset', therefore ongoing support for community involvement and participation is fundamentally important to sustainability of the region"*

During consultation for the EIS, residents of Julia Creek regularly commented about its friendly, close-knit nature being a source of pride for the community and the importance of maintaining this sense of community into the future. This was further integrated in the Community Plan which highlighted strong community spirit and involvement as a key strength, noting that in 2016, more than a third of the population undertook voluntary work and almost 40 percent of Community Plan questionnaire respondents represent one or more community organisations.

Throughout the year, the town hosts numerous events including the annual Julia Creek Dirt n Dust Festival in April and includes one of Australia's toughest triathlons, the Artesian Express Horse Race (the richest horse race in the north west), a PBR Bullride and the iconic Australia's Best Butt Competition.

Julia Creek has a primary school, hospital, public library, visitor and cultural centre, swimming pool, tennis courts, parks as well as a sports centre. During consultation, members of the community stated that they were hopeful that an increase in

population due to the Project, would allow for the re-opening of the high school, as well as facilitate opportunities for post-school education.

Local businesses in Julia Creek include:

- Building and construction contractors;
- Equipment hire, earthworks and civil contractors;
- Workshops and haulage;
- Hotels, motels, caravan parks;
- Grocery stores, cafes, catering; and
- Pharmacy and health services.

During the consultation periods, business owners expressed interest in expanding their customer base through new mining opportunities, in addition to already supporting the local agriculture industry and civil contractors.

The McKinlay Shire has been seeking to achieve a more resilient diversified rural economy including new industries that contribute to its overall vision and sustainability. These goals include:

- Improved community connections through both road, rail and air accessibility as well as telecommunications (mobile and broadband);
- Increased residential, rural lifestyle and commercial land availability within Julia Creek to provide for diversity of housing and living choices, including quality of Council owned housing stocks;
- Develop and maintain a prosperous local economy supported by an increased population and new, sustainable and value adding industries;
- Assist established and emerging mines and energy industries to form mutually beneficial partnerships with the McKinlay Community;
- Develop and maintain a skilled local labour force;
- Establish and promote a thriving tourism industry; and
- Support and sustain the rural sector.

The McKinlay 2019-2026 Community Plan has been developed in order to achieve these goals. This Community Plan outlines 9 priority projects, one of which is:

"3. Develop and enact partnerships and agreements between the proposed Multicom Resources St Elmo Mine and McKinlay Shire Council that clarify expectations and incentives to support the local economy and the community, including:

- *Incorporating recommendations from the Community Plan with the Social Impact Management Plan (SIMP) prepared by Multicom Resources as part of St Elmo Mine approval process*
- *Sourcing local services and products, where possible*
- *Employing locals*

- *Providing incentives to attract workers to relocate to McKinlay Shire and reduce reliance on FIFO*
- *Integrating workers village development in Julia Creek*
- *Providing access to housing prioritising young families willing to relocate to Julia Creek*
- *Provide training programs for local people enabling a larger number of the community to work for St Elmo Mine*
- *Ongoing commitments to providing community grants for key infrastructure projects and other programs that support the community plan"*

Multicom has signed a Memorandum of Understanding with the McKinlay Shire to pursue these common goals. Multicom met with the McKinlay Shire Council throughout 2018 and 2019 and agreed to continue to work to progress accommodation options, as well as undertake a review of associated infrastructure needs in 2019, prior to construction.

Julia Creek is on the Flinders Highway. There is no public transport within the town, although it is connected by the REX air service to Mount Isa, Cloncurry and Townsville; a bus service and twice weekly rail service. Private vehicles are the primary form of transport.

6.1.2 Richmond

Richmond is located approximately 125 km to the east of the Project site. The Richmond area, originally known as Richmond Run, was explored and settled for pastoral use. Presently, the Richmond economy is dominated by the pastoral industry and has been capitalising on its position on the inland tourist route, notably as a location on the dinosaur trail, a marine fossil museum created in homage to the discovery of the Kronosaurus queenslandicus in the Richmond area.

Richmond has a population of around 500 and is serviced by a hospital, school (from Prep to Year 10), swimming facilities, race course, caravan park, tourist information centre. The town has a number of tourist accommodation options including hotels, motels and a caravan park as well as supermarkets and cafes. Like Julia Creek, there is no public transport within the town, although it is connected by the REX air service to Mount Isa, Cloncurry and Townsville; a bus service and twice weekly rail service. Private vehicles are the primary form of transport.

6.1.3 Cloncurry

Cloncurry is approximately 140 km to the west of the Project. Cloncurry was founded on mining (copper and gold), despite the surrounding region generally being settled for its pastures. The extension of the railway also provided population growth in the town and established Cloncurry as "a regional pastoral railhead and a railway depot" (Centre for the Government of Queensland 2018). The discovery of uranium at Mary Kathleen brought wealth to the community in the 1950s. Until the development of Mount Isa in the 1960s, Cloncurry was the administrative centre of the region. The importance of Cloncurry throughout history is evident in it being chosen a destination for the first Qantas air service, and the founding of the Royal Flying Doctor Service in 1928 (Cloncurry Shire Council 2018a). The values of Cloncurry are captured in this extract from the Cloncurry Shire Planning Scheme 2016:

"This is a place that offers a prosperous future for anyone willing to give it a go."

Today, Cloncurry has become, *"the centre of the largest mineral field in Australia together with a major pastoral industry"* (Cloncurry Shire Council 2018b) and is the hub for many nearby mines. Cloncurry supports a population of 2,700 people with cattle grazing being the other major industry and there is a large sale yard in town. The town has two schools (catering for Prep to Year 12 levels), kindergarten, hospital public library, gallery, public swimming pool, showground, racecourse, Flying Doctor museum and a mineral display in the old post office.

As a larger urban centre than Julia Creek, it offers a greater range of services including a large supermarket and retail options; as well as numerous civil and mining contractors with at least twelve such companies in the town; providing a potential source of skilled local labour to the Project.

Like Julia Creek, there is no public transport within the town, although it is connected by the REX air service to Mount Isa and Townsville; a bus service and twice weekly rail service. Private vehicles are the primary form of transport.

6.1.4 Mount Isa

Mount Isa is located about 275 km west of the Project site and with a population of more than 20,000 is the largest town in the region. Mount Isa is situated on the traditional lands of the Kalkadoon people who followed patterns of hunting and gathering, fishing and trade for many thousands of years before the arrival of the first Europeans. Kalkadoon craftsmen were famous for the quality of their stone implements. Hand-crafted tools were traded by the Kalkadoon people with other Aboriginal groups across western Queensland, as far south as Birdsville. Today, Mount Isa City Council celebrates a wealth of talent, success and creativity in Mount Isa's Aboriginal and Torres Strait Islander community.

Mount Isa was founded originally as a mining field in 1923 (Centre for the Government of Queensland 2018a). Samples of mined material found high yielding lead ore, and thus began the mining boom in Mount Isa (Tatham 2018).

Today, Mount Isa is the administrative, commercial and industrial centre for Queensland's North West, and is the second largest city in Australia (by area) (Mount Isa City Council 2016a). The next closest major city is Townsville, approximately 883km further east of Mount Isa (Mount Isa City Council 2016a). As such, it is generally considered that Mount Isa's role as a service centre also serves the townships of Richmond, Cloncurry, Julia Creek, and the Project site, which are all located to the east of Mount Isa.

Mount Isa's Glencore Mount Isa Mines are amongst the world's top ten producers of lead, copper, silver and zinc (MITEZ 2015). The Glencore Mount Isa Mines employs over 3,000 people and contributes approximately $1B each year to the Queensland economy (Glencore 2019a).

Mount Isa has a larger variety of health care and education services than the other towns located within north western Queensland. Its largely mining based economy is well positioned to support the Project in terms of provision of local contractors as well

as potential employees who either wish to be employed on a DIDO basis or relocate to Julia Creek and utilise the Project bus service to and from site.

Mount Isa is supported by daily flights to both Brisbane and Townsville, on Qantas and Virgin Australia, as well as bus and rail services. Community consultation identified however, that there is community concern about the high price of regional airfares to the town, which has the potential to limit transportation options for prospective workers.

6.2 POPULATION AND DEMOGRAPHICS

6.2.1 Population Growth

Population data has been based upon place of usual residence. The population of Julia Creek was 414 in 2016 and is the only township in the primary or secondary Study Areas which experienced population growth between 2011 and 2016, as shown in ***Table 6-1***. Despite this however, it is noted that the change in population in Julia Creek, Cloncurry and Richmond relates to fewer than 100 persons.

Table 6-1 Population Size

Location	2011	2016	Growth No.	% Growth*
Julia Creek	351	414	63	17.95
Cloncurry	2,313	2,254	-59	-2.55
Richmond	522	517	-5	-0.96
Mount Isa	20,570	18,342	-2,228	-10.83
McKinlay LGA	1,050	796	-254	-24.19
Queensland	4,332,739	4,703,193	37,0454	8.55

Source: ABS 2018a and 2018b

*Growth percentage is calculated as the average annual growth rate from 2011 to 2016.

Between 2011 and 2016, the McKinlay shire population fell by around 250 people. This reduction in population was corroborated with comments received during consultation indicating that the area has recently been in decline and associated loss of services. A population increase in the area which would result from the Project, has the potential to stem this decline. This, in turn, would improve the viability of local businesses and service provisions (including health and education). This concept of increased regional economic growth and viability through diversification of employment in McKinlay Shire is further explored through this Chapter. It is noted, however, that recent population projections published by the Queensland Government predicts a further decline in population. In the medium scenario, it is predicted that the McKinlay Shire population will fall to approximately 728 people by 2021, and 668 in 2031 (Queensland Treasury 2019).

Population growth in these areas has been impacted by a combination of weakened commodity prices for key commodities produced in the region and drought conditions.

The Indigenous populations of both Julia Creek (six percent) and Richmond (eight percent) are significantly lower than those in the neighbouring towns of Cloncurry (24 percent) and Mount Isa (17 percent) as outlined in ***Table 6-2.*** Multicom is seeking to

increase local Indigenous participation through a range of actions, outlined in the SIMP (**Chapter 8.0**). Additional baseline data on the local Indigenous employment capacity is provided in **Section 6.4.4**.

Table 6-2 ***Indigenous Population Size***

Location	2011	2016	% of 2016 Population	% Growth*
Julia Creek	20	24	5.9	20
Cloncurry	538	533	23.6	-0.9
Richmond	36	41	7.9	13.9
Mount Isa	3,070	3,042	16.6	-0.9
McKinlay LGA	41	39	4.9	-4.9
Queensland	155,826	186,482	3.9	19.7

Source: ABS 2018a and 2018b

*Growth percentage is calculated as the average annual growth rate from 2011 to 2016.

6.2.2 Age

The median age varies across each locality within the Study Area. As shown in ***Table*** 6-3, the median age has generally increase across the Study Area, McKinlay LGA and Queensland. Julia Creek and the McKinlay LGA experienced a six year difference between the 2011 and 2016 median ages, and it is highlighted that Julia Creek has the oldest median age in comparison to the remainder of the Study Area.

Table 6-3 ***Median Age***

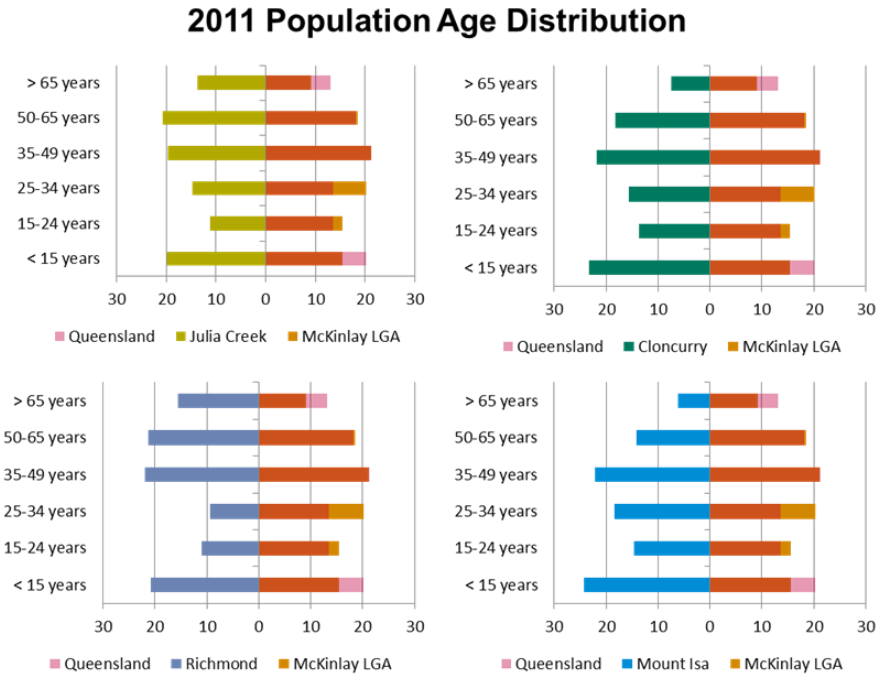
Location	2011	2016	No. Change
Julia Creek	36	42	6
Cloncurry	34	34	0
Richmond	41	38	-3
Mount Isa	30	37	7
McKinlay LGA	33	39	6
Queensland	36	37	1

Source: ABS 2018a and 2018b

Figure 6-1 and ***Figure 6-2*** illustrate the age distribution by age cohort for the Study Areas, compared to the McKinlay LGA and Queensland. In 2011, the largest age cohorts over 15 years old were 35-49 and 50-65 years old in Julia Creek, Cloncurry and Richmond, and 25-34 and 35-49 years old in Mount Isa. This is compared to 35-49 and 50-65 Queensland and 25-34 and 35-49 McKinlay LGA.

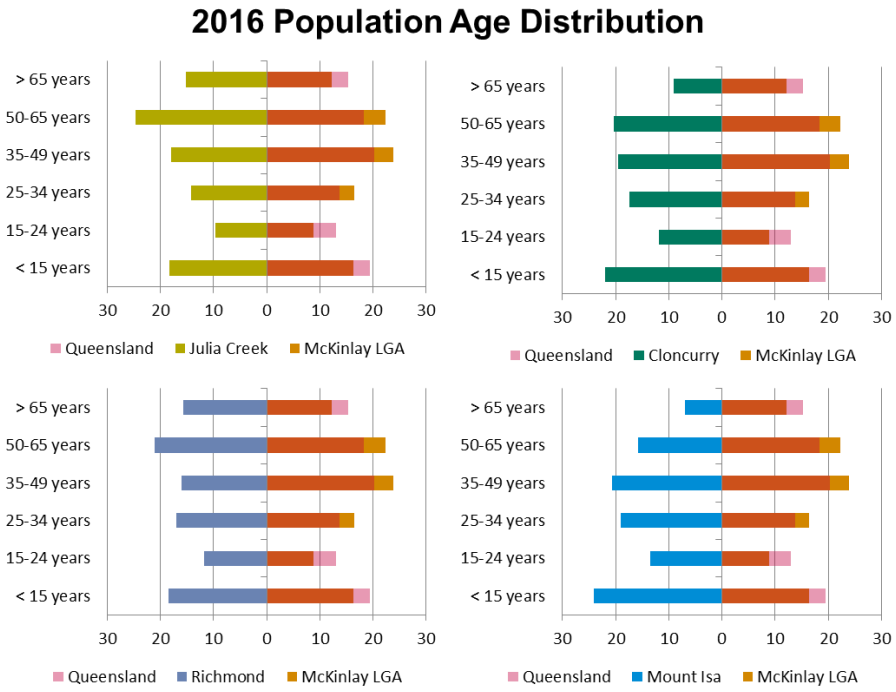
In 2016, the largest age cohorts over 15 years old were maintained in Julia Creek and Cloncurry (35-49 and 50-65 years old), and Mount Isa (25-34 and 35-49 years old). The largest age cohorts in Richmond were 25-34 and 50-65 years old. The largest age cohorts in Queensland and McKinlay LGA were also maintained.

The data suggests that the population across the Study Area is of an age that would lend itself to the creation of a Workforce Management Plan for the Project (refer to **Section 8.4**).



Source: ABS 2018b

Figure 6-1 2011 Population Age Distribution



Source: ABS 2018a

Figure 6-2 2016 Population Age Distribution

6.2.3 *Gender*

The gender distribution is generally 50/50 across the Study Areas. The exception to this being the McKinlay LGA, where the distribution was 60 percent male to 40 percent female in 2011, and 54 percent male and 46 percent female in 2016.

6.2.4 *Family*

Across the Study Area, 'couple family with children' formed the largest type of family structure, followed by 'couple family without children', 'one parent family' and 'other family'. This data is presented in ***Table 6-4*** and ***Table 6-5.*** In addition, it is also noted that 'married' and 'never married' are the most common marital statuses within the Study Area (ABS 2018a). In Julia Creek however, 'Couple family without children' formed the largest type of family structure, consistent with the age profile of the community with families whose children have moved out as they have aged.

When this data is considered against the religious affiliation of persons (i.e. Christians comprised 92.1 percent in 2016), it is considered that the residents of the Study Area are likely to hold more traditional, 'family orientated' values. This understanding is crucial in devising management plans and associated strategies for the Project (e.g. a Workforce Management Plan).

Table 6-4 Number of Family Types, 2011

	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Couple family without children	37	213	57	1,654	152	453,102
Couple family with children	32	227	48	2,183	299	491,200
One parent family	20	90	24	727	53	184,547
Other family	0	12	3	83	8	19,330
Total	89	542	132	4,647	512	1,148,179

Source: ABS 2018b

Table 6-5 Number of Family Types, 2016

	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Couple family without children	38	198	60	1,537	140	481,451
Couple family with children	45	223	40	1,985	285	518,494
One parent family	12	77	22	770	36	201,308
Other family	0	9	3	61	0	19,898
Total	95	507	125	4,353	461	1,221,151

Source: ABS 2018a

6.2.5 *Country of Birth*

Over 70 percent of the population within the Study Area, in 2011 and 2016, were born in Australia, as shown in ***Table 6-6*** and ***Table 6-7***. In Julia Creek, 85 percent of the population stated Australia as their country of birth. This data is consistent with anecdotal evidence obtained during consultation, which identified that Julia Creek's population basis is comprised of a number of extended families who have lived in the area for multiple generations.

Table 6-6 Country of Birth, 2011

	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Australia	306	1,871	442	14,576	849	3,192,115
New Zealand	0	43	10	839	24	192,037
United Kingdom	10	37	9	405	28	214,329
India	0	6	0	105	0	30,258
China	0	0	0	32	0	27,037
South Africa	0	5	0	172	6	35,549
Others	3	86	10	1,488	25	389,426
Not Stated	30	268	50	2,953	118	251,987
Total	349	2,316	521	20,570	1,050	4,332,738

Source: ABS 2018b

Table 6-7 Country of Birth, 2016

	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Australia	343	1,684	425	13,070	669	3,343,819
New Zealand	4	55	11	899	14	201,206
United Kingdom	10	29	5	303	13	212,519
India	0	12	0	155	3	49,145
China	0	8	0	34	0	47,114
South Africa	0	3	0	147	3	40,131
Others	12	69	10	1,438	18	465,761
Not Stated	45	380	51	2,289	71	343,501
Total	414	2,240	502	18,335	791	4,703,196

Source: ABS 2018a

6.3 HOUSING AND ACCOMMODATION

6.3.1 Housing and Accommodation

Table 6-8 and ***Table 6-9*** describe the number of dwellings within the Study Area.

The total number of dwellings increased across the Study Area between 2011 and 2016. In particular, there was an increase of approximately 33 percent in the total number of dwellings in Julia Creek. This increase may be due, in part, to the construction of a number of new housing areas in the township (McKinlay Shire Council 2017).

Table 6-8 Private Dwelling Numbers, 2011

Location	Occupied Dwellings	%	Unoccupied Dwellings	%	Total Dwellings
Julia Creek	151	77.04	45	22.96	196
Cloncurry	778	81.55	176	18.45	954
Richmond	202	83.82	39	16.18	241
Mount Isa	6,286	90.32	674	9.68	6,960
McKinlay LGA	300	77.52	87	22.48	387
Queensland	1,547,303	89.69	177,911	10.31	1,725,214

Source: ABS 2018a and 2018b

Table 6-9 Private Dwelling Numbers, 2016

Location	Occupied Dwellings	%	Unoccupied Dwellings	%	Total Dwellings
Julia Creek	174	66.67	87	33.33	261
Cloncurry	747	75.15	247	24.85	994
Richmond	198	77.95	56	22.05	254
Mount Isa	5,992	82.88	1,238	17.12	7,230
McKinlay LGA	270	66.01	139	33.99	409
Queensland	1,656,831	89.44	195,570	10.56	1,852,401

Source: ABS 2018a and 2018b

Julia Creek and the McKinlay LGA both have unoccupied dwelling rates of around 33 percent (in 2016), significantly greater than the Queensland average of 10 percent. While not all these additional dwellings may be available or in an immediately habitable condition, this additional 23 percent increase above the Queensland average may result in up to 100 currently unoccupied houses in McKinlay LGA. This higher percentage of unoccupied dwellings was anecdotally noted by residents during consultation, who observed that there were a number of empty houses in Julia Creek.

Data received from McKinlay Council indicates that they currently receive rates from 394 residential properties and a further 194 rural properties, the majority of which would be blocks without homesteads or dwellings. Of these, 249 are located in Julia Creek. This total figure is only 15 lower than the McKinlay LGA data and 12 below the Julia Creek ABS data, suggesting the ABS data is reasonably accurate for total dwellings,

but further analysis may be required to understand the state and availability of unoccupied dwellings.

On 18th October 2017, the Queensland Government's Department of Infrastructure, Local Government and Planning announced its approval and preliminary approval of grant funding of more than $7.709 million for North West Queensland projects through the Local Government Grants and Subsidies Program (**LGGSP**). McKinlay Shire Council was successful in securing a total of $797,985 from the State Government for the construction of additional council staff housing. Staff housing is provided to select staff in order to assist in the retention of suitably qualified and experienced staff. The funding covered 60 percent of the total project cost. McKinlay Shire Council funded the balance of the project expenses. The funding supported the construction of two four-bedroom houses, and two two-bedroom units in Julia Creek. This project was completed in mid-2019.

As evidenced in **Section 6.3.2** though **Section 6.3.4**, a public rental market, similar to that which operates in larger urban areas (e.g. realestate.com.au), does not currently actively operate in Julia Creek. Working with the McKinlay Shire Council and the community, Multicom may be able to capitalise on existing dwelling vacancies, however this will need to be developed further as part of their Housing and Accommodation Plan (refer to **Section 8.5** for more information).

As per ***Table 6-9*****,** in 2016 there were also an additional 303 unoccupied dwellings in the neighbouring communities of Richmond and Cloncurry. These dwellings have the potential to support any workers who may wish to reside in these communities and DIDO to the Project, due to the increased range of services (e.g. secondary schools) provided by these townships.

With respect to dwelling structures, 'Separate house' is the most common dwelling type in the Study Area. In 2011 and 2016, 'Separate house' comprised over 76 percent of all dwelling types, which lends itself to the use by various family compositions.

The Study Area does not include any existing apartment style accommodation typologies or worker accommodation villages which can be adapted for Project use, supporting the need for the construction of a new Workforce Accommodation Village for the Project (refer to **Section 8.5**).

Discussions are continuing with the McKinlay Shire Council in regard to the location of any future areas for housing, beyond what is available with existing vacant houses. While additional housing is likely to be required in the future, the Workforce Accommodation Village will provide a short term solution for workers who relocate to the area, while suitable housing is being sourced. This will prevent monopolisation of short-term accommodation options.

Case Study – Temporary Worker Accommodation Village, March 2019

Following extensive damage due to the February 2019 floods, 400 Queensland Rail staff and contractors were required to repair a 200 kilometre stretch of railway line between Richmond and Cloncurry. While over half of these employees stayed in local motels and other accommodation, these options were not adequate to account for the full number of workers that had been deployed to the area (Queensland Government 2019).

To assist with the accommodation shortage, two temporary camps were established that included a 120 bed camp in Julia Creek and a 60 bed camp in Richmond. The camps were established by the Department of Housing and Public Works, who worked closely with Richmond and McKinlay Shire Councils, as well as local businesses including (but not limited to) the Mud Hotel in Richmond and Marwill Pty Ltd in Julia Creek (Queensland Government, 2019).

Marwill Pty Ltd sought hire companies in Mackay and Townsville that could supply 37 dongas – transportable temporary accommodation buildings which comprised of rooms, toilets and shower facilities. The final camp had four laundries, two offices, a kitchen block and dining area, as well as beds for workers to rest and recover after a day's work. The temporary camp is depicted in ***Figure 6-3*** and ***Figure 6-4.*** Julia Creek company Corrina's Catering provided the food, with most items sourced from the local grocery and butcher shops. The local service station put together packed lunches for workers subcontracted to Queensland Rail who were already in town.

Source: Photos courtesy of Marwill Pty Ltd

Figure 6-3 ***Accommodation Camp***

Source: Photos courtesy of Marwill Pty Ltd

Figure 6-4 ***Accommodation Camp Extent***

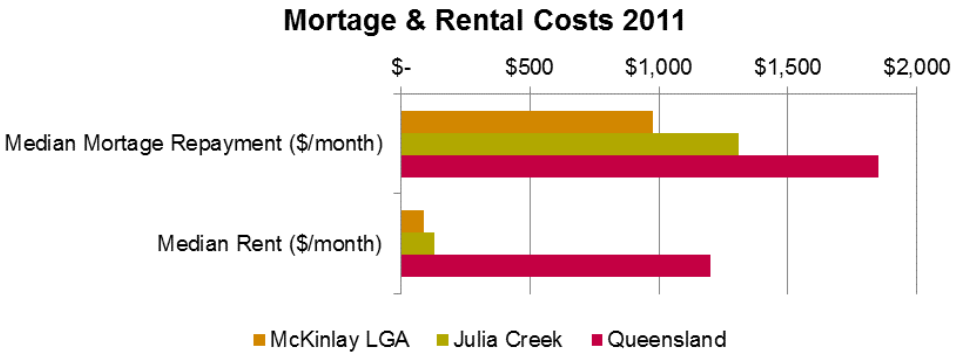
Having the worker camps set up quickly meant a larger workforce could be engaged to get the important freight line opened as quickly as possible. On the completion of the works, the camps were removed.

It is worth noting that the temporary nature of this camp means it does not have the full range of recreational facilities for workers, which would be expected, in the planned workforce village (see also **Section 8.5.2**).

It is also important to note that, although this was a successful short term solution, consultation highlighted concerns regarding workforce behaviour and interactions with the community. Establishment of a long term accommodation facility will therefore need to consider management of workforce behaviour and supporting positive interactions with the local community.

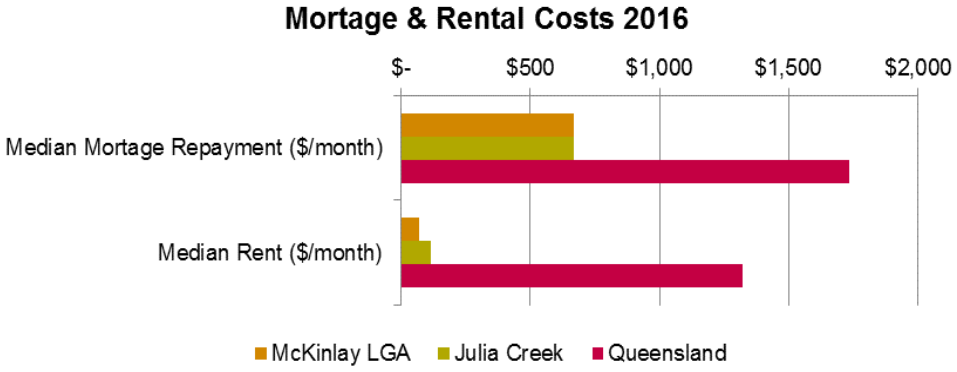
6.3.2 *Mortgage and Rental Costs*

The median mortgage and rental costs were generally higher in Julia Creek than the McKinlay LGA, but lower than Queensland. Specifically, Julia Creek and the McKinlay LGA experienced a decrease in median mortgage repayments (51 percent decrease) as well as median rent between 2011 and 2016, shown in ***Figure 6-5*** and ***Figure 6-6.***



Source: ABS 2018b

Figure 6-5 Julia Creek Mortgage and Rental Costs, 2011



Source: ABS 2018a

Figure 6-6 Julia Creek Mortgage and Rental Costs, 2016

6.3.3 *House Prices*

Median house and rent prices were unavailable for Julia Creek outside of that provided in the ABS Census due to the small sample size of public data. During consultation, residents stated that the current low rental market works on a 'word of mouth' system, or via signs in local shop windows. Total residential sales in Julia Creek have been between two and 11 sales each year since 2008, with the median sales price between $50,000 and $100,000 between 2013 and 2018 (North Queensland Register, 2018).

The median house price in Cloncurry is $125,000, whilst median rent is $300 per week. There was insufficient data to determine the median prices for units (Property Value 2018). Realestate.com.au (2018) determined that the median house price (updated 14 May) is $115,000.

Richmond's median house price is $148,000 (Property Value, 2018). There was insufficient data to determine median house rental and prices for units, as these are not a primary dwelling type.

6.3.4 *Housing Tenure*

Within Julia Creek, there has been an increase in the number of houses owned outright and with a mortgage, between 2011 and 2016. Additionally, rented housing has also increased in this period, as shown in ***Table 6-10*** and ***Table 6-11***.

In comparing this to the McKinlay LGA, there has been a decrease in the number of housing owned outright or with a mortgage, and a negligible difference in the number of housing rented.

Consistent with the consultation feedback that the rental market works on a 'word of mouth' system, in 2016 no properties were rented through real estate agents and 75 percent of properties were rented through 'person not in same household' or 'other landlord type' which includes caravan parks and employee provided accommodation. 11 dwellings, or 15 percent of rented accommodation was provided through 'state or territory housing authority'. This informal rental system also makes understanding housing vacancy rates and availability more difficult.

Table 6-10 ***Housing Tenure, 2011***

2011	Julia Creek	McKinlay LGA	Queensland
Owned Outright	59	128	448,617
Owned with a Mortgage	30	47	533,868
Rented	50	98	513,415
Other Tenure Type	3	12	14,304
Not Stated	10	15	37,099
Total	152	300	1,547,303

Source: ABS 2018b

Table 6-11 ***Housing Tenure, 2016***

2016	Julia Creek	McKinlay LGA	Queensland
Owned Outright	67	114	471,407
Owned with a Mortgage	31	43	558,439
Rented	71	99	566,478
Other Tenure Type	0	3	15,566
Not Stated	5	11	44,944
Total	174	270	1,656,834

Source: ABS 2018a

6.3.5 *Short Term Accommodation*

Within a one hour drive of the Project site (refer to **Section 4.1.2**), are the following short term accommodation options:

- Corella Creek Country Farm Stay;
- Gannon's Hotel Motel;

- Julia Creek Caravan Park;
- Julia Creek Hotel;
- Julia Creek Motel; and
- Julia Creek Villas.

These short-term accommodation options are primarily used for accommodation of tourists; infrastructure workers (e.g. electricity and railway); sales businesses, public service, and social services staff. Vacancy rates are not publicly available, however, anecdotal evidence provided during consultation was that vacancies are generally available, with the exception of the weekend of the Julia Creek Dirt n Dust Festival in April. Furthermore, during consultation some providers indicated they had the opportunity to increase their available rooms, if there was consistent increased demand.

6.4 LABOUR FORCE

6.4.1 LEVEL OF Highest EDUCATIONAL ATTAINMENT

The following statistics relate to the level of highest educational attainment for people aged 15 years and over. As shown in ***Table 6-12*** and

Table 6-13, there has been a general increase in the number of people who have Certificate III qualification or higher, throughout the Study Areas. Notably in 2016, 110 people in Julia Creek, 584 in Cloncurry and 138 in Richmond had Certificate III qualification or higher.

Table 6-12 Highest Level of Educational Attainment, 2011

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA
Bachelor Degree Level and above	19	159	36	1,707	77
Advanced Diploma and Diploma Level	12	83	15	720	36
Certificate III & IV Level	45	296	53	3,220	171
Certificate I & II Level	0	17	4	181	13
Certificate Level (not further defined)	0	21	16	153	12
Year 12 or equivalent	77	590	104	6,018	354
Year 11 or equivalent	15	136	26	1,153	60
Year 10 or equivalent	95	431	139	3,742	233
Year 9 or below	54	278	77	1,481	107
Did not go to school	0	18	6	93	3

Source: ABS 2018b

Table 6-13 Highest Level of Educational Attainment, 2016

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA
Bachelor Degree Level and above	25	191	39	1759	70
Advanced Diploma and Diploma Level	16	99	29	757	33
Certificate III & IV Level	69	294	70	3,248	128
Certificate I & II Level	4	21	8	186	12
Certificate Level (not further defined)	4	19	11	190	14
Year 12 or equivalent	119	658	127	6178	270
Year 11 or equivalent	16	131	23	1017	40
Year 10 or equivalent	113	396	133	3123	202
Year 9 or below	48	201	72	1,162	81
Did not go to school	0	12	0	70	0

Source: ABS 2018a

Further, ***Table 6-14*** shows the number of people attending educational institutions in 2016. It is noted that there is an increase in the number of people attending technical or tertiary institutions in Julia Creek, compared to 2011.

Table 6-14 Number Attending Educational Institution

	Julia Creek		Cloncurry		Richmond		Mount Isa		McKinlay LGA	
	2011	2016	2011	2016	2011	2016	2011	2016	2011	2016
Secondary	8	3	106	102	18	6	1,062	1,073	13	13
Technical or Further Educational Institution	3	3	28	24	5	11	386	317	15	7
University or other Tertiary Institution	0	8	27	39	3	0	325	403	17	14
Other	0	0	6	14	3	0	98	115	8	3
Not Stated	25	39	307	399	64	58	3,161	2,250	117	65

Source: ABS, 2018a & 2018b

6.4.2 Industry of Employment

Table 6-15 and ***Table 6-16*** detail the types and numbers of employees of specific industries, within the primary and secondary Study Area.

The major employment industries in the McKinlay Shire in 2016, which include agriculture, forestry and fishing, public administration and safety, mining and construction, all provide a potential pool of transferable skills for the Project. The possibility of this employee skill transfer was raised during consultation with stakeholders, with a number of the stakeholders identifying that whilst they currently work in agriculture, they have previous experience in the mining industry; one former

miner said he now runs a café in town; and various machinery operators saw their skills as being highly transferable.

In addition, the number of requests relating to potential employment opportunities garnered during the consultation period attest to the experience of the existing McKinlay Shire labour pool.

Within the secondary Study Area, more than 3,000 people in 2016 were employed in the mining industry, and more than 500 people were employed in the construction workforce. Given the quantum of persons with these directly relevant skillsets, it is likely that the secondary Study Area will provide a direct pool of labour for the Project to draw on in its local and DIDO.

It can be observed from the data that there have been declines in mining between 2011 and 2016 in Mount Isa (-330 employees) and McKinlay Shire (-90), which are likely due to operational changes at local mines over this period. These reductions will likely add to the pool of qualified workers who may not currently be working in this industry but may be interested in employment opportunities with the Project.

Table 6-15 Industry of Employment, 2011

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Agriculture, Forestry and Fishing	11	45	31	32	271	55,416
Mining	6	156	4	3,106	140	52,954
Manufacturing	0	35	6	465	9	171,671
Electricity, Gas, Water and Waste Services	3	3	3	133	3	24,829
Construction	22	99	9	562	40	183,780
Wholesale Trade	3	22	10	267	3	74,286
Retail Trade	28	95	27	822	31	217,610
Accommodation and Food Services	12	60	19	514	22	141,857
Transport, Postal and Warehousing	15	216	22	384	23	107,072
Information Media and Telecommunications	0	6	0	62	0	25,357
Financial and Insurance Services	3	14	7	83	3	54,154
Rental, Hiring and Real Estate Services	0	10	0	149	4	37,004
Professional, Scientific and Technical Services	6	9	0	228	9	132,750
Administrative and Support Services	3	26	4	290	9	65,015
Public Administration and Safety	46	135	48	613	55	136,819

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Education and Training	9	72	23	700	10	160,921
Health Care and Social Assistance	15	66	33	943	21	242,559
Arts and Recreation Services	0	4	0	32	3	28,445
Other Services	7	26	9	365	9	78,716
Inadequately described/Not stated	11	40	13	232	16	48,061
Total	**200**	**1,139**	**268**	**9,982**	**681**	**2,039,276**

Source: ABS 2018b

Table 6-16 Industry of Employment, 2016

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Agriculture, Forestry and Fishing	45	58	24	52	190	60,608
Mining	0	193	0	2,776	50	49,997
Manufacturing	0	18	13	259	4	128,787
Electricity, Gas, Water and Waste Services	3	8	4	92	3	23,883
Construction	28	77	16	385	32	191,338
Wholesale Trade	3	18	3	175	7	56,370
Retail Trade	18	76	18	726	28	211,778
Accommodation and Food Services	9	44	13	460	27	156,670
Transport, Postal and Warehousing	11	142	24	330	11	108,083
Information Media and Telecommunications	0	7	0	56	0	25,265
Financial and Insurance Services	0	14	8	67	4	54,286
Rental, Hiring and Real Estate Services	0	6	6	114	3	42,500
Professional, Scientific and Technical Services	0	11	7	155	3	133,652
Administrative and Support Services	0	30	5	286	7	75,336
Public Administration and Safety	50	133	74	556	62	140,164
Education and Training	10	77	17	747	15	192,143
Health Care and Social Assistance	19	56	22	1,004	20	276,945

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Arts and Recreation Services	0	6	0	47	0	33,667
Other Services	5	38	6	348	10	83,470
Inadequately described/Not stated	4	41	9	311	6	91,505
Total	**205**	**1,053**	**269**	**8,946**	**482**	**2,136,447**

Source: ABS 2018a

6.4.3 Local Businesses

There is a range of local businesses located in Julia Creek that provide goods and services to the local and wider McKinlay Region and have the potential to supply the Project. Local businesses include but are not limited to:

- **Short term accommodation providers:** Julia Creek Caravan Park, Julia Creek Villas; Corella Creek Country Farm Stay; Cloncurry Discovery Parks; Gannon's Hotel.
- **Retail businesses:** Elders Rural, Information Centre, Julia Creek News, Pharmacy and Gift Shop; Corina's Catering; Grocery shops; hardware shops, roadhouse tyre distributor; and
- **Contractors:** Bulk haulage, plumbers, construction companies, distribution companies; field mining services, mobile workshops; electrical contractors; grader and water tanker hire.

6.4.4 Occupation

Table 6-17 and ***Table 6-17*** identify the main occupations within the primary and secondary Study Areas.

The qualifications of Labourers, Technicians and Trades Workers and Machinery Operators and Drivers could be seen as being most relevant to the employment needs of the Project for construction, mining, maintenance and process operations. In Julia Creek there are approximately 90 people working in these occupations. Across the secondary Study Area there were almost 5,000 people working in these occupations in 2016.

With the Project offering employment opportunities for initially 200 construction workers and then approximately 150 operational employees, the number of workers in complementary occupations, within DIDO range, is notable. Equally, it could be seen that the employment of 150 workers will only be approximately three percent of this potential employment pool, and it is therefore not expected to cause a major disruption to existing employers.

Table 6-17 Occupation, 2011

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Managers	27	107	27	786	188	245,605
Professionals	10	143	29	1,534	51	385,583
Technicians and Trades Workers	22	160	34	2,249	85	304,564
Community and Personal Service Workers	12	83	26	817	23	202,979
Clerical and Administrative Workers	31	174	31	1,141	47	299,326
Sales Workers	26	67	19	664	26	199,633
Machinery Operators And Drivers	41	234	28	1,668	129	149,322
Labourers	24	145	61	876	119	215,236
Inadequately described/Not stated	7	26	13	247	13	37,030
Total	**200**	**1,139**	**268**	**9,982**	**681**	**2,039,278**

Source: ABS 2018b

Table 6-18 Occupation, 2016

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Managers	58	112	38	673	158	258,509
Professionals	13	148	31	1,431	43	423,917
Technicians and Trades Workers	27	147	34	2,000	53	305,441
Community and Personal Service Workers	18	86	22	872	25	241,956
Clerical and Administrative Workers	23	152	33	954	39	291,317
Sales Workers	12	64	12	641	17	207,795
Machinery Operators And Drivers	26	190	35	1,423	55	147,636
Labourers	36	131	59	781	87	225,268
Inadequately described/Not stated	3	16	10	163	12	34,599
Total	**216**	**1,046**	**274**	**8,938**	**489**	**2,136,438**

Source: ABS 2018a

6.4.5 *INDIGENOUS EMPLOYMENT CAPACITY*

Further analysis was undertaken to understand the capacity of the Indigenous population within the secondary Study Area, and their potential to participate in direct and indirect employment activities with the Project. For this purpose, three Indigenous Areas (IARE) were used to approximate the secondary Study Area.

Table 6-19, Table 6-20 and ***Table 6-21*** show that the total Indigenous population of the area is more than 4,000, with a median age of 22-27, which is suitable for employment, either directly or after further training.

Table 6-19 Indigenous Population, 2011

People	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Aboriginal	2,979	699	272
Torres Strait Islander	101	27	10
Both Aboriginal and Torres Strait Islander	122	19	11

Source: ABS 2018b

Table 6-20 Indigenous Population, 2016

People	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Aboriginal	2,944	671	255
Torres Strait Islander	84	32	11
Both Aboriginal and Torres Strait Islander	122	30	34

Source: ABS 2018a

Table 6-21 Median Age of Indigenous Population, 2011 and 2016

Year	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
2011	21	24	25
2016	22	27	27

Source: ABS, 2018a & 2018b

Of the Indigenous people aged 15 and over, around a quarter of the population (approximately 1,500 people) have completed Year 12 or a higher level of education (refer to ***Table 6-22***). Discussions with DATSIP (Mt Isa) and Indigenous training organisations in Cloncurry confirmed there are a number of existing employment programs aimed at providing increased training for school leavers, such as a Certificate III in mining related fields. These existing programs also target older workers to be job ready. These programs are already in use at neighbouring mines and processing plants and could be readily adapted to the Project (Glencore 2019b).

Table 6-22 ***Indigenous Highest Level of Educational Attainment, 2016***

2016	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Bachelor Degree Level and above	73	15	5
Advanced Diploma and Diploma Level	72	15	9
Certificate III & IV Level	304	62	33
Certificate I & II Level	44	7	9
Certificate Level (not further defined)	38	3	3
Year 12 or equivalent	648	138	54
Year 11 or equivalent	211	42	26
Year 10 or equivalent	501	136	60
Year 9 or below	365	123	41
Did not go to school	43	8	6

Source: ABS 2018a

In 2016 (refer to ***Table 6-23***) approximately 870 Indigenous people were identified to be in full time employment across the region, with approximately 565 either unemployed or underemployed (part time), representing a possible source of employment capacity for the Project. Both DATSIP Mt Isa and regional training bodies confirmed that they have a database of suitably qualified people who are seeking employment opportunities.

Table 6-23 ***Indigenous Employment Status, 2016***

Employment Categories	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Worked full-time	646	161	63
Worked part-time	196	42	26
Away from work	70	29	12
Unemployed	238	48	15
Total in labour force	1,151	278	113

Source: ABS 2016a

Analysis of the relevant occupational categories indicates there are more than 400 Indigenous people currently employed as machinery operators and drivers or technicians and trade workers within the secondary Study Area (***Table 6-24***). While the relevant top industries of employment vary across the IAREs (***Table 6-25***), there are more than 200 Indigenous people currently employed in the mining industry within the secondary Study Area. This indicates a suitable pool of appropriately skilled and experienced workers are available within the greater region. This is consistent with discussions held with organisations in Mount Isa and Cloncurry, indicating there would be a level of available and appropriately skilled Indigenous employees, and that the Project location in Julia Creek would not be a social or cultural barrier.

Table 6-24 ***Top Occupations of Indigenous People, 2016***

	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Machinery Operators and Drivers	158	52	20
Technicians and Trade Workers	155	28	5
Community and Personal Service Workers	152	18	16
Labourers	122	54	25
Clerical and Administrative Workers	108	24	5
Professionals	99	13	7
Managers	52	-	15
Sales Workers	46	12	4
Inadequately described	-	9	-

Source: ABS 2019

Table 6-25 ***Top Responses, Industry of Employment, 2016***

	Mount Isa IARE	McKinlay – Cloncurry IARE	Flinders – Richmond – Dalrymple IARE
Copper Ore Mining	126	26	-
Silver-Lead-Zinc Ore Mining	36	-	-
Road and Bridge Construction	-	13	-
Coal Mining	-	-	3

Source: ABS 2016

A review of information available publicly and provided through the Department of Employment, Small Business and Training has identified a number of training providers located within the secondary Study Area. These include:

Locally based training providers include:

- TAFE Queensland - Mount Isa
- Mount Isa Centre for Rural & Remote - Mount Isa
- Martyr Training Services- Mount Isa
- Jenagar- Cloncurry
- Hilton Training Kym - Mount Isa
- Krause Health and Safety - Mount Isa
- Bakhash Safety - Mount Isa
- Axial Training - Mount Isa and Cloncurry

Data has also been sourced from DATSIP (Mount Isa) and the Black Business Finder, to understand the capacity of existing Indigenous businesses in the Economic Catchment

that may be able to support the Project and provide indirect employment (***Table 6-26***). Where possible, the nature of this business and their ongoing operations have been verified.

The desktop assessment identified no Indigenous businesses were located in either Julia Creek or Richmond, the two closest towns to the Project. There are, however, a number of businesses in the secondary Study Areas of Cloncurry and Mount Isa, consistent with the increased Indigenous populations of these areas. There were a further 65 Indigenous businesses identified in the greater Economic Catchment areas including Hughenden and Townsville. These businesses would be engaged directly as part of the Buy Local Plan (See **Section 8.6**).

Table 6-26 Indigenous Businesses in the Study Area

Location	Type*	Name
Cloncurry	**Civil**	Chong Excavations Pty Ltd
		G & M Watercarts Pty Ltd
		K & R Contracting Pty Ltd
		Curry Contracting & Co Pty. Ltd.
	Engagement	CHEMS (Cultural Heritage & Environmental Management Services) Pty Ltd
	Labour Hire	Western Labour Hire
Hughenden	**Civil**	Carter Sheds Pty Ltd
		Prairie Services Pty Ltd
	Other	Yumba Community Co-Operative Society Ltd
Mount Isa	**Civil**	Fiori's Concreting Services
		Hookey Contracting Pty Ltd
	Construction	Tyrrell Carpentry
		Fast Scaff Pty Ltd
		MI Steel Fabrications
		Tyrrell Carpentry
		BCG Engineering Pty Ltd
	Labour Hire	ADG Corporation
		EIC Labour Hire
		Munns Courier Service
		Myuma Pty Ltd
		Rainbow Gateway Limited
	Training	Kalkadoon Community Pty Ltd
		Martyr Training Services
	Other	Ilyanyu Waru Pty Ltd
		Mcmartins Carrying Service
		MOB FM
		Dugalunji Aboriginal Corporation
		North Star

Location	Type*	Name
		North West Queensland Indigenous Services Aboriginal Corporation
		Phoenix Security Services
		R.J.M. Auto Electrics (Qld) Pty Ltd
		Dugalunji Aboriginal Corp.
		Hookey Logistics Pty. Ltd.
		Phoenix Security Services Pty Ltd
Townsville	**Business**	Robert Paul Designs
		Queensland Signage Solutions Unit Trust
		JENDATA
		Schilling Consultancy
	Civil	Embark Enterprises Pty Ltd
		Hansen Constructions N.Q.
		NQ Biz Wiz
		NQ Smart Coatings
	Construction	Townsville CBD Electrical Pty Ltd
		Jakaba Constructions Pty Ltd
		Moncrieff Cabinetmaking & Joinery
		Morton Plumbing Pty Ltd
		Waanyi Shamrock United Pty Ltd
		R.S. & R.A. Morton Plumbing Pty Ltd
		Absolute Building Supplies
		ACD Constructions Pty Ltd
		Ambrose Style Solutions
		CDM Plumbing Solutions Pty Ltd
		Indigenous Construction Solutions Pty Ltd
		Campbells Kitchen Cabinets
		Synergy Facility Services Pty Ltd
		Shalom Development Services Pty. Ltd.
	Energy	Activate One Pty Ltd
	Engagement	Glenda Dawn Duffy
		Cultural Systems Solutions
	Maintenance	Indigichoice
		Paragon Gardens
	Training	Bindal Sharks United Training Employment Sport And Recreation Aboriginal Corporation
		Sawere Reuben
		Dreamtime Training
		Jangga Operations Pty Ltd

** Note that this is a broad and indicative classification and in some cases, businesses provide multiple services.*

Source: QMI Solutions 2019 & DATSIP, Mount Isa

6.4.6 SKILLS SHORTAGES

Based on the skills required to fulfil the construction workforce and requirements for the workforce at the processing facility, as identified *Error! Reference source not found.* , a desktop study of available information has been carried out to determine potential skill shortages for the Project.

Mining Industry (Queensland)

The Australian Jobs 2018 Report (DJSB 2018a) identified that the Mining industry in Queensland experienced the largest fall over the past five years (down by 15,100), although it remains relatively high by historical standards. Although around 26 percent of total Mining employment in Australia is in Queensland, this only accounts for 2 percent of employment across the state. The findings also identified that 15 percent of the workforce in the area comprising 'Queensland – Outback', which encompasses the secondary Study Area, had a bachelor's degree or higher, with 35 percent having a certificate III or higher VET qualification (DJSB 2018a).

As discussed in **Section 6.4**, 34.7 percent of people in Julia Creek, 35.6 percent of people in Cloncurry, 31 percent of people in Richmond and 41.5 percent of people in Mount Isa had attained a certificate level III or higher level of education (ABS 2016). Furthermore, the major employment industries in the McKinlay Shire in 2016, which include agriculture, forestry and fishing, public administration and safety, mining and construction, all provide a potential pool of transferable skills for the Project (ABS 2016).

National Skill Shortage Research Findings

A summary of the National Occupational Cluster Reports from the Department of Jobs and Small Business (DJSB 2018b) is provided below:

- **Engineering Professionals, Australia, 2017-18** – Key research findings include:
    - Employers in Queensland recruited mechanical engineers in Queensland with relative ease.
    - No shortages of electrical engineers were evident in 2017-18, and shortages have not been identified since 2012.
    - Around half of the civil engineering vacancies were filled and generally attracted a smaller field of candidates than vacancies for other assessed populations. This occupation is now in shortage for the first time since 2012.
    - Employers recruited for mining engineers with relative ease and this occupation was not in shortage in 2017-18. Overall 77 percent of vacancies were filled and there were large fields of applicants.
    - Labour market conditions in the mining industry have strengthened over the last year, reflecting strong commodity prices.
- **Engineering Trades, Australia, November 2018** – Key research found:
    - Employers generally had difficulty filling engineering trades vacancies in 2018.
    - Employers typically sought qualified tradespeople, although around one in 10 were willing to hire unqualified applicants as long as they had experience.

- A number of vacancies remained unfilled despite employers attracting suitable applicants due to a failure to agree on remuneration or conditions.
- The demand for engineering trade workers has strengthened over the past two years, with employment and advertised vacancy numbers rising since recent lows in 2016.
- 49 percent of vacancies were filled, 8.3 applicants on average per vacancy, 45 percent of applications were qualified, 1.1 suitable applicants (on average, per vacancy, 76 percent of qualified applicants were unsuitable.

Queensland Skill Shortage Research Findings

A summary of relevant Queensland Occupational Cluster Reports (DJSB 2018c) is provided below:

- **Construction Trades, Queensland, 2018** – Key findings include:
  - Employers had more difficulty recruiting for construction trades in 2018 compared with the previous year, despite attracting a higher average number of applicants and suitable applicants;
  - There were several instances where employers were unable to fill vacancies despite attracting suitable applicants, this was generally because of a failure to agree on remuneration or the applicant found work elsewhere;
  - 49 percent of vacancies filled, 9.4 applicants (on average, per vacancy), 4.0 qualified applications (on average, per vacancy), 1.8 suitable applicants (on average, per vacancy), 37 percent of employers attracted no suitable applicants; and
  - Employers in regional Queensland had greater difficulty recruiting for construction trades compared with employers in Brisbane.

Queensland Individual Occupational Reports

A summary of relevant Queensland Individual Occupational Reports from the Department of Jobs and Small Business (2018d) is provided below:

- **Civil Engineering Professionals, Queensland, April 2018 (ANZSCO 2332-11,12,14,15)** – Shortages are evident across the state for civil engineering professionals. Employers are reporting declining numbers of suitably qualified and experienced applicants across all fields including civil, geotechnical, structural and transport.
- **Electrical Engineer, Queensland, March 2018 (ANZSCO 2333-11)** - Employers in both metropolitan and regional areas continue to fill the majority of vacancies and are able to choose from multiple suitably qualified and experienced applicants.
- **Mechanical Engineer, Queensland, April 2018 (ANZSCO 2335-12)** - This year, the majority of mechanical engineer vacancies in both metropolitan and regional areas were filled indicating that there is no shortage of the occupation.
- **Electrician (General), Queensland, September 2018 (ANZSCO 3411-11) -** Employers are generally able to fill their electrician vacancies with suitably qualified and experienced candidates, although they noted declining availability of experienced electricians across domestic, commercial and industrial work.

Electricians are generally attracted to working in the mining industry due to high remuneration.

Assessment of Impacts

- **Construction Trades** – Based on the difficulty of the construction industry to attract workers, particularly in regional Queensland, this poses a moderate level of risk for the Project. This is likely to be mitigated through an appropriate remuneration strategy.
- **Engineering –** Based on the labour skillset (i.e. metallurgical, operations and maintenance) requirements for the processing facility in *Error! Reference source not found.* comprising different fields of engineering (i.e. mechanical, electrical, chemical, mining), it can be anticipated that Multicom should not experience difficulty in employing suitable engineers based on the data from 2017-18.
- **Electrician (General)** – As per *Error! Reference source not found.*, it is anticipated that the processing facility will require three (3) FTE electrical supervisors and four (4) FTE electricians. Based on the 2018 data collected on the recruitment/ availability of jobs for electricians in Queensland, it appears that Multicom should not experience difficulty recruiting suitably qualified and experienced candidates.

6.5 INCOME AND EMPLOYMENT

6.5.1 *Employment Status*

The number of full-time employed workers in Julia Creek increased (by 29 persons) between 2011 and 2016, however a decrease of full-time workers (by 145) was recorded in the McKinlay LGA in the same period. A decrease in full-time workers was also recorded in Cloncurry and Mount Isa – as noted in ***Table 6-27*** and ***Table 6-28***.

While the pool of unemployed workers in the region for the Project to employ is relatively low (less than 100 people across Julia Creek, Cloncurry and Richmond), the pool of under-employed people is three times this size with around 300 people in part time employment in these three nearest towns.

The total number of people who are either unemployed or employed on a part time basis within the secondary Study Area in 2016 was 2,700. While not all of these people will be suitably qualified to work in the Project, it does present a pool of potential employees within the region that is larger than the operational requirements.

Table 6-27 Employment Status, 2011

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Worked full-time	146	821	169	7,629	556	1,302,955
Worked part-time	37	197	65	1,667	73	611,299
Away from work	9	54	15	428	31	80,394
Not stated	6	66	21	256	18	44,630
Unemployed	6	63	9	451	12	131,797
Total in labour force	**204**	**1,201**	**279**	**10,431**	**690**	**2,171,075**

Source: ABS 2018b

Table 6-28 Employment Status, 2016

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Worked full-time	175	790	187	6,655	411	1,333,193
Worked part-time	34	197	64	1,719	56	691,751
Away from work	6	39	11	390	14	73,004
Not stated	3	22	8	184	11	38,511
Unemployed	13	64	11	577	17	175,665
Total in labour force	**231**	**1,112**	**281**	**9,525**	**509**	**2,312,124**

Source: ABS 2018a

6.5.2 Median Weekly Income

Median total household, family and personal incomes in Julia Creek were lower than that of the McKinlay LGA in 2011 and 2016. This is detailed in ***Table 6-29*** and ***Table 6-30***. Incomes have also increased throughout the Study Area between both periods.

Table 6-29 Median Income, 2011

2011	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Median total household income ($/weekly)	972	1,574	946	2,103	1,152	1,235
Median total family income ($/weekly)	1,312	1,917	1,166	2,421	1,410	1,453
Median total personal income ($/weekly)	742	833	631	949	836	587

Source: ABS 2018b

Table 6-30 Median Income, 2016

2016	Julia Creek	Cloncurry	Richmond	Mount Isa	McKinlay LGA	Queensland
Median total household income ($/weekly)	1,069	1,773	1,187	2,141	1,135	1,402
Median total family income ($/weekly)	1,483	2,227	1,437	2,390	1,537	1,661
Median total personal income ($/weekly)	763	947	671	1,008	834	660

Source: ABS 2018a

6.6 SOCIO-ECONOMIC INDEX

The social fabric of the surrounding communities within the Project site is an important consideration in order to determine the potential for investment in future Project-directed social initiatives. An examination of the social fabric includes undertaking an analysis of the socio-economic indexes, safety, and security apparent within the Project site.

6.6.1 Socio-Economic Indexes

The Socio-Economic Index for Areas (**SEIFA**) is a product developed by the Australian Bureau of Statistics that ranks geographic areas in Australia according to relative socio-economic advantage and disadvantage. SEIFA is commonly used throughout Australia by various practitioners to determine areas that require additional funding or services; identify business and commercial opportunities; and to better understand the relationship between socio-economic advantage and disadvantage, and health and educational outcomes.

SEIFA comprises a suite of four summary indices, created from Census data:

- **Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)**: is a continuum of advantage (high values) to disadvantage (low values) and is derived from census variables related to both advantage and disadvantage.
- **Index of Relative Socio-economic Disadvantage (IRSD):** focuses primarily on disadvantage and is derived from census variables such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- **Index of Economic Resources (IER):** focuses on financial aspects of advantage and disadvantage, using census variables relating to residents' incomes, housing expenditure and assets.
- **Index of Education and Occupation (IEO):** includes census variables relating to the educational attainment, employment and vocational skills.

Table 6-31 and ***Table 6-32*** provide detail as to the SEIFA Indices for the Study Area, compared to Queensland and Australia. It is noted that the equivalent Richmond UCL was comprised of three SA1 datasets and Cloncurry UCL was comprised of seven SA1 datasets. Due to the nature of the calculations made, these SA1 datasets cannot be combined to form their equivalent UCL counterparts. Furthermore, each type of data can only be compared against its own type, for instance SA1 data can only be compared against other SA1 data, and not SA2 or LGA data.

SEIFA rankings are ordered from the lowest score to highest score, where the lowest score is given a rank of 1 (ABS 2013). As SEIFA indexes are provided to give point-in-time comparisons of data, the ABS does not recommend undertaking longitudinal analysis (comparing individual areas across time) (ABS 2013).

As shown in the data, the SA1 QLD ranks are spread over a large range. It is highlighted that the SEIFA scores are attributed to a number of factors, such as population size and age and the remote location of the Study Area. Notably, Julia Creek contains limited facilities, does not have a high schools and has more limited healthcare facilities and other resources.

As SEIFA is a score that is standardised against a mean of 1,000 with a standard deviation of 100, the average SEIFA score will be 1,000 and the middle two-thirds of SEIFA scores will fall between approximately 900 and 1,100. In the primary Study Area, all scores for Julia Creek and McKinlay Shire fall within the middle two thirds of distribution. Only a few outlying data points, particularly relating to education, occur within the secondary Study Area in Cloncurry and Richmond.

Table 6-31 SEIFA, 2011

Location	Index of Relative Socio -Economic Advantage and Disadvantage			Index of Relative Socio-Economic Disadvantage			Index of Economic Resources			Index of Education and Occupation		
	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank
Julia Creek (SA1)	928	11,405	2,323	951	13,207	2,611	961	16,431	3,343	961	16,431	3,343
Richmond UCL (SA1)	*No Data*											
Richmond UCL (SA1)	909	9,022	1,794	933	10,731	2,081	946	13,792	2,809	946	13,792	2,809
Richmond UCL (SA1)	932	11,986	2,465	966	15,410	3,084	973	18,794	3,808	973	18,794	3,808
Cloncurry UCL (SA1)	993	22,464	4,756	1,009	23,713	4,942	1,014	27,531	5,458	1,014	27,531	5,458
Cloncurry UCL (SA1)	1,002	24,176	5,132	1,009	23,656	4,928	958	15,966	3,252	958	15,966	3,252
Cloncurry UCL (SA1)	855	4,050	765	862	4,480	775	845	3,250	586	845	3,250	586
Cloncurry UCL (SA1)	942	13,326	2,730	965	15,195	3,046	947	14,021	2,856	947	14,021	2,856
Cloncurry UCL (SA1)	935	12,432	2,558	944	12,193	2,397	982	20,628	4,153	982	20,628	4,153
Cloncurry UCL (SA1)	893	7,246	1,430	887	6,152	1,099	880	5,575	1,090	880	5,575	1,090
Cloncurry UCL (SA1)	974	18,678	3,942	983	18,269	3,732	940	12,890	2,628	940	12,890	2,628
McKinlay (LGA)	1,001	412	64	1,023	447	69	1,030	473	68	942	224	52
Mount Isa (SA2)	990	941	225	998	941	222	990	890	215	942	642	190

Source: ABS 2018c

Table 6-32 SEIFA, 2016

Location	Index of Socio -Economic Advantage and Disadvantage			Index of Relative Socio-Economic Disadvantage			Index of Economic Resources			Index of Education and Occupation		
	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank	Score	AUS Rank	QLD Rank
Julia Creek (SA1)	935	13,382	3,055	951	13,951	3,037	930	11,964	2,614	937	15,210	3,618
Richmond UCL (SA1)	*No Data*											
Richmond UCL (SA1)	905	9,170	2,056	917	9,602	2,018	913	9,467	2,100	872	5,690	1,291
Richmond UCL (SA1)	942	14,508	3,317	967	16,384	3,539	962	17,559	3,799	933	14,589	3,468
Cloncurry UCL (SA1)	993	24,290	5,516	1,016	26,340	5,694	1,022	30,643	6,307	918	11,997	2,840
Cloncurry UCL (SA1)	997	25,005	5,675	1,012	25,422	5,499	945	14,639	3,189	991	25,893	6,075
Cloncurry UCL (SA1)	874	5,708	1,241	879	6,013	1,191	848	3,616	761	876	6,031	1,366
Cloncurry UCL (SA1)	1,004	26,618	5,999	1,032	30,496	6,576	971	19,474	4,168	979	23,667	5,568
Cloncurry UCL (SA1)	974	20,406	4,628	1,006	24,106	5,209	1,027	31,750	6,535	863	4,728	1,028
Cloncurry UCL (SA1)	885	6,875	1,529	876	5,766	1,142	868	4,936	1,053	860	4,409	948
Cloncurry UCL (SA1)	986	22,734	5,173	993	21,221	4,587	942	14,118	3,078	992	26,236	6,148
McKinlay (LGA)	992	398	72	1,010	407	71	1,008	392	67	971	334	68
Mount Isa (SA2)	974	869	216	991	897	218	969	681	179	940	595	180

Source: ABS 2018c

6.7 SOCIAL INFRASTRUCTURE AND SERVICES

Relevant social infrastructure and services present at the Project site and surrounding area is detailed in in this section and is inclusive of the various health, educational, community and emergency services.

6.7.1 Hospitals and Health Services

At a federal level, the Project site is located within the Western Queensland Primary Health Network (**PHN**), PHN305. At a state level, the Project site is located within the North West Hospital Health Service catchment, depicted in ***Figure 6-7***. There are 11 Hospitals and health services within the North West catchment.

Source: Queensland Health 2014

Figure 6-7 North West Hospital Health Service (State)

Additionally, the Townsville Hospital and Health Service, which encompasses Richmond, is located to the east of the Project site and depicted in ***Figure 6-8****Error! Reference source not found.***.** Relevant hospitals within this catchment for the Project include:

- Hughenden Health Service;
- Richmond Health Service; and
- The Townsville Hospital.

Source: Queensland Health 2018

Figure 6-8 Townsville Hospital and Health Service (State)

The three most relevant hospitals and health services for the Project are the Mount Isa Base Hospital, Cloncurry Multipurpose Health Service and McKinlay Shire Multipurpose Health Service (previously known as Julia Creek Hospital). Both Julia Creek and Cloncurry Multipurpose Health Services contain fewer than 50 beds and have some emergency services available. Mount Isa Base Hospital contains 80 beds and has an emergency department. A summary of the key information and services provided in these hospitals is provided in ***Table 6-33***.

Table 6-33 Regional Hospital and Health services

Services	Julia Creek Multipurpose Health Service	Cloncurry Multipurpose Health Service	Mt Isa Base Hospital
Hospital beds	7 bed in-patient facility	15 bed general ward	80 bed facility
Staffing	10 FTE roles	19 FTE + ancillary staff	351
Hospital Services	24 hour Emergency services – resuscitation and stabilisation General management – medical and aged patients General practice clinic Outpatient clinic Basic radiography Pathology samples Video conferencing available for consultations	Emergency services, inpatient facility, a residential aged care facility, an emergency department and an outpatient department	Medical, Surgical Intensive Care Paediatric Obstetric & Gynaecology 24 Hour Emergency Service Allied Health Palliative Care Oral Health Royal flying doctor base
Allied Health	Physiotherapy	Pharmacist, Dentist Podiatry, Dietetics, Hearing Health, Speech Pathology Physiotherapy	Dietetics, Medical Imaging Dentistry, Occupational Therapy Pathology, Pharmacy, Physiotherapy, Podiatry, Speech Pathology, Social work
Visiting services	Paediatrics, Mental Health, Dietetics, Physiotherapy, Pharmacy, Podiatry, Oral Health, Child Health, Occupational Therapist	Renal health services, Flying Surgeon, Flying Obstetrician/Gynaecologist Nutritionist, Women's Health Mental Health Child Health Paediatrics, Respiratory Medicine, Aged Care Assessment, Palliative Care Services	Cardiology, Flying Obstetrician Urology, Orthopaedics, Gastroenterology, Radiology Neurosurgery, Endocrinology Ophthalmology, Respiratory Medicine, Radiation Oncology Maxillo-Facial Surgery, Child Cardiology, Paediatrics Genetics, Reconstructive Surgery
Community health/ outreach	McKinlay Bush nurse (for McKinlay and surrounding townships), McKinlay Community Nurse	Medical centre and pathology collection	Chronic disease Aged Care Sexual health Aboriginal and Torres Strait Islander Health Child and Family health Home and Community Care

Services	Julia Creek Multipurpose Health Service	Cloncurry Multipurpose Health Service	Mt Isa Base Hospital
Aged Care	Two bed aged care residential facility 12 independent living aged care units managed by McKinlay Council	10 bed residential aged care facility	Aged care assessment team

As announced by the Queensland Government in June 2018, (Queensland Government 2018), there are plans to prioritise health funding in the North West region over the 2018-2019 period. This includes:

- Continuing the $8.4 million replacement multi-purpose health facility at Julia Creek;
- $1.2 million for initiatives aimed at retaining the rural and remote nursing workforce;
- $456,000 growth funding to meet projected increase in activity including emergency department presentations, elective surgery and outpatients; and
- $221,000 for community mental health treatment services.

At the time of the announcement, the Queensland Health Minister noted that the new Julia Creek Hospital will deliver more services with a modern emergency room, outpatients, pharmacy, pathology as well as staff amenities. The hospital will have an integrated care model accommodating primary care, hospital care and aged care all under one roof. The facility will be a new build on the existing site, with the new building to be built first and the old building demolished afterwards. The facility opened in 2019.

During community consultation, there was discussion of this new facility and its ability to provide improved service to the Project, compared to the existing facilities. Additionally, information about the potential for the Project to proceed had been available during the planning for this new facility.

Table 6-34 shows the number of patient admissions to each hospital. A general decline in the number of admissions has occurred between 2011-12 and 2016-17 for Julia Creek and Cloncurry Hospital, with the converse observed at Mount Isa Base Hospital. A full breakdown of admission types is provided in ***Annex B***. Of these admissions, the majority have been due to emergency medical conditions. No information on waiting times for surgery was able to be obtained.

Table 6-34 Number of Admissions Per Hospital

Hospital	2011-12	2012–13	2013–14	2014-15	2015–16	2016–17
Julia Creek Hospital	213	279	174	161	160	149
Cloncurry Hospital	1,064	990	999	1,006	813	765
Mount Isa Base Hospital	6,857	6,745	6,917	6,726	6,933	7,566

Source: Australian Institute of Health and Welfare 2018

General Practitioners

In 2011, 249 General Practitioners (GPs) and 60 full-time service equivalents (FSE) were located in Western Queensland (ABS, 2011). The Queensland FSE average is 101.3, with very remote areas at 61.5 (DoH, 2017). The GP:Patient ratio decreases as an area's

remoteness increases, meaning there are fewer GP's per person in regional and remote settings (RACGP 2018). The number of FSE's in Western Queensland is very similar to that of very remote areas, which is reflective of Julia Creek and surrounding towns.

Emergency Care

Emergency Care hospital data for February 2019 for Julia Creek, Cloncurry and Mount Isa hospitals is provided in ***Table 6-35***. It is noted that data was unavailable for Richmond.

As shown in ***Table 6-35***, 84 – 100 percent of patients at these hospitals are seen within clinically recommended times, with 100 percent of patients at Julia Creek hospital being seen within the recommended times. Additional information for quarterly hospital activities for October, November and December 2018, provide a longer term view, as shown in ***Table 6-36***.

Table 6-35 ***Emergency Care Hospital Data, February 2019***

Indicators	Julia Creek	Cloncurry	Mount Isa
Number of Attendances	47	303	2,243
Variation in Number of Attendances	-42%	15%	4%
Patients seen within clinically recommended times	100%	96%	84%
Median waiting time to treatment (in minutes)	2	5	19
Percentage of patients who did not wait for treatments	2%	2%	8%
Patients admitted from the Emergency Department	9%	18%	17%
Admissions to hospital within four hours	75%	91%	50%
Patients whose ED stay was within four hours	89%	95%	83%
Number of patients who left after treatment commenced	0	0	33
Percentage of patients who left after treatment commenced	0%	0%	1%
Number of patients who did not wait for treatment	1	5	176

Source: Queensland Health, 2019

Table 6-36 ***Quarterly Hospital Activity Information for October, November and December 2018***

Indicators	Julia Creek	Cloncurry	Mount Isa
Patient Admissions	20	211	2,158
Same Day Admissions	5	70	1,011
Overnight Admissions	15	141	1,147
Emergency Admissions	19	204	1,304
Outpatient Services	233	1,754	9,131
Babies Born	0	0	103

Source: Queensland Health 2019

6.7.2 Mental Health

The Mental Health Services available within the key locations considered for the Project include:

- McKinlay Shire MPHS – Julia Creek;
- Cloncurry Community Health – Cloncurry;
- North and West Remote Health – Mount Isa;
- Mount Isa Alcohol Tabaco and Other Drugs Services & Homeless Health Outreach Team – Mount Isa;
- Mount Isa Mental Health Service – Mount Isa;
- Headspace – Mount Isa;
- Richmond Multi-Purpose Health Service – Richmond; and
- Hughenden Multi-Purpose Health Service – Hughenden.

The National Rural Health Alliance (2017) highlights that people in rural and remote areas face a range of stressors unique to living outside major cities, and that there is a correlation between rates of self-harm and suicide increase with remoteness. Risk factors contributing to mental health issues include rates of smoking, drinking and drug use; fewer employment opportunities and greater exposure and vulnerability to natural disasters. The Project would assist in mitigating some of these factors, providing increased access to local employment, providing increased community resilience against natural disasters. To support mental health treatment in rural areas, an increase in funding for community regional mental health treatment services was announced by the Queensland Minister for Health in June 2018 (Queensland Government 2018).

Despite this, studies have found that people in rural areas regularly score better on indicators of life satisfaction and feelings of wellbeing, compared to people in major cities, and may be due to the positive aspects of rural life, and the interconnectedness of people living there. Generally, rural areas experience higher levels of civic participation, social cohesion, social capital, and volunteering and informal support networks between neighbours, friends and the community (National Rural Health Alliance 2017).

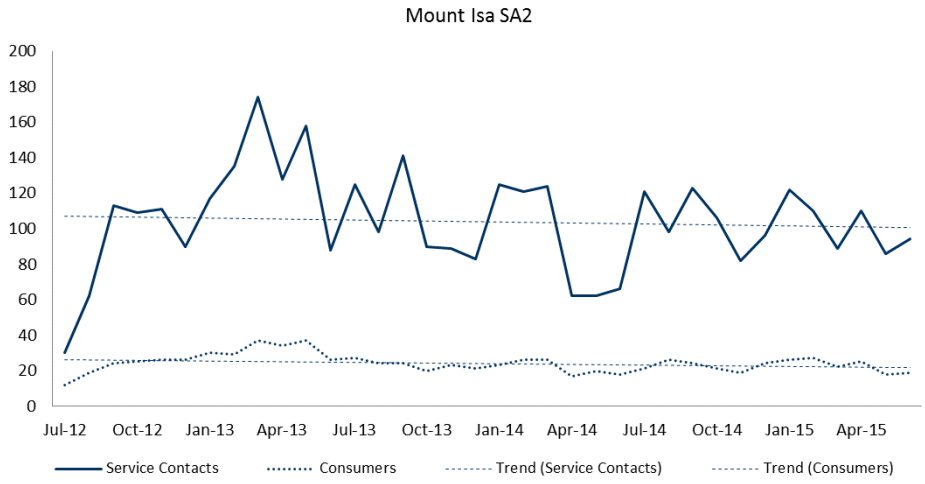
This resilience was evident during consultation carried out in March 2019, with those impacted by the February 2019 floods. A key example of this is the Queensland Country Women's Association in Julia Creek who are developing a space which will be available for mental health professionals to work from (ABC 2019).

Data is not available at a level which demonstrates the particular impacts around the Julia Creek primary Study Area. However, it is available at a more regional scale:

- Mount Isa SA2 – an area similar to the Mount Isa City Council;
- Mount Isa Region SA2 – an area between the Queensland boarder, Mount Isa and Cloncurry; and
- Northern Highlands SA2 which covers the region between Mount Isa to Hughenden.

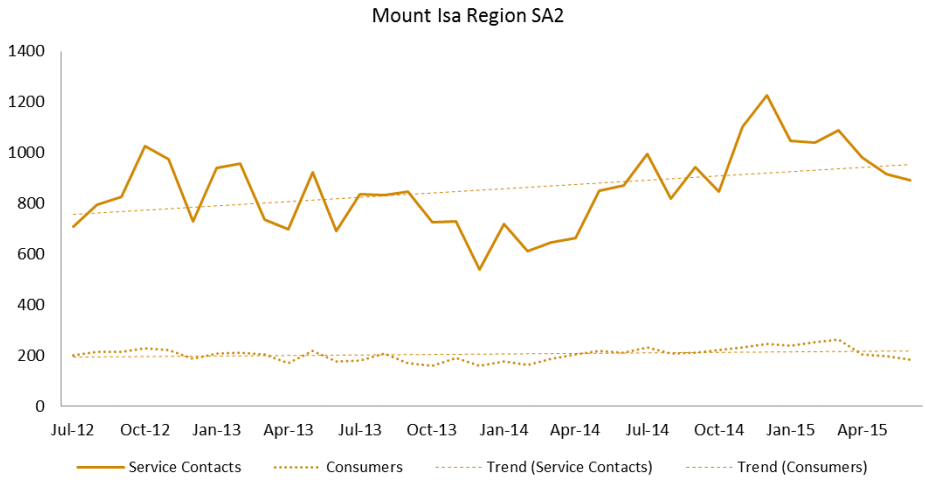
For these areas, the number of service contacts within the Mount Isa SA2, Mount Isa Region SA2, and Northern Highlands SA2 fluctuated between July 2012 and June 2015. Generally, the trend for Service Contacts and Consumers in the Mount Isa SA2 was in decline; stable

in the Northern Highlands SA2 and increase in the Mount Isa Region SA2. This data is depicted in ***Figure 6-9***, ***Figure 6-10*** and ***Figure 6-11***. It is anticipated that the Project would improve access to mental health services at a local scale by providing employees and their families with access to an Employee Assistance Program (**EAP**), a resource not currently available in the region.



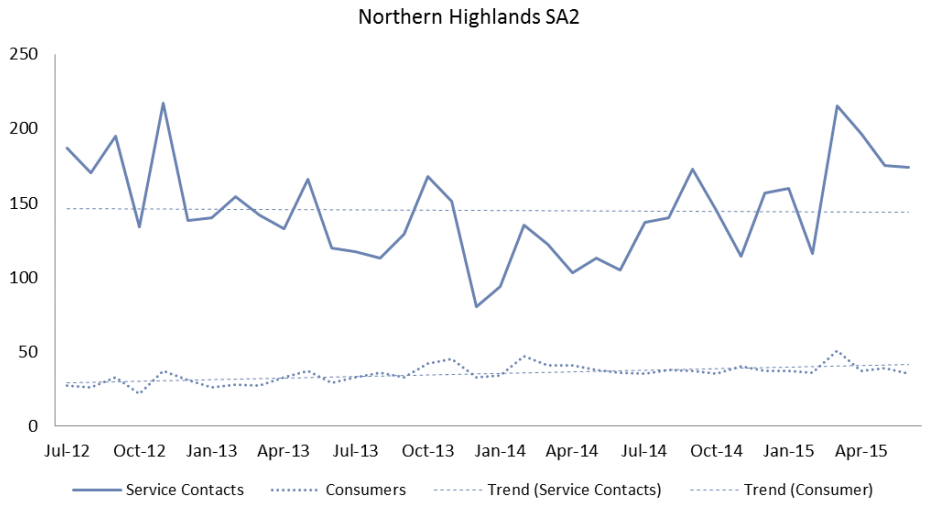
Source: Queensland Health n.d.

Figure 6-9 Service Contacts, Mount Isa



Source: Queensland Health n.d.

Figure 6-10 Service Contacts, Mount Isa Region



Source: Queensland Health n.d.

Figure 6-11 Service Contacts, Northern Highlands

6.7.3 Neighbourhood and Community Centres

The nearest neighbourhood and community centre (within 200km of Julia Creek) is the Cloncurry Community Support Service (Queensland Government 2017). Cloncurry Community Support Service provides free information, referral and counselling and support services (Centacare 2018).

6.7.4 Schools / Education

Primary Study Area

Julia Creek has one Early Learning Centre which is run by McKinlay Shire Council, catering for children aged 12 months to 5 years. It has 21 places and offers a fully accredited and registered Kinder program as well as an early years program for 1-3 year olds. The Australian Childcare Alliance (Urban Economics 2017) recommends that a target planning threshold in the order of 27 places per 100 children aged 0 to 4 years is appropriate. In Julia Creek, where there were 43 children aged 0-4 years in 2016, there is presently a ratio of 48 places per 100 children which is substantially higher than the planning thresholds. This indicates that the Childcare centre has capacity to support population growth.

Additionally, Julia Creek has a free weekly playgroup for pre-school aged children. During consultation discussions it was advised that the Julia Creek ELC had current capacity for additional placements and was also planning to upgrade its facilities in a new location. However, Julia Creek does not have an after-school care program, which was identified in consultation as a factor inhibiting people accessing full time employment. McKinlay Shire Council in partnership with the Queensland State Government has undertaken a feasibility study and business case for the development of an Early Learning Years Hub which would see childcare, before and after school as well as child and youth allied health services collocated. This project is currently in the design phase prior to advocating for funding.

Julia Creek is within the primary school catchment of the Julia Creek State School. The school has been operating since 1911, with a secondary school expansion in 1963, and an early education centre expansion in 1980 (Julia Creek State School 2019).

For primary school aged children, the Julia Creek State School currently has three teaching staff including two classroom teachers and principal as well as four teacher aides, with a

current enrolment of approximately 40 students (McKinlay Shire Council 2019a). The current ratio of teachers (excluding the Principal) to students is about 1:20 (McKinlay Shire Council 2019a). This is well below the target ratio of 1:25 for class sizes (within Queensland) at primary schools, allowing for the composite nature of the classes (DoE, 2018). Consultation with the School Principal in May 2020 highlighted that the school had experienced a substantial increase in enrolments in 2020, taking enrolments up to 50. This was through a combination of students transitioning from the School of The Air to classroom and a larger contingent of prep students. Consultation indicated that there is sufficient capacity in the school for additional students, including additional classes, with sufficient planning. This is supported through the population data with a reduction of primary school aged students from 71 in 2001 to 42 in 2016. This, combined with consultation indicates that there is sufficient infrastructure capacity with the school to support growth alongside resource planning.

The secondary school component of the Julia Creek State School is no longer operational in a traditional capacity, however in 2015 McKinlay Shire Council launched a Middle School in conjunction with Mount Isa School of the Air (**MISOTA**) and Julia Creek State School. The Middle School provides for secondary students in Year 7-10 not attending boarding school (McKinlay Shire Council 2019b). Students are enrolled with MISOTA through distance education and attend Julia Creek State School in a separate room specifically for secondary students and are supported by a teacher's aide during class time (McKinlay Shire Council 2019b). In 2020 there were 3 students enrolled in classroom based MISOTA.

The McKinlay Shire Council has identified the re-opening of the high school as one of its ten priority projects, stating:

> *"Commence and continue ongoing work and incentives to retain young people in the Shire. In particular, lobby State Government for the reopening of the local High School*."

Through the consultation carried out, it was made apparent that there is a high level of community expectation around the potential for the Project to facilitate enough of a population increase in Julia Creek to allow for the re-opening of the Julia Creek High School. The reopening of the high school would allow children to remain in Julia Creek, rather than be sent off to boarding school for Year 7 onward (i.e. age 11 or 12). Further, opportunities to provide training and apprenticeships (see **Section 8.4.4**) as part of the Project may also extend this continued learning beyond school age.

In addition, in partnership with Julia Creek State School, McKinlay Shire Council conducts a Sporting Schools Program. This consists of students participating in activities three days per week at the Indoor Sports Centre, Kev Bannah Oval or Julia Creek Swimming Pool depending on the season. The Council also offers a school holiday program.

MISOTA is also available for children who live on remote properties that are not within close proximity to any public schools.

Secondary Study Area

The nearest Secondary schools to Julia Creek are located in the secondary Study Area. These schools are:

- Richmond State School (Prep up to Year 10);
- Cloncurry State School (Prep up to Year 12); and

- Spinifex State School – Mount Isa (Junior Campus – Year 7 to Year 9, Senior Campus – Year 10-12).

Boarding schools located close to Julia Creek include schools in Townsville, Mount Isa and Charters Towers. The Department of Education, Training and the Arts provides assistance to eligible Queensland parents whose children must board away from home to attend school on a daily basis. This is due to:

- Their homes being geographically isolated; and
- They do not have reasonable daily access to a government school with the appropriate level of primary, secondary or special schooling.

Special and non-Sate schools situated in the surrounding area follow.

- St Joseph's Catholic School (Cloncurry);
- St Joseph's School (Mount Isa);
- Good Shepherd Catholic College (Mount Isa);
- St Kieran's Catholic School (Mount Isa); and
- Mount Isa Flexible Learning Centre.

North Queensland Technical and Further Education (TAFE) have 12 facilities within the region. Two of these, Cloncurry and Mount Isa, are located within the secondary Study Area.

6.7.5 Australian Early Development Census

The Australian Early Development Census (**AEDC**) collects national data on the developmental health and wellbeing of all children starting school, through approximately 100 questions across five key domains, described in the ***Table 6-37***.

Table 6-37 AEDC Domains

Domain	Description
Physical health and wellbeing	Children's physical readiness for the school day, physical independence and gross and fine motor skills.
Social competence	Children's overall social competence, responsibility and respect, approach to learning and readiness to explore new things.
Emotional maturity	Children's pro-social and helping behaviours and absence of anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.
Language and cognitive skills (school-based)	Children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy.
Communication skills and general knowledge	Children's communication skills and general knowledge based on broad developmental competencies and skills.

Source: Australian Early Development Census 2018

The Study Area falls under three AEDC communities, being:

- **Cloncurry/McKinlay Community:** Cloncurry, Julia Creek, Kynuna, McKinlay, and Selwyn.
- **Richmond:** Richmond-North West.
- **Mount Isa:** Happy Valley, Parkside, Healy, Hilton, Miles End, Mount Isa City, Mount Isa Surrounds, North Mount Isa, Spreadborough, and Townview.

AEDC development tables are available at ***Annex C***. Notably, no data was available for Richmond in 2012.

Based on the AEDC tables, there is an overall decrease in AEDC population in Cloncurry/McKinlay and Mount Isa, with a minor increase in Richmond in the 2009 to 2015 period. The respective was observed for the Indigenous populations of the aforementioned AEDC communities. Early education emerging trends found that in Cloncurry/McKinlay and Mount Isa AEDC communities, children in preschool or kindergarten formed the largest cohort across 2009 to 2015. In Richmond, the largest cohort was children in day care in 2009, and in 2015 this changed to children in preschool or kindergarten.

6.7.6 NAPLAN

The National Assessment Program – Literacy and Numeracy (**NAPLAN**) conducts annual assessments for Year 3, 5, 7 and 9 students across Australia. Based on schools in the secondary Study Area, it was found that although the enrolment by school varied, the total enrolment of students in the Area was relatively static. This is evidenced in ***Table 6-38.***

Table 6-38 NAPLAN Enrolments

Location	2011	2012	2013	2014	2015	2016	2017
Julia Creek State School	18	18	14	10	12	9	16
Cloncurry State School	110	92	110	85	89	77	103
Good Shepherd Catholic College	102	99	92	108	211	177	193
Mount Isa Flexible Learning Centre	1	6	11	14	13	-	-
Richmond State School	42	24	28	25	23	23	22
Spinifex College - Junior Campus	212	196	162	189	302	257	321
St Joseph's School (Cloncurry)	43	43	67	61	66	54	58
St Joseph's School (Mount Isa)	156	148	157	133	81	92	81
St Kieran's School (Mount Isa)	74	66	77	54	51	44	41
TOTAL	**878**	**785**	**860**	**784**	**929**	**806**	**895**

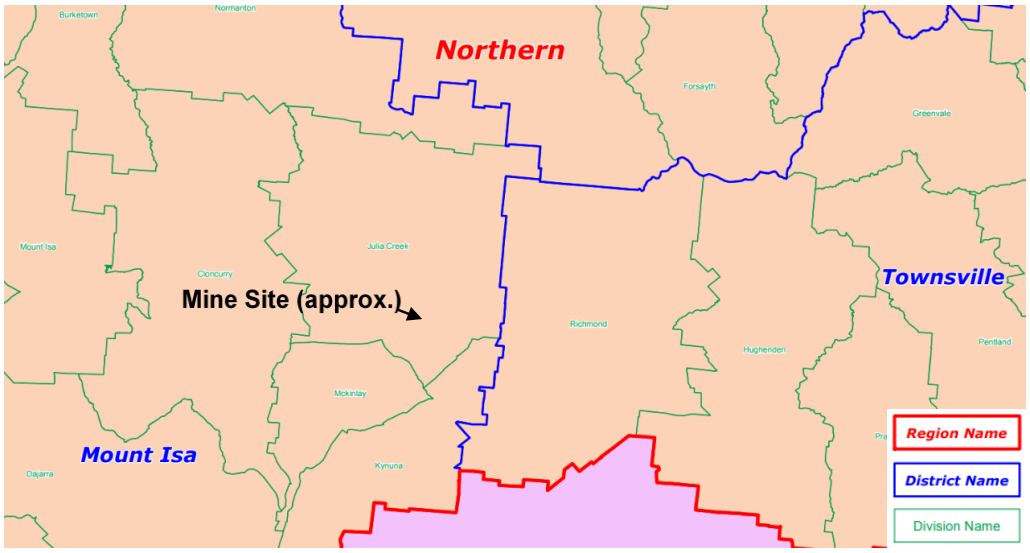
Source: Queensland Curriculum and Assessment Authority 2018

Annex D shows NAPLAN scores across 2011 to 2017. Due to low number of students at Julia Creek State School, results were not published to maintain privacy.

6.7.7 *Crime and Safety*

The Project site is located within the Julia Creek Queensland Police Division as part of the Mount Isa District, within the Northern Region, as shown in ***Figure 6-12***. The Police Divisions within the secondary Study Area include:

- Mount Isa Division (Mount Isa District);
- Cloncurry Division (Mount Isa District); and
- Richmond Division (Townsville District).

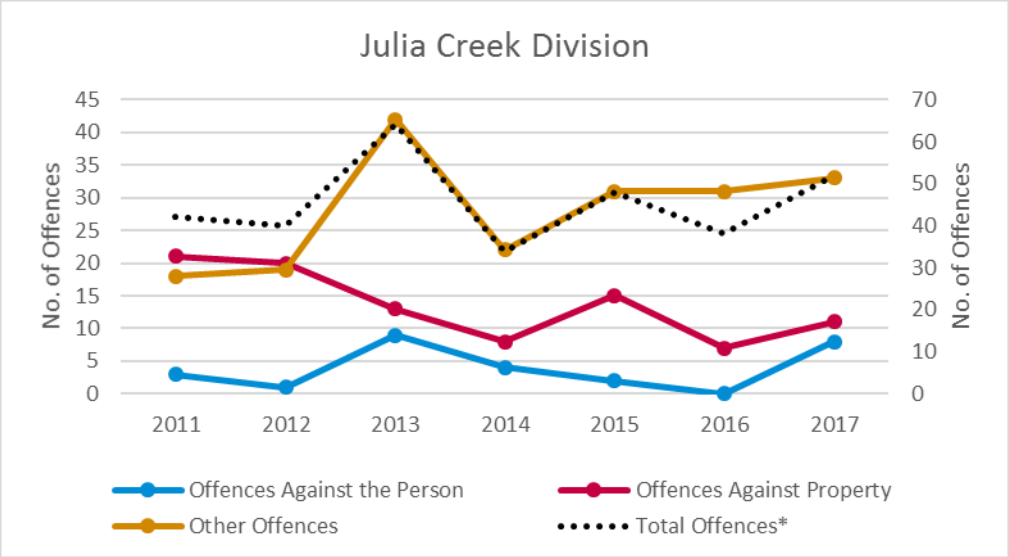


Source: Queensland Police Service 2018

Figure 6-12 Queensland Police Boundaries

There are two police officers based in Julia Creek, however additional resources are drawn from within the Mount Isa District on an "as needs" basis. As the Project site is located within the Julia Creek Queensland Police Division, crime data in this Division was obtained from January 2011 through to December 2017. Data for all relevant Divisions and Districts is presented at ***Annex D***, with the more specific data relevant to the primary Study Area (i.e. the Julia Creek Division and Mount Isa District) depicted in ***Figure 6-13*** and ***Figure 6-14.***

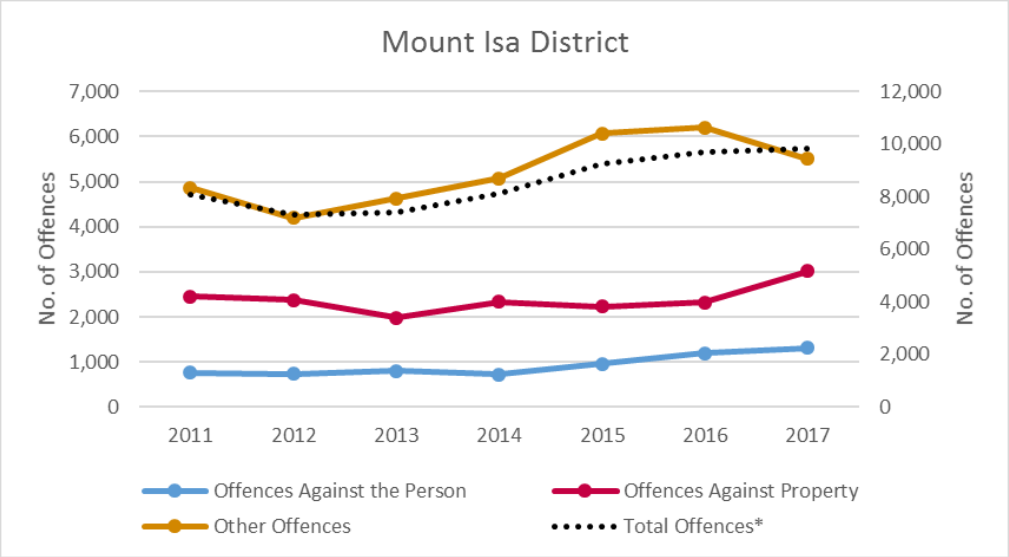
The data has been aggregated into three overarching types of offences, being: 'Offences Against the Person', 'Offences Against Property', and 'Other Offences'. A breakdown of the types of offences into categories and sub-categories is provided in ***Annex D***.



Please note 'Total Offences' follows the secondary axis on the right of the chart.

Source: Queensland Police Service 2018

Figure 6-13 ***Crime in Julia Creek Division, 2011-2017***



Please note 'Total Offences' follows the secondary axis on the right of the chart.

Source: Queensland Police Service 2018

Figure 6-14 ***Total Crime in Mount Isa Division, 2011-2017***

The data depicted in ***Figure 6-13*** and ***Figure 6-14*** for the Julia Creek Division, and Mount Isa District, is representative of the full extent of district and division data provided in ***Annex E***.

During community consultation, no concerns were raised regarding local police or other emergency services, and their ability to service the community and/or the Project.

6.7.8 *Other Emergency Services*

Julia Creek has two permanent ambulance staff who work closely with the McKinlay Shire Multi-Purpose Health Service (McKinlay Shire Council 2019c). The Fire Station in Julia Creek is not permanently staffed, as it is an auxiliary station only (QFES 2018). There is a local volunteer State Emergency Service (SES) group which works closely with other organisations under the McKinlay Shire Disaster Management Plan (QFES 2019). The local Fire Captain and the Ambulance Committee were involved in the consultation process.

6.8 *TRANSPORT INFRASTRUCTURE*

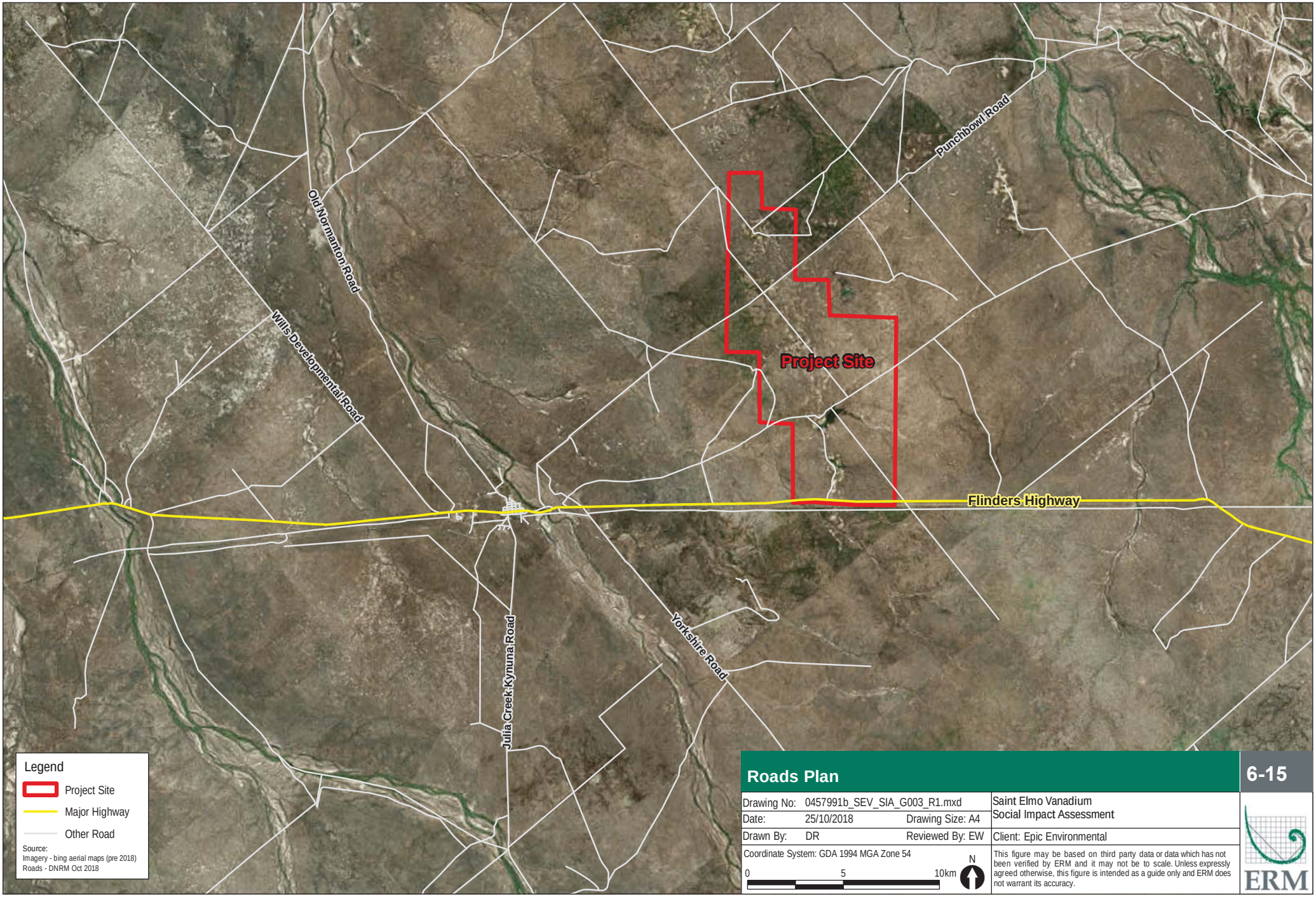
6.8.1 *Roads*

The Project site presents a frontage onto the Flinders Highway, which is a State-Controlled Road. Flinders Highway becomes Goldring Street (at Julia Creek), then continues west as Flinders Highway.

The Flinders Highway then becomes McIlwraith Street and Ramsay Street in Cloncurry, and then Barkly Highway west of Cloncurry towards Mount Isa. East of the Project site, Flinders Highway becomes Larsen Street and Goldring Street at Richmond before becoming Flinders Highway further east of the township.

Punchbowl Road, which intersects the Project site, is another road of importance to the Project, and is not a state-controlled road. ***Figure 6-15*** provides an overview of key roads near the Project Site and Julia Creek.

The main site access, for transit to and from work, will be via the Flinders Highway which is a sealed road, and the major road in the region. Travel on unsealed roads by employees, in transiting to and from work, would be minor.



Roads Plan

6-15

Drawing No:	0457991b_SEV_SIA_G003_R1.mxd		Saint Elmo Vanadium Social Impact Assessment
Date:	25/10/2018	Drawing Size: A4	
Drawn By:	DR	Reviewed By: EW	Client: Epic Environmental

Coordinate System: GDA 1994 MGA Zone 54

0 5 10km

N

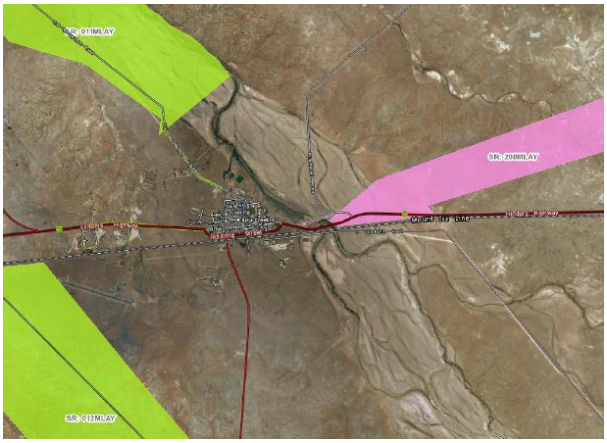
This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM

Stock Routes

The following presents a summary of stock routes located in proximity to the Project Site, Julia Creek and surrounding townships, as noted from Queensland Globe imagery (State of Queensland 2018).

Julia Creek

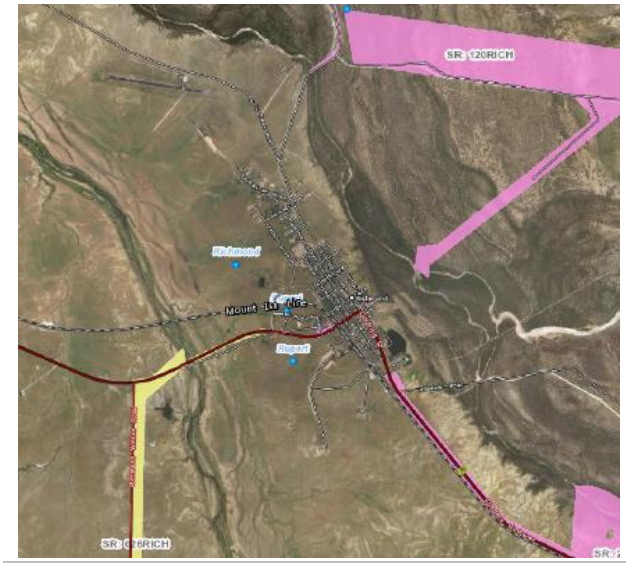


North: Old Normanton Road – Primary, open stock route.

East: Unnamed road – Minor and unused, open stock route.

West: Flinders Highway – Primary, open stock route.

Richmond



North: Unnamed road – Minor and unused, open stock route.

East: Unnamed road – Minor and unused, open stock route.

South: Flinders Highway – Minor and unused, open stock route.

West: Flinders Highway and Richmond Winton Road – Minor and unused, open stock route.

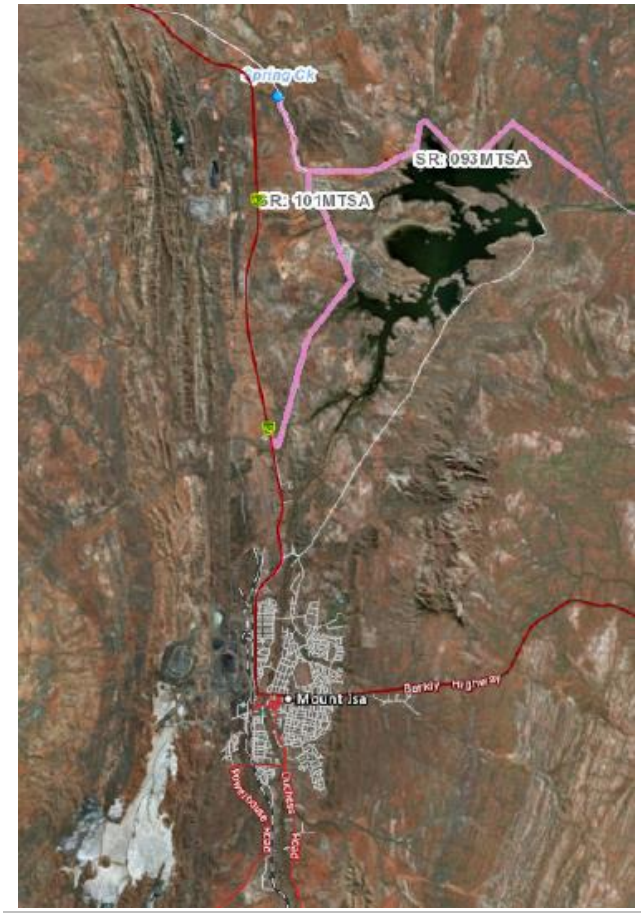
Cloncurry

North: Burke Developmental Road, Hensley Drive, Ernest Henry Road – minor and unused, open stock routes.

South: Round Oak Road and road adjacent to Mount Isa Railway lines – minor and unused, open stock routes.

West: Powerhouse Road – minor and unused, open stock routes.

Mount Isa



The Project site and surrounding area are affected by historical mineral (EPM) and petroleum (ATP) exploration permits. Minor and unused, open stock route north of Mount Isa township, to the east of the Barkly Highway.

6.8.2 Air

The closest airport to the Project site is located in Julia Creek, with the next closest airport located in Richmond. Regional Express Airlines (Rex) operates services from both airports, as depicted in ***Figure 6-16***, to destinations including: Mount Isa; Townsville; Cairns; and Brisbane. Mount Isa and Townsville Airports (located 265 km and 650 km from Julia Creek respectively) are both serviced by Qantas and Virgin Australia, offering daily services to Brisbane and connecting services.

Source: Regional Express n.d.

Figure 6-16 REX Network Map

6.8.3 Railway

'The Inlander' rail service between Townsville and Mount Isa operates twice weekly, departing Townsville on Wednesday and Saturday, and Mount Isa on Sunday and Thursday. The closest railway stations to the Project site are Julia Creek and Richmond. An extract of the network map is depicted ***Figure 6-17***.

Source: Queensland Rail n.d.

Figure 6-17 The Islander Rail Service

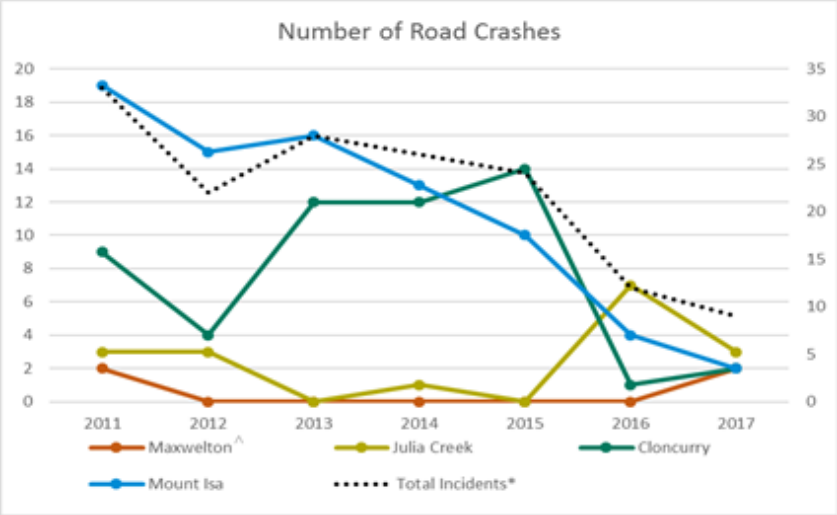
6.8.4 Buses

Bus Queensland and Greyhound operate bus services that stop in Julia Creek, Cloncurry and Richmond (Bus Queensland 2017). During consultation, discussions indicated that the buses are too infrequent, running a combined four times a week, to be a regular transport option for commuting to work in the region.

6.8.5 Road Crash Data

Road crash data obtained from the Queensland Government Department of Transport and Main Roads for the 2011-2017 period noted that:

- One medical treatment and one minor injury resulted from incidents at Punchbowl Road (this occurred in 2012). No other incidents occurred at Punchbowl Road.
- There were four fatalities on Barkly/Flinders Highway, each occurring in 2011, 2014, 2015 and 2017.
- In general, the overall number of crashes has been decreasing since 2011, as shown in ***Figure 6-18***.



** Please note 'Total Offences' follows the secondary axis on the right of the chart.*
^ Please note Maxwelton is a township situated east of Julia Creek, before Richmond.

Source: Transport and Main Roads 2013

Figure 6-18 Number of Road Crashes 2011-2017

6.9 WATER

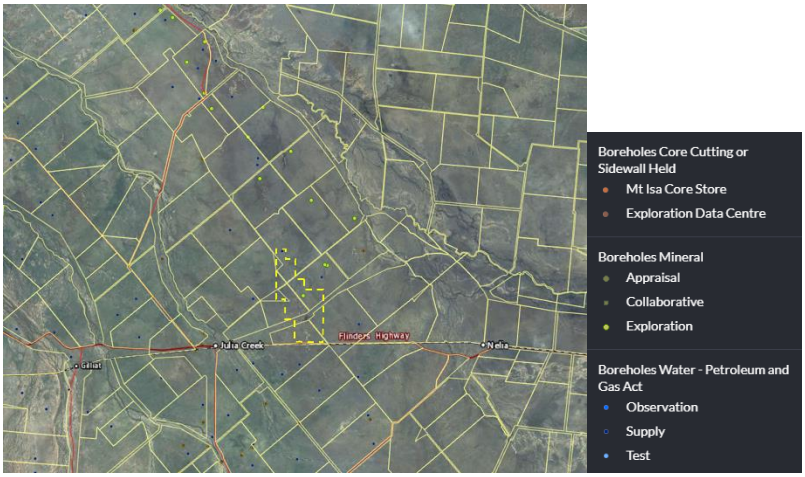
Potential water users that may be affected by water use of the Project and the proposed water harvesting scheme have been consulted. Current and potential water users that may be impacted as a result of the Project include:

- Directly adjoining landholders/water users;
- Neighbouring landholders/ water users;
- Landholders where potential water infrastructure may be sited; and
- Water users within the neighbouring Richmond and Hughenden Shires.

The majority of water in the Study Area is drawn from the Great Artesian Basin (**GAB**) with the exception of Mount Isa, where water is sourced from the Leichardt River (Verge Urban Landscape Architecture 2010). Water used from the GAB, is a principal resource to local agricultural stakeholders, as well as being the town supply for Julia Creek, as raised during consultation.

The following identifies groundwater boreholes within the primary Study Area, and in proximity to the Project site.

Boreholes



The Project site contains a water supply borehole at the north and west of the site, and a mineral exploration borehole at the centre of the site.

A number of mineral exploration, water supply and exploration data centre boreholes also surround the Project site.

In 2010, the McKinlay Shire Infrastructure Plan was developed and identified that water supply for mining and industry growth was a priority. Water was also a priority for Mount Isa City and Cloncurry Shire LGAs, along with irrigation schemes for Richmond and Flinders Shires.

Despite this however, in recent years the Study Area has experienced a three year period of drought which has affected the availability of water for the region Furthermore, the influx of new mines means the requirement for additional water (Allumium 2016). In response to the drought, there has been proposals for new dams in the region, and particularly along the Cloncurry River. These alternate water sources would help support the North West Minerals Province. It should be noted that most of these proposed developments are in the early stages of investigation (Allumium 2016 & DNRME 2018).

6.9.1 Flinders River

As described in **Chapter 2.0,** in order to support mining activities, an operating water supply will be stored in an OWSF. The OWSF and associated infrastructure are located approximately 21 km to the east of MLA100162. A water entitlement to harvest from the Flinders River is through the Department of Natural Resources, Mines and Energy (DNRME). The OWSF and associated infrastructure comprise three separate mine (infrastructure) lease components:

- MLA100244 – OWSF infrastructure area;
- MLA100245 – pipeline from OWSF to Project site; and
- MLA100246 – aqueduct from the OWSF to Flinders River.

The Flinders River is defined as a major watercourse under the *Water Act 2000* as well as a Prescribed Watercourse under the *Water Plan (Gulf) 2007* and is the main river of the Flinders River sub-basin and flows in a northwest direction east of the SEVP MLA boundary. It is the longest river in Queensland with a length of approximately 1,004 km (Geoscience Australia 2018) and a total catchment of over 100,000 km^2.

The Flinders River is often subject to flash flooding with strongly intermittent and seasonal flow. It is classified as a dryland river however, due to the climate its surface waters are generally confined to isolated segments or segregated waterholes across the catchment during the dry season (Steward et al. 2011). These segregated waterholes can persist for up to two years between flood events without surface or groundwater inflow (Faggotter 2011).

There is reference to the use of some local areas for recreational purposes, the closest being the Punchbowl waterhole which is located close to the DNRME gauging station of the same name on the Flinders River. Consultation indicated that when water persists within the channel, recreational purposes include activities such as swimming (primary recreational use) and fishing (secondary recreational use) and picnicking. The Punchbowl waterhole is located on the upstream side of Punchbowl Crossing and comprises a sandy bank on the right bank of the River looking upstream. The opposite side of the river has a steep embankment rocky scour protection at the water's edge.

A review of water licences attached to properties surrounding the Project area identified one license has been granted for the purpose of taking surface water from the Gilliat River and / or Julia Creek. While the purpose of the water use is not known, it is likely to be for stock watering purposes. The licence area is approximately 72 km downstream from the Project area.

Although there are no Aboriginal or Torres Strait Island cultural heritage parties / bodies recorded within the Project area (CHMP, CHB18-008), the documented usage of the region would indicate the likelihood of Indigenous cultural heritage presence within the broader Project area such as Indigenous stone artefacts in areas of low past disturbance and close to the Flinders River and its tributaries.

Evidence of these gathering points or travelling routes is absent from the published record, however, it is hypothesised that latter stock routes may have followed such pathways. If the stock route across the tenement did follow local Indigenous travelling routes there may be a higher likelihood of artefacts and values being present, however, their value may have been impacted by cattle movement over time.

The area of the Flinders River where the water will be harvested is located on private property on Lindfield Station. There is limited private or public use of the river at this location.

6.9.2 Unallocated Water In The Flinders River Catchment Area

Schedule 7, Part 2 of the Water Plan (Gulf) 2007 states the total volume for strategic unallocated water (Water for a State purpose) in the Flinders River catchment area is 17,850 ML. On 5 July 2019, the Project was recognised by the Queensland Department of Natural Resources, Mines and Energy (**DNRME**) as a Project of Regional Significance under the Water Plan (Gulf) 2007 and as such is eligible to apply for a water allocation from this unallocated supply.

6.9.3 February 2019 Flooding Event

In February 2019, North West Queensland experienced an extended period of heavy rainfall, with Julia Creek to Richmond experiencing major flooding across large areas (BoM 2019). The highest seven day rainfall total for Julia Creek Airport weather station (BoM Station: 029058) during this event was 510.2 mm ending on 6 February 2019. More than 30 years of rainfall data has been collected for Julia Creek (between BoM Stations: 029058 and 29025), with the rainfall observed on 5 February 2019 setting a new high daily rainfall record of 233.0 mm for the month of February. The previous record was 127.4 mm on 1 February 1994 (BoM 2019). Several sites in northwest Queensland had 7 day rainfall accumulations of more than 600 mm, and large areas received more than four times their February average rainfall (BoM 2019).

A qualitative assessment of the February 2019 rainfall event, carried out by Engeny (refer to EIS Appendix A16) confirmed the key water storage structures onsite would have performed as modelled (refer to EIS Chapter 6.9.1)

6.10 INDIGENOUS CULTURAL HERITAGE

Under the *Aboriginal Cultural Heritage Act 2003*, DATSIP are required to keep an Aboriginal Cultural Heritage (**ACH**) Register and Database. Searches of these systems were undertaken for the Project site on the 15 August 2018. There are no entries recorded in the ACH Database or Register within the Project site or within a 5 km buffer.

There are no Indigenous Land Use Agreements (**ILUAs**), native title determinations or claims over the Project site. The Project site falls within the Representative Aboriginal and Torres Strait Islander Body (**RATSIB**) areas for the Queensland South Native Title Services Limited, in the Southern and Western Queensland Region.

Where there is no native title claim registered, there is a requirement to advertise the mining lease under s29 of the Act, any claims lodged could require a Right to Negotiate Agreement to facilitate the grant of a mining lease. A review of the native title tribunal future act claims, objections and determination register show there are three s29 Notification of future act claims in the area surrounding the Project and inclusive of the Project site.

Multicom advertised its notification for s29 for MLA100162 in the Koori Mail, on 27 June 2018 and in the North West Star on 28 June 2018. The notification date was advertised as 11 July 2018. As well as the public advertising process, a copy of the Section 29 notice was provided to Queensland South Native Title Services (**QSNTS**), as Representative Aboriginal and Torres Strait Islander Body for the Project site. It has been confirmed by the DNRME

(11 November 2018) that there are no claims overlapping the area of MLA100162 and therefore all native title requirements have been finalised. There are no Right to Negotiate agreements required and the area can proceed to grant as unclaimed. The OWSF (MLA100244) has been determined to be located on exclusive land, therefore a s29 notification will not apply. The associated infrastructure (MLA 100245 and MLA 100246) are currently undergoing native title assessment. Whilst no native claims are lodged over these areas, the MLA's will progress through a s24MD notification process.

To ensure the duty of care will be met Multicom has voluntarily developed a Cultural Heritage Management Plan (**CHMP**) pursuant to Part 7 of the *Aboriginal Cultural Heritage Act 2003*. The CHMP has been Approved by the chief executive of DATSIP accordance with Section 107 of the ACHA. The CHMP covers the MLA area. The area covered by the CHMP will be expanded to incorporate the OWSF and associated infrastructure areas (MLA100244, MLA100245 and MLA100246) in order to ensure the duty of care is met through an Approved CHMP for these areas as part of the project development.

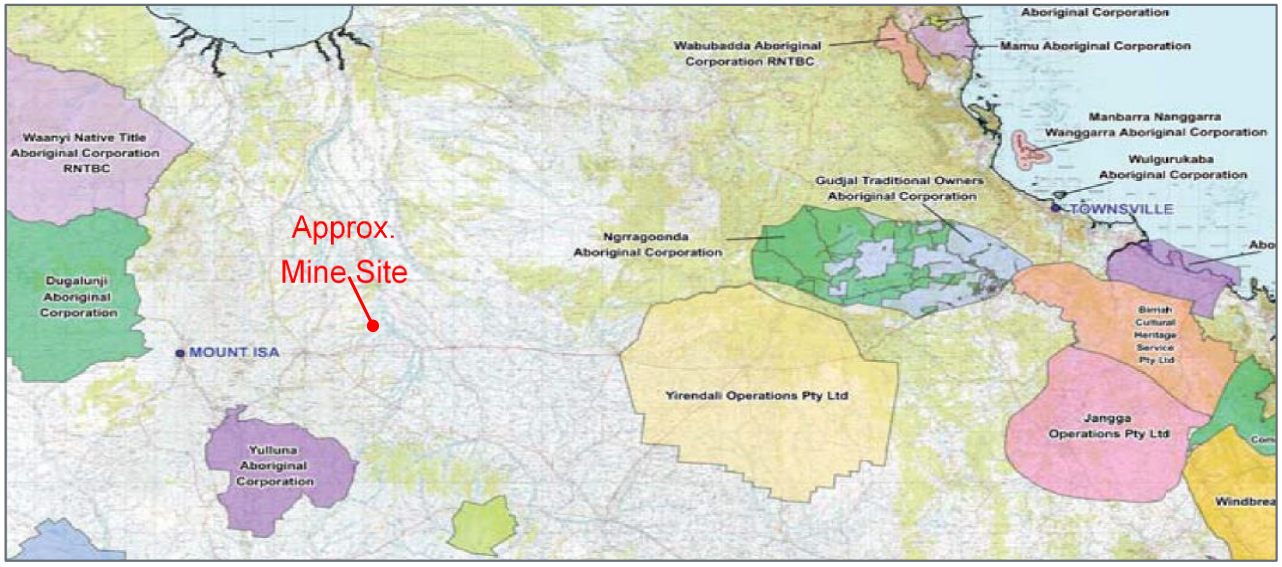
The CHMP makes provision for managing the Project in a way that will; avoid harm to Aboriginal cultural heritage; and to the extent that harm cannot reasonably be avoided, to minimise harm to Aboriginal cultural heritage. As part of this process, QSNTS were notified of the intention to develop the CHMP.

The CHMP is designed to ensure that an Aboriginal party may become involved in any process under the CHMP should they be identified in the future while Project activities are being carried out. In the absence of an Aboriginal party, Multicom intend to utilise the services of an experienced cultural heritage professional or an archaeologist.

6.10.1 Registered Cultural Heritage Bodies

As at September 2017, there are no Registered Cultural Heritage Bodies registered over the Project site, as shown in ***Figure 6-19***.

This was further confirmed through a search of the State Aboriginal and Torres Strait Islander Cultural Heritage Database and Register, conducted on 15 May 2018. A copy of the search results is provided in ***Annex F***.

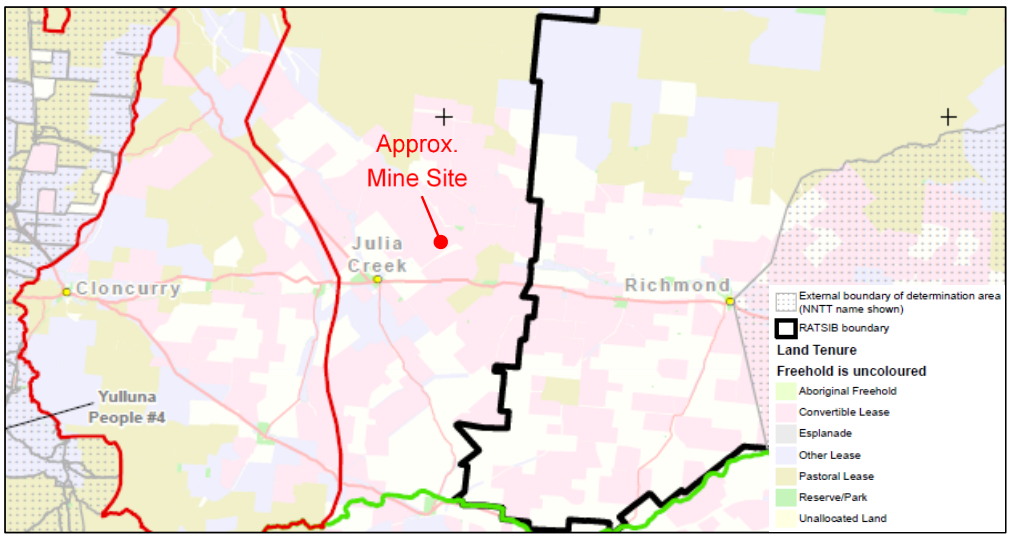


Source: Cultural Heritage Unit 2017

6.10.2 *Native Title*

The Project site is located in the Southern and Western Queensland Region for the purpose of Native Title applications and determination areas. Under this, the subject site is designated 'convertible lease', as shown in ***Figure 6-20*.**

A 'convertible lease' described as a "term lease which has the potential of conversion to freehold" (PSMA Australia n.d.).



Source: National Native Title Tribunal 2018a

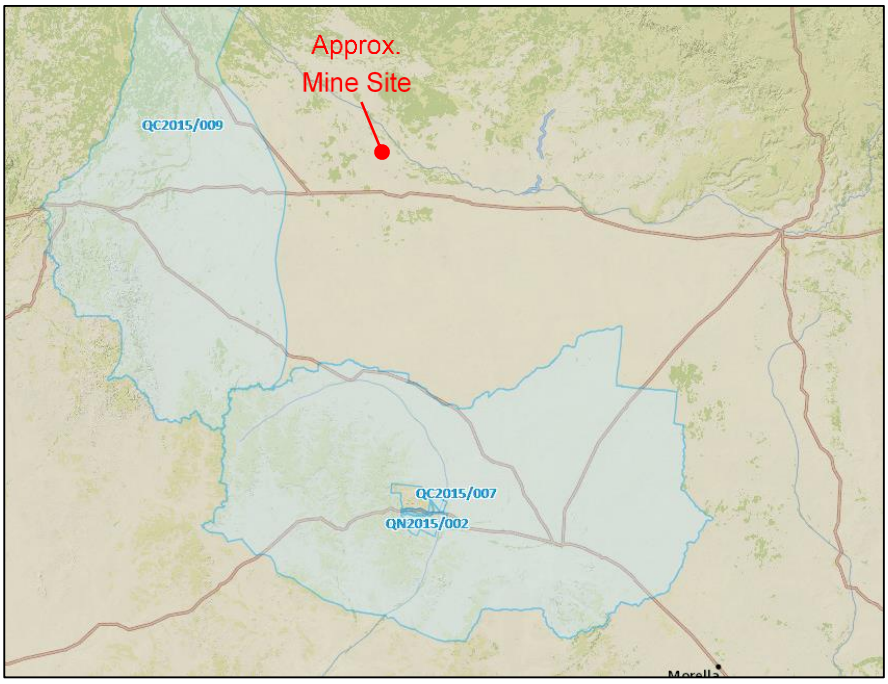
Figure 6-20 Native Title Applications and Determination Areas

Furthermore, it is noted that the following Native Title Claims are located in the area surrounding the Project site:

- Tribunal: QC2015/009 / Federal Court: QUD556/2015 (***Figure 6-21***); and
- Tribunal: QC2015/007 / Federal Court: QUD592/2015 and Tribunal: QN2015/002 / Federal Court: QUD82/2015 (***Figure 6-22***).

Source: National Native Title Tribunal 2018b

Figure 6-21 Native Title Claim QC2015/009



Source: National Native Title Tribunal 2018b

Figure 6-22 Native Title Claim QC2015/007

6.11 LAND TENURE AND LAND USE

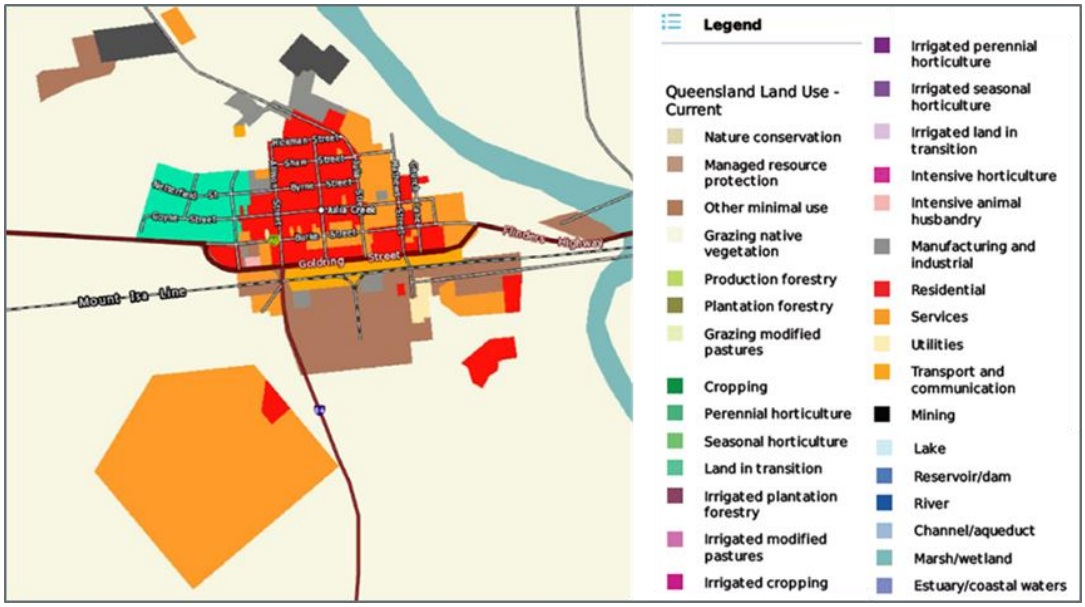
The predominant land use within the primary Study Area is defined as 'grazing native vegetation'. 'Grazing native vegetation' land use relates to grazing by domestic stock on land that is greater than 50 percent dominate native species. The specific land uses in the primary and secondary Study Areas, focusing on the main townships previously identified in this SIA, is detailed in the following sections.

A Traffic Impact Assessment carried out by TTM (2019) identified that traffic generation during all stages of the Project is not likely to worsen the level of service of the Flinders Highway. This is inclusive of Julia Creek, Richmond, Cloncurry and Mt Isa.

6.11.1 *Julia Creek*

The major land use in Julia Creek is 'residential', followed by 'services' which relates to land allocated to the provision of commercial or public services, and 'transport and communication', which is land allocated for infrastructure to transport goods or people and/or associated transport infrastructure, as depicted in ***Figure 6-23***. All traffic associated with the Project will access the site directly off the Flinders Highway via a purpose-built intersection. The Traffic Impact Assessment carried out by TTM (2019) indicates the new intersection will ensure that Project traffic will not adversely impact the operational capacity of the Flinders Highway to a significant level. Furthermore, traffic generated during all stages of the Project is not likely to decrease the level of service from the Flinders Highway and roads within the immediate vicinity of the Project.

Notably, land at the west is designated 'land in transition' which relates to a proposed residential subdivision (McKinlay Shire Council 2010) and land at the south is 'other minimal use' which does not have a dominate land use but may have ancillary uses. 'Manufacturing and industrial' and 'waste treatment and disposal' land uses are located at the north of the township, and a 'transport and communication' use is located further south.

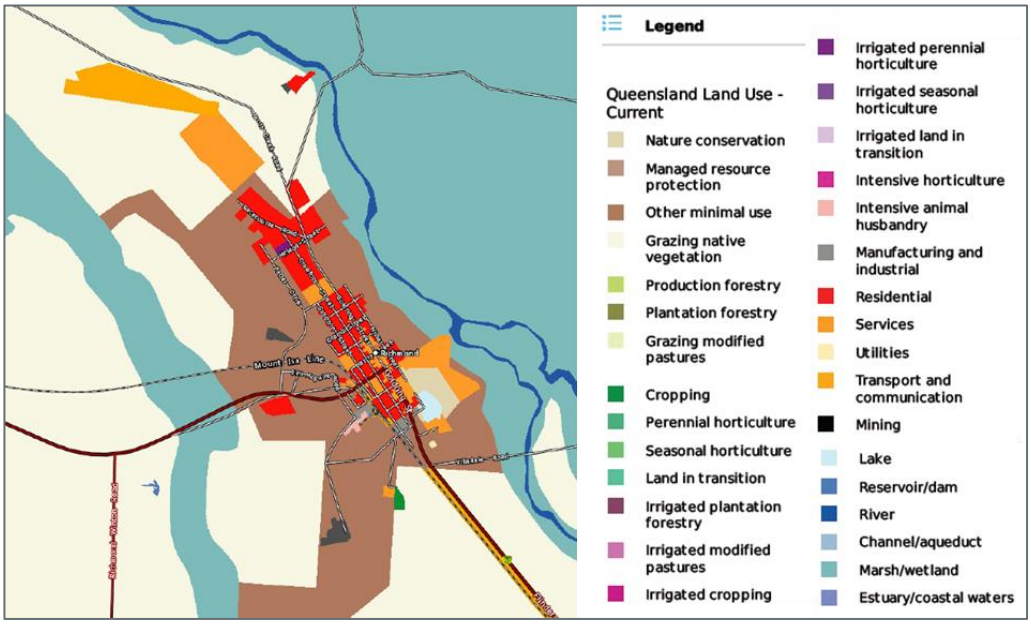


Source: State of Queensland 2018b

Figure 6-23 Land Uses, Julia Creek

6.11.2 Richmond

Richmond largely contains 'residential' and 'services' and 'transport and communication' land uses as depicted in ***Figure 6-24***. It is noted that 'other minimal use' surrounds the majority of the township.

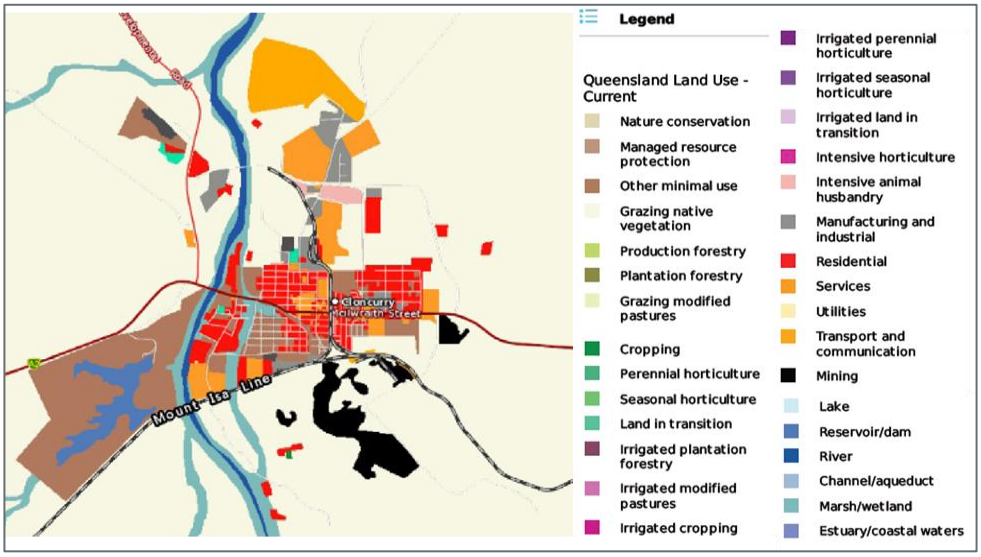


Source: State of Queensland 2018b

Figure 6-24 Land Uses, Richmond

6.11.3 *Cloncurry*

The Cloncurry township contains a number of land uses, which are predominantly 'residential', 'services', and 'transport and communication'. Notably, land to the west is designated 'other minimal use', and a number of 'mining' land uses are located to the east and south. This is depicted in ***Figure 6-25.***

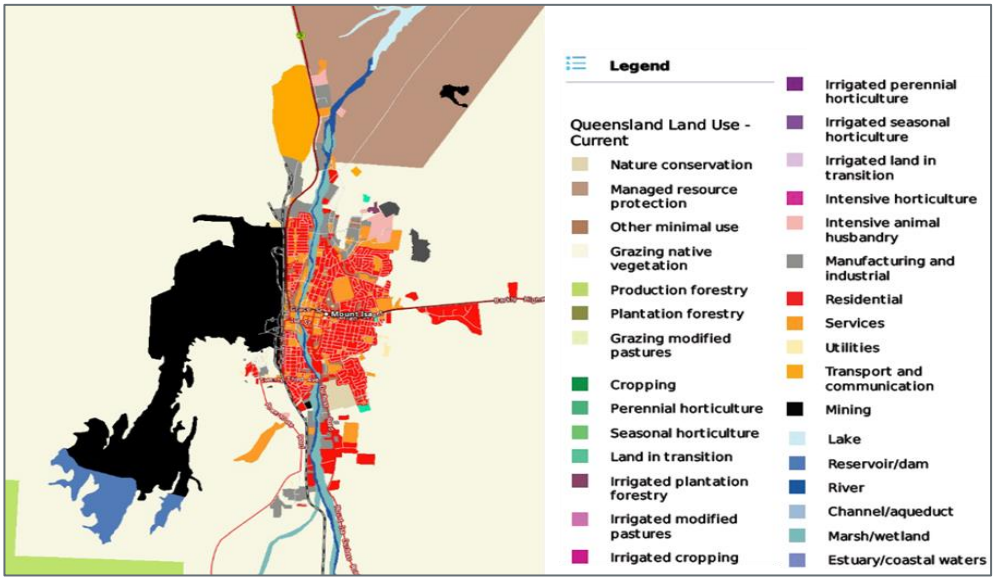


Source: State of Queensland 2018b

Figure 6-25 Land Uses, Cloncurry

6.11.4 *Mount Isa*

Mount Isa, as with other townships, largely contains 'residential' land use, as well as 'services' and 'transport and communication' uses. Land to the west contains a 'mining' use, and 'managed resource protection' to the north. Additionally, a 'production forestry' land use, relating to the commercial production from native forests and related activities on public and private land, is located south-west of Mount Isa and is shown in ***Figure 6-26***.



Source: State of Queensland 2018b

Figure 6-26 Land Uses, Mount Isa

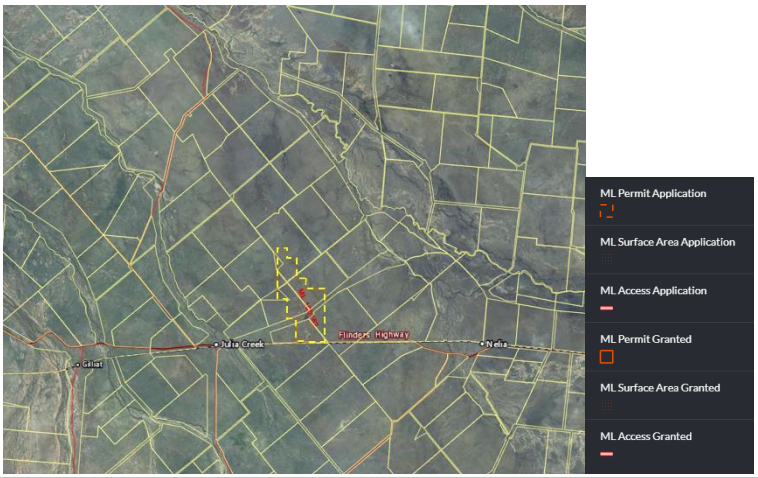
6.12 ECONOMIC ACTIVITIES

An investigation of 'economic' activities at the Project site found the following resource related activities (State of Queensland 2018b), summarised as follows.

Exploration Permits

The Project site has been granted Mineral Exploration Permit 26410. Mineral Development Licence 522 is located immediately north east of the Project site. It is noted that Geothermal Exploration Permit 111 overlaps onto the south west portion of the Project site (and Mineral Exploration Permit 26410).

Production Permits

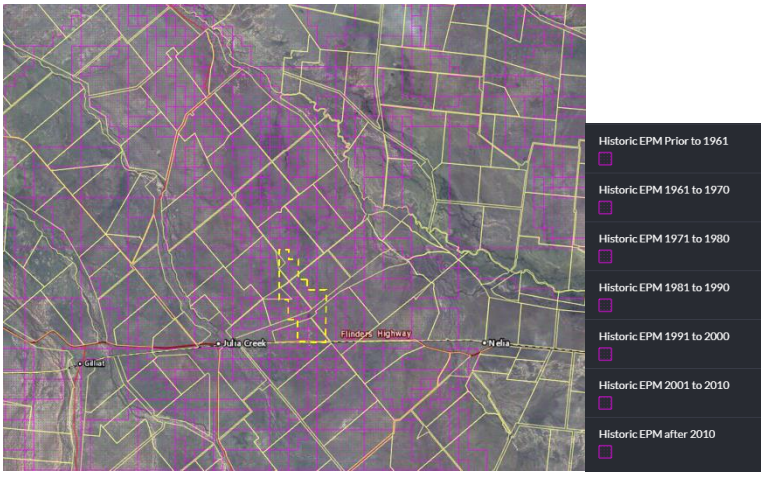


The Project site has contains a Mining Lease Permit Application 100162. There are no other mining lease permits or applications in the surrounding area.

Resources

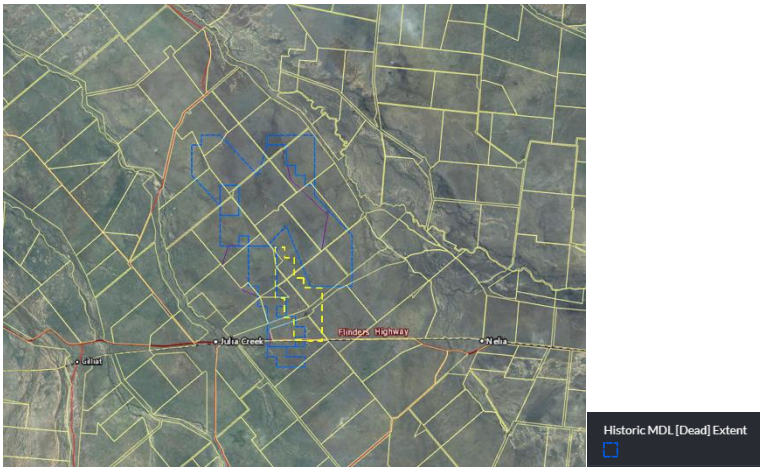
The Project site contains vanadium oxide. Another vanadium oxide occurrence is located north east of the Project site. Oil shale occurs west and north of the Project site.

Historical Exploration Permits – EPM & ATP



The Project site and surrounding are affected by historical mineral (EPM) and petroleum (ATP) exploration permits.

Historical Permits (Dead)



The Project site is partially affected by a historic Mineral Development Licence at the south west. Other Mineral Development Licences are located at the north and west of the Project site.

In addition, a search of the McKinlay and Richmond Shire Councils and Mount Isa City Council meeting minutes between January 2017 and May 2018 was conducted to determine if there were any town planning or development matters of interest. The development matters of interest found included:

- The closure of an unnamed road (Old Aerodrome Road) as it is no longer required for use by Council, however this is not expected to impact the Project;
- Grant housing to be developed in McKinlay Shire to accommodate Council staff (Project completed April 2019) – see also **Section 6.3.1**; and
- Intensification of an existing Hard Rock Quarry in Mount Isa City, however given the scale and proximity this is not expected to impact the Project.

Further detail in relation to the above is provided in ***Annex G***.

6.13 SUMMARY OF BASELINE INDICATORS

A preliminary summary of the social values, conditions and key socio-economic indicators as identified through research and analysis is presented in ***Table 6-39***.

Table 6-39 Summary of Key Baseline Indictors

Category	Baseline Indicators
Nature of Workforce	• In both 2011 and 2016, 'agriculture, forestry and fishing' was the largest industry of employment, where 87 percent of people were employed in this industry. Similarly, this industry was the largest employer in the McKinlay LGA. It is noted that the number of respondents decreased in McKinlay LGA from 681 to 482. • The largest industry of employment in Julia Creek and Richmond was 'public administration and safety' across 2011 and 2016. • The largest industry in Cloncurry was 'transport, postal and warehouse' in 2011 (19 percent), and changed to mining in 2016 (18.3 percent). • The largest industry of employment in Mount Isa is mining (31 percent) in 2011 and 2016, although the number of respondents decreased from 9,982 in 2011 to 8,946 in 2016.

Category	Baseline Indicators
Main sources of employment	• In the McKinlay LGA, the largest type of occupation was 'managers' (27.6 percent in 2011 and 32.3 percent in 2016), followed by 'machinery operators and drivers' in 2011 (18.9 percent) and 'labourers' in 2016 (17.8 percent). • 'Machinery operators and drivers' was the largest type of occupation in Julia Creek in 2011 (20.5 percent) followed by 'clerical and administrative workers' (15.5 percent), which changed to 'managers' in 2016 (26.9 percent) followed by 'labourers' (16.7 percent). • In Cloncurry, machinery operators and drivers were the largest type of occupation in 2011 (20.5 'percent') and 2016 (18.2 percent), followed by 'clerical and administrative workers' (15.3 percent in 2011) and (14.5 percent in 2016). • 'Labourers' were the largest type of occupation in Richmond, being 22.8 percent in 2011, followed by 'technicians and trades workers' (12.7 percent) and 21.5 percent in 2016, followed by 'managers' (13.9 percent). • 'Technicians and trades workers' formed the largest type of occupation in Mount Isa in 2011 and 2016 (22 percent), followed by 'machinery operators and drivers' in 2011 (16.7 percent) and 'professionals' in 2016 (16 percent). • This differs from Queensland, where 'professionals' is the largest type of occupation (18.9 percent in 2011 and 19.8 percent in 2016), followed by 'technicians and trades workers' (14.9 percent in 2011 and 14.3 percent in 2016).
Local Population	• Between 2011 and 2016 there has been a general trend towards population decline, with all locations, with the exception of Julia Creek, and Queensland as a whole.
Proportion of the community identifying as Indigenous	• The Indigenous population in Julia Creek and Richmond also saw slight increases, although these were from a very low base. McKinlay LGA, Cloncurry and Mount Isa have had a decrease in population over the same period. • Within the Study Area, the largest populations of Indigenous persons in 2016 were located in Mount Isa (3,042) and Cloncurry (533). 41 Indigenous persons live in Richmond, 24 in Julia Creek. McKinlay LGA was home to only 39 Indigenous persons in 2016.

Category	Baseline Indicators

Aboriginal Cultural Heritage	• As at September 2017, there are no Registered Cultural Heritage Bodies registered over the Project site.
	• A search of the Aboriginal and Torres Strait Islander Cultural Heritage Database and Register was conducted on 15 May 2018. The search found:
	  ○ No Aboriginal cultural heritage sites located at the Project site (and 100m buffer).
	  ○ No Cultural Heritage Party recorded at the Project site (and 100m buffer).
	  ○ No cultural heritage management plans recorded at the Project site (and 100m buffer).
	  ○ No Designated Landscape Areas (DLA) recorded at the Project site (and 100m buffer).
	  ○ No Registered Study Cultural Heritage Areas recorded at the Project site (and 100m buffer).

Income levels compared to the region and the State	• Across all locations (McKinlay LGA, Julia Creek, Cloncurry, Richmond and Mount Isa), median personal income was higher than Queensland's in 2011 and 2016. • McKinlay, Julia Creek and Richmond had lower median family and household incomes compared to the State in 2011 and 2016. • Cloncurry and Mount Isa had higher median family and household incomes compared to the State in 2011 and 2016.
Availability and Cost of Housing	• In general, median rental and mortgage repayments were lower compared to the State in 2011 and 2016. This is except for Mount Isa, where the median mortgage repayments were higher than the State in this period. • Notably, Cloncurry has higher median rent and mortgage repayments in 2011 and 2016 (at least 50 percent more) compared to the McKinlay LGA.
Trends in relation to unemployment, particularly young people	• Compared to the State, all locations (McKinlay LGA, Julia Creek, Cloncurry and Richmond had higher proportions of full-time employed persons and fewer unemployed persons in both 2011 and 2016. • Although there is a high proportion of employment, only Julia Creek, Richmond and the State saw an increase in the number of people in the labour force.
Indigenous employment capability	• Within the secondary Study Area, there is an existing population of suitably qualified Indigenous employees with relevant industry experience for the Project. • There is also a population of unemployed or underemployed Indigenous people who, with additional training, could be suitable to be employed by the Project. • There are no "local" (primary Study Area) Indigenous Businesses identified, but some suitable providers in the secondary Study Area and more within the Economic Catchment who can be engaged as part of the Procurement strategy.

Category	Baseline Indicators
Age profile of the community relative to State/National profile	• The population age has generally increased between 2011 and 2016, except in Cloncurry which has remained the same, and Richmond which decreased. • It is noted that McKinlay LGA saw an increase from 33 to 39 years old, Julia Creek increased from 36 to 42 years old, and Mount Isa increased from 30 to 37 years old. • The gender distribution in Queensland was 50 (female)/50 (male) in 2011 and changed to 51/49 in 2016.
What is the mix of urban and rural dwellers in the surrounding area	• In both 2011 and 2016, 'agriculture, forestry and fishing' was the largest industry of employment, where 87 percent of people were employed in this industry. Similarly, this industry was the largest employer in the McKinlay LGA. It is noted that the number of respondents decreased in the McKinlay LGA from 681 to 482.
Physical Infrastructure	• Air: the closest airport to the Project site is located in Julia Creek. Additionally, an airport is located in Richmond. Regional Express Airlines (Rex) operates services from both airports, to destinations including: Mount Isa, Townsville, Cairns, and Brisbane. • Rail: 'The Inlander' rail service between Townsville and Mount Isa operates twice weekly, departing Townsville on Wednesday and Saturday, and Mount Isa on Sunday and Thursday. The closest railway stations to the Project site are Julia Creek, and Richmond. • Road: The proposed Project site presents a frontage onto the Flinders Highway, which is a State-Controlled Road. • Port: The Port of Townsville is approximately 645km from Julia Creek.

Government and Non-Government Services	• Police Division: Mount Isa District, and Northern Region. Notably the following Police Divisions are located in the surrounding area: Richmond (Townsville District); McKinlay (Mount Isa District); and Kynyna (Mount Isa District).
	• Bus Services: Bus Queensland and Greyhound operate bus services that stop in Julia Creek and Richmond.
	• Health Care: At a state level, the Project site is located within the North West Hospital Health Service catchment. Hospitals and health services within the North West catchment of relevance to the Project are:
	  ○ Mount Isa Hospital;
	  ○ Julia Creek Multipurpose Health Service; and
	  ○ Cloncurry Multipurpose Health Service.
	• Schools: The Project site is located within the Julia Creek State School Catchment. The Project site is not located within a secondary school catchment. The nearest secondary schools are:
	  ○ Richmond State School (up to Year 10);
	  ○ Hughenden State School (up to Year 12);
	  ○ Winton State School (up to Year 12);

Category	Baseline Indicators
	○ Cloncurry State School (up to Year 12); and ○ Spinifex State School – Mount Isa (Junior Campus – Year 7 to Year 9, Senior Campus – Year 10-12). Despite this, there is the option to enrol with MISOTA through distance education and attend at a dedicated classroom within the Julia Creek State School campus.
Aboriginal and Torres Strait Islander Services	• Department of Aboriginal and Torres Strait Islander Services: The Project site is located in the 'North Queensland' DATSIP region. The nearest DATSIP office to the Project site is in Mount Isa. • Cloncurry Community Indigenous Health Service: ○ Aboriginal health clinic. ○ Located in Cloncurry. • Julia Creek Home and Community Care: ○ For older people who are mostly – but not completely – able to live and cope on their own, and don't yet need higher levels of care at home. ○ For all aged 65 years or older, or 50 years or older and Aboriginal and/or Torres Strait Islander persons. ○ Located in Julia Creek. • Gidgee Healing: ○ Aboriginal Community Controlled Health Service. ○ Nearest location to proposed Mine Site is in Mount Isa. • Aboriginal and Torres Strait Islander Legal Service (Qld) ○ Nearest office to proposed Mine Site is located in Mount Isa. • Business and Training Providers: ○ TAFE Queensland North – Mt Isa ○ Mount Isa Centre for Rural & Remote Health – Mt Isa ○ Martyr Training Services – Mt Isa ○ Jenagar Pty Ltd - Cloncurry ○ Hilton Training - Mt Isa ○ Krause Health and Safety – Mt Isa ○ Bakhash Safety – Mt Isa ○ Axial Training – Mt Isa/Cloncurry

Category	Baseline Indicators

Social Infrastructure	• Shopping Centres: The closest shops are located along Burke Street / Flinders Highway in Julia Creek. Shops are also located in Richmond, along Goldring Street.
	• Libraries: Julia Creek Library and McKinlay Library.
	• Parks:
	  ○ Julia Creek: Peter Dawns Park and George Sills Lions Park.
	  ○ McKinlay: Adjacent to McKinlay Library.
	  ○ Kynuna: Combo waterhole.
	• Sporting and Showgrounds in Julia Creek include:
	  ○ Swimming pool.
	  ○ Daren Ginns Centre: 24/7hr gym.
	  ○ Indoor Sports Centre: Netball, basketball, tennis, volleyball, and cricket.
	  ○ Kev Bannah Oval: Rugby league, touch football, athletics, netball, and cricket.
	  ○ McIntyre Park: Race course, pony club, and campdraft facilities.
	  ○ Tennis Courts: Two courts located next to the Sports Centre.
	  ○ Bike Safety Track: Mock road course for bike riding.
	  ○ Indoor Recreation Area (Civic Centre): Used for various activities including circuit classes, fit ball, boxing, kids gymnastics, and after school activities.
	  ○ Skate Park (opened in 2000): Shaded and includes a skate bowl/ramps, and children's play equipment.

7.0 IMPACT ASSESSMENT, MITIGATION AND MANAGEMENT MEASURES

The following section presents the outcomes of the impact assessment process, including the impact significance and likely residual impact.

7.1 WORKFORCE MANAGEMENT

7.1.1 Workforce Overview

If approved, construction of the Project will commence in early 2021, with operations to produce first vanadium in 2022. There are two phases of construction: phase 1 will enable construction of the mine to process 10,000 tpa of product and phase 2 will be an expansion of the processing facility to enable processing to 20,000 tpa of product.

In summary, the Project workforce will include:

- Up to 200 jobs during phase 1, which will involve construction of the MIA and processing facility able to produce 10,000 tpa of product. This phase would be over a period of 12 months starting in early 2021;
- Approximately 150 operational jobs commencing in 2022 to support the first
- 10,000 tpa of processed ore;
- A further 150 construction jobs is expected for phase 2 to enable the expansion of the processing facility to 20,000 tpa. The expansion will require an additional 100 operational roles once construction finishes. For the purposes of assessing a maximum development case, phase 2 is assumed to begin construction in 2023 with a peak operating workforce of 250 in 2024; and
- Approximately 75 jobs during mine decommissioning, estimated to occur in 2053.

In the first 10 years, it is anticipated the Project will create over 200 jobs during the initial (phase 1) *construction phase*, up to 250 jobs once fully operational at peak capacity, and approximately 75 jobs during decommissioning.

Construction phase 1 of the Project is expected to occur over a 12 month period and is expected to commence in January 2021. Expansion to 20,000 tpa (phase 2) in approximately Year 3 (2023) would require *construction* of a second processing train, which would create an additional 150 jobs during *construction* over a further 12 months and an additional 100 ongoing *operational* roles. ***Figure 7-1*** outlines the estimated peak annual employment over the first 10 years of the Project, including overlap of *construction* and *operations phases*. During construction of the upgraded processing facility to allow 20,000 tpa of Project, up to 300 construction and operational workers are anticipated to be employed by the Project.

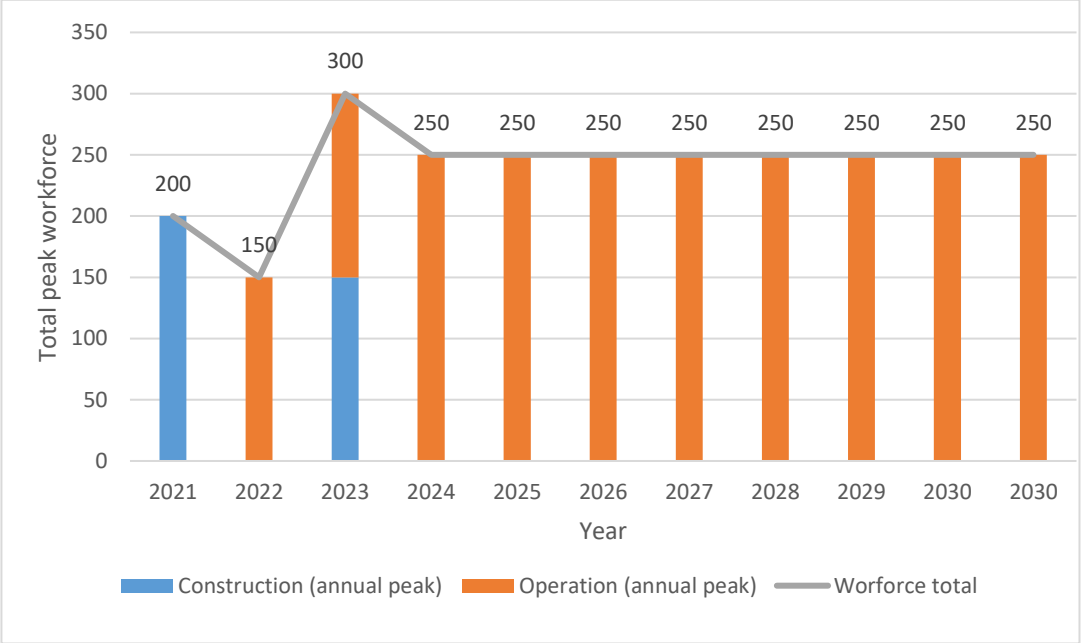


Figure 7-1 ***Project workforce 2021-2030***

Table 7-1 ***Estimated Employment***

	Construction	Operation		Decomm.	Total
		Phase 1	Phase 2		
Initial Construction	200	–	–	–	200
10,000 tpa Operation	–	150	–	–	150
10,000 tpa Operation plus Phase 2 Construction	150	150	–	–	300
20,000 tpa Operation	–		100	–	250
Decommissioning (Post Mining)	–	–	–	75	75

7.1.2 Construction Workforce Requirements and sourcing

As described above, *construction* of the phase 1 mine and the 10,000 tpa processing facility will require a workforce of approximately 200 people over a 12 month period beginning in January 2021. An additional 150 people will be required for the expansion (phase 2) of the processing facility to 20,000 tpa. For the purposes of assessing a maximum development case, phase 2 is assumed to begin *construction* in 2023.

Key occupations and skills required for construction are anticipated to be:

- Earthmoving plant operators;
- Structural steel and welding trades workers;
- Professionals including geologists, managers, safety officers, engineers and environmental scientists;
- Painting, plumbing and electrical trades workers;
- Concreters; and
- Construction and mining labourers.

Local and regional contractors, labourers and suppliers will be preferentially employed in the *construction phase*, in accordance with relevant legislation, including the *Anti-Discrimination Act 1991 (QLD)*. Local and regional labour availability will need to be tested as part of the recruitment process. For the purposes of this assessment it has been assumed that approximately 25 percent of the workforce will be sourced from the primary and Secondary Study Area and a further 50 percent from the remainder of the Economic Catchment (Townsville and Charters Towers). A further 25 percent of the construction workforce will be sourced from regional Queensland centres (Wave International 2018). Given the location of the site access, approximately 25 km from Julia Creek, buses will be utilised to transport people to and from the Project site to minimise local traffic and driver fatigue (Wave International 2018). Additionally, bus transport will also be provided between Julia Creek and neighbouring regional centres such as Cloncurry, Richmond and Mount Isa at the end of shift rotations (Wave International 2018). All construction workers who do not reside in Julia Creek will be accommodated in the Workforce Accommodation Village that will be constructed as part of the Project.

As described in **Section 6.4**, the major industries of employment in the McKinlay Shire in 2016 (i.e. agriculture, forestry and fishing, public administration and safety, mining and construction), provide a potential pool of transferable skills for the Project during construction and operation.

Within the secondary Study Area, more than 3,000 people in 2016 were employed in the mining industry, and more than 500 people were employed in the construction workforce. Given the quantum of people with these directly relevant skillsets, it is likely that the secondary Study Area will provide a direct pool of labour for the Project to draw on for its local and DIDO workforces.

Due to the short length of the *construction phase* it is not anticipated that construction workers will relocate to Julia Creek as "new local" residents.

7.1.3 Operational Workforce Requirements and sourcing

The Project operations are proposed to commence in 2022 with a workforce of approximately 150 to support the initial 10,000 tpa mine and processing facility. With further processing capacity from a phase 2 expansion, this workforce is anticipated to increase to 250 people. To assess a maximum development case, it is assumed that this phase 2 development will commence operation by 2024.

Key operations roles are likely to include the following:

- Mining operations:
  - Geologists;
  - Machinery operators;
  - Truck drivers;
  - Maintenance crew including diesel fitters, boiler makers, electricians; and
  - Supervisors.
- Processing facility:
  - Metallurgists
  - Operators;
  - Maintenance crew including electricians, instrument and mechanical technicians and trades assistants;

- Chemists and laboratory supervisors and support staff;

- Mine Management:
  - Health, safety, human resources and mine management professionals; and
  - Administrative staff.

Multicom will have a recruitment hierarchy that prioritises local and regional recruitment from Julia Creek and the secondary Study Area communities of Mount Isa, Richmond and Cloncurry. Operations staff will also be encouraged to relocate to Julia Creek. It has been estimated that 75 percent of the workforce will be sourced from the Economic Catchment (Townsville to Mount Isa) and up to 25 percent of the workforce will be sourced from elsewhere in Queensland. In addition to employees, Multicom will also ensure its contractors provide reasonable opportunity for locals to gain necessary knowledge, skills and experience to be competitive in the labour market for the Project (Wave International 2018).

Based on an analysis of workforce skills and availability in the primary and secondary Study Areas and economic catchment, sourcing estimates for the first 10 years of operations have been developed for the following areas:

- Primary – Julia Creek and communities/properties within a 1 hour commute;
- Secondary – Richmond, Mount Isa and Cloncurry;
- Economic Catchment (rest) – Hughenden through to Townsville; and
- FIFO – elsewhere in Queensland.

Table 7-2 and ***Figure 7-2*** below show sourcing estimates by percentage (%) and FTE (#). As shown, it is estimated that there will be a gradual increase in the proportion of the workforce who resides in Julia Creek over time. This recognises that attraction of "new local" residents to the Julia Creek community will require progressive effort and, once established, the mine is likely to be more successful in attracting existing DIDO workers from outside the primary Study Area to relocate with their families. It is estimated that a total of 25 percent of the workforce will be sourced from Julia Creek by 2031, comprising both existing residents and new residents relocating to the area for employment. Over the life of the Project it is estimated that up to 50 employees will relocate to Julia Creek, starting with approximately eight in the first two years of operations.

Table 7-2 Operational Workforce Sourcing Estimates

		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Primary (existing)	**%**	7%	7%	5%	5%	5%	5%	5%	5%	5%	5%
	#	11	11	13	13	13	13	13	13	13	13
Primary (new)	**%**	5%	5%	10%	10%	10%	15%	15%	15%	15%	20%
	#	8	8	25	25	25	38	38	38	38	50
Secondary	**%**	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
	#	45	45	75	75	75	75	75	75	75	75
Economic C'ment (excl. Study Area)	**%**	33%	33%	30%	30%	30%	25%	25%	25%	25%	25%
	#	50	50	75	75	75	63	63	63	63	63
FIFO	**%**	25%	25%	25%	25%	25%	25%	25%	25%	25%	20%
	#	38	38	63	63	63	63	63	63	63	50

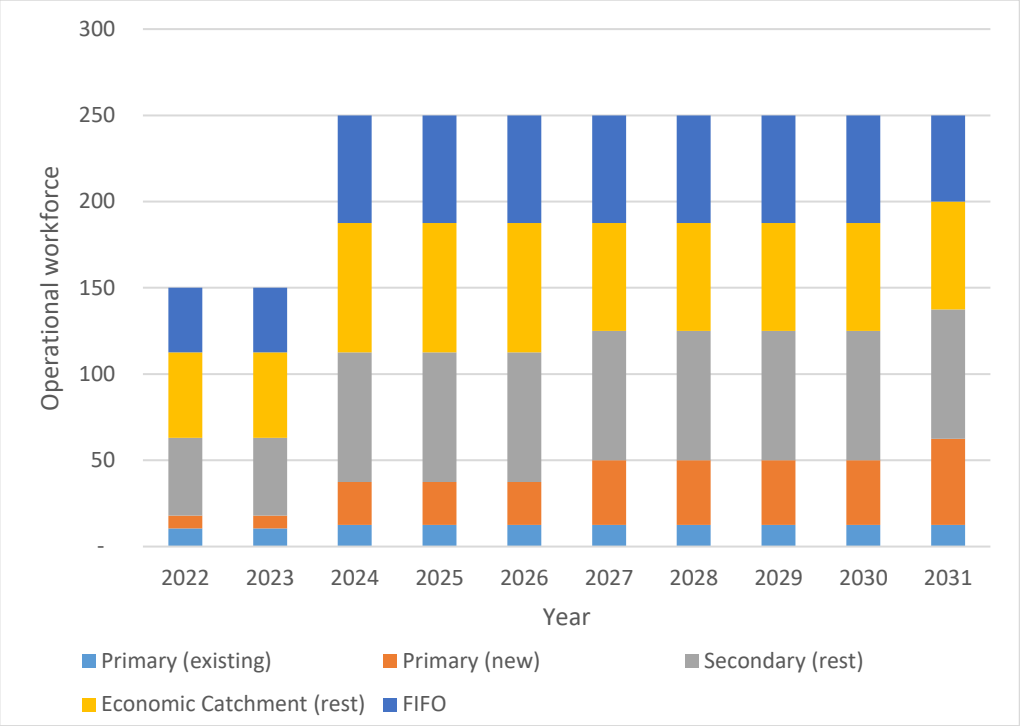


Figure 7-2 Workforce by home location

7.1.4 Workforce Arrangements

Multicom will work with contractors to agree on rosters that will be utilised for construction. The majority of construction activities will take place during dayshift, however activities may also occur during a night shift. Construction activities will take place seven days a week.

Shift times and rosters for the operational phase of the Project will be the same for local and commute workers, and are expected to include:

- Operational hours will be 24 hours a day, seven days a week;
- Mining operations will be on a 10.5 hour shift cycle roster, working 3 day shifts, 3 night shifts and 3 days off; and
- Senior management and staff will work a five days on (Monday to Friday), two days off roster except direct supervisory staff who will be on an even time roster for 24/7 coverage.

All local employees within a one hour drive will be able to travel between home and the Project daily. Non-local employees (those with a drive time of more than one hour) will stay in the Workforce Accommodation Village that will be maintained for the duration of operations, travelling home at the end of their 'swing'. Those personnel based in other towns within the secondary Study Area, including Richmond, Cloncurry and Mount Isa, will be bused or use car-pooling to get to the Project site.

7.1.5 Training and Development

As part of the local recruitment strategy, the Project will provide training opportunities, specifically focussing on young people (16 – 25 years) and may include apprenticeships and identification of tertiary pathways, particularly those that will allow children of local residents to remain in the area or return following tertiary education (refer to **Section 0**). This was identified as being of importance to the local community during consultation.

Indigenous training programs will also be developed to ensure equitable access to employment and support Indigenous participation in the Project (refer to **Section 0**).

7.1.6 Workforce Safety

Multicom is committed to a safe and healthy workforce, this extends to all aspects of wellbeing including:

- Promoting worker health, safety and wellbeing as fundamental to Project success, promoting a positive, inclusive, and safety oriented culture within the workforce; and
- Full compliance with all relevant mine safety and health legislation.

Major construction contractors will be required to demonstrate their previous safety record and include details of their proposed health and safety plans as part of the tendering process. Contractors will also be required to report on the delivery and outcomes of these strategies throughout construction.

During the *construction* and *operations phases*, the Project will have an on-site medic and basic health facilities. These facilities will provide emergency response teams that can work to provide first response for not only health issues but also other emergencies, and will work in collaboration with existing emergency service providers in the area (including Ambulance, Fire and Emergency and Police).

7.1.7 Workforce Integration

Although the Project will implement a recruitment hierarchy that prioritises the employment of local people, due to the small size of the Julia Creek population it anticipated that up to 90 percent of the construction workforce and 75 percent of the operational workforce will be sourced from outside the primary Study Area. This workforce will be accommodated in the Workforce Accommodation Village while on shift. A large proportion of the workforce will be sourced from the surrounding communities and may have existing networks and connections within the community; however some will also be new to the area. In addition to the DIDO/FIFO workforce the Project is also expected to attract new residents (i.e. those that relocate) to Julia Creek for employment. This mixture of workforce sourcing may result in social implications for the Julia Creek community if not appropriately managed.

The potential social implications include an increase in disruption to community cohesion, sense of place and cultural identity. This may impact the close-knit nature of the community. Whilst some of these issues may be felt in the surrounding townships, these impacts are most likely to be observed in Julia Creek where the majority of the workers are proposed to be accommodated. These implications are likely to result from the relatively large number of non-resident workers that will likely reside within the Julia Creek township, when compared to the present situation.

Assessment of Impacts

There has been extensive study and discussion about the potential impacts associated with the presence of FIFO workers, particularly when a large FIFO workforce is introduced into a close-knit community. The presence of a large FIFO population workforce within the Julia Creek community has the potential to change the existing sense of place and contribute to concerns about safety (e.g. due to anti-social behaviour). This was demonstrated through consultation described in **Section 6.3**, which highlighted community concerns regarding anti-social behaviour from non-resident workers residing in a temporary accommodation

camp in Julia Creek following the 2019 floods to repair the rail line. In addition, there is also the potential for inequalities to be felt within the community due to the payment of higher wages in the mining industry, comparative to, for example, agricultural work. This potential sense of inequality may be reinforced through the impressions of fluoro vests and other personal protective equipment (PPE) worn by mine site workers within the community, as the visual differentiation is readily apparent, and can foster a sense of "otherness". This is expected to be minimised through the use of local and DIDO workers in preference to FIFO, according to the recruitment hierarchy (refer to **Section 0**).

Whilst on-site recreation facilities are to be provided within the Workforce Accommodation Village, interaction between the local community and the Project workforce will naturally occur.

It is anticipated that the highest perceived level of impact will be during the *construction phase* – given the more transient nature of Project workers; whereas the presence of the *operations* workforce will likely to be longer term and a greater proportion sourced from the regional communities of Mount Isa, Richmond and Cloncurry with existing networks in the region.

Multicom has also committed to working with McKinlay Shire Council to provide a community integration process for new Julia Creek employees and their families. This community integration may be through initiatives such as a volunteering program, however this will be further refined through ongoing consultation with Council.

If those employed by the Project were to be housed only within either the Workforce Accommodation Village or in a singular large-scale housing subdivision developed by Multicom, this would potentially add to the separation from and change in the existing community. As the Project is planning on prioritising local employment through the recruitment hierarchy (refer to **Section 0**) and utilisation of existing vacant dwellings where possible (refer to **Section 8.5**), integration rather than segregation is intended.

Given the above, it is considered that the significance of the impact experienced by the local communities from Project workers during the *construction phase* would be **moderate**, as it has the potential to be more disruptive, with a larger workforce, although over a shorter period of time.

The impact experienced by the community during the *operations* phase, will be from a higher proportion of the workforce sourced locally and from the secondary Study Area and therefore be less than during the construction phase. There is also potential for there to be positive community development options. Therefore the impact during the operation phase is considered **minor**.

Workforce Management Mitigation and Management Measures

The following mitigation and management measures will be implemented in order to manage impacts and enhance opportunities associated with employment opportunities and workforce integration:

- Develop a recruitment policy (that is part of the recruitment hierarchy), using the identified sourcing estimate as goals for local and regional employment, attraction of "new local" personnel, and maximising female participation and Indigenous participation;
- Require Construction contractors to prioritise local and Indigenous and female employment and businesses and to report on their performance;

- Work with DSDMIP Mount Isa, Mount Isa TAFE and other training providers to develop training programs to upskill local workers as necessary, including specific programs for females and Indigenous employees;
- Develop and implement an Indigenous Training and Employment Plan for operations;
- Clearly communicate in a timely manner, all employment and training opportunities to local and regional communities throughout the construction and *operations phases*;
- Support the McKinley Shire Council in its proposal to develop a Smart Hub in Julia Creek. The Smart Hub concept aims to provide access to high speed internet, increase business and educational capabilities, improve digital literacy, and provide training facilities. Multicom has provided its support for this initiative, as it will contribute to the increased capability of local residents to participate, as either employees or contractors, in the Project. Such a hub could also be used in providing local access to online recruitment, induction and training processes;
- Develop and implement a Workforce Code of Conduct (**Section 8.4.3**) which applies to all employees of the Project, in particular those housed in the construction (and operations) Workforce Accommodation Village. The Code of Conduct will be provided as part of the induction process for new employees, and provide specificity around acceptable behaviours, particularly in relation to the local community, and will be aimed at reducing anti-social behaviour within the workforce. The effectiveness of the Code of Conduct will be monitored, and changes made as required;
- Contract an EAP provider to assist construction and operation personnel to confidentially seek support and/or assistance with various concerns, such as mental health issues, domestic and family violence, etc.;
- Develop a healthy workforce plan to promote worker health, safety and wellbeing as fundamental to Project success, establish a healthy workforce policy and a positive, tolerant and safety oriented culture within the workforce;
- Promote return to work after illness or injury; Work with McKinlay Shire Council to develop an appropriate number of on-site recreation facilities (e.g. gym) as part the Workforce Accommodation Village in Julia Creek, with the objective to manage interaction and reduce potential conflict, and offer opportunities for integration by use of existing community facilities where appropriate;
- Work with McKinlay Council to publish an information pack including a profile of local communities to support “new local” employees to understand the amenity, services and housing options on offer;
- Initiate a welcoming and community integration process for new Julia Creek employees and families; and
- Investigate opportunities for operation phase workforce community involvement in community events, and volunteering with local organisations and services.

Multicom will need to engage key local stakeholders, including business operators and representatives and special interest groups to develop positive relations, better understand community values and expectations, bolster community resilience, and develop opportunities to foster integration. Further detail as to this communication is provided in the Community and Stakeholder Engagement Plan (refer to **Section 8.3**).

As part of the engagement process, a complaints mechanism (**Section 8.3.4**) will be implemented. A complaints mechanism will provide an avenue to identify, track and remediate community complaints.

7.2 HOUSING AND ACCOMMODATION

7.2.1 Workforce Housing and Accommodation

As the construction, operation and decommissioning phases of the Project will result in temporary and permanent increase in population of the local region, the housing and accommodation needs of these persons will need to be taken into consideration.

Due to the short period of phase 1 *construction* (12 months) it is not anticipated that non-local members of the construction workforce will relocate to Julia Creek as new residents. The workforce sourced outside of a one hour driving radius from Julia Creek will be accommodated in the Workforce Accommodation Village while on shift. Assuming that up to 10 percent (20 workers) of the construction workforce can be sourced from the primary Study Area, approximately 180 workers will be required to be sourced from outside this one hour driving radius. Based on 75 percent of the construction workforce being onsite at any one time, this will result in 135 workers being accommodated in the Workforce Accommodation Village at a given time.

As described in **Section 7.1**, once fully *operational*, there is expected to be a peak workforce of more than 250 people, of which 25 percent will reside in the local community either as existing residents or "new local" residents and 75 percent will commute from other communities either through DIDO or FIFO arrangements.

It is anticipated that the Project will lead to an increase over a period of time in the size of the local population, specifically in Julia Creek. As outlined in **Section 7.1**, it is estimated that over the life of the Project up to 50 employees and their families may relocate to become "new local" residents in Julia Creek. As described above, in-migration of "new local" workers and families would take some time and is more likely to occur over a period of years. Therefore, it has been estimated that 5 per cent of the workforce or up to 8 employees may relocate over the first two years, a further 17 over the next three years as the Project is developed and expanded and so on (refer to ***Table 7-2***). Therefore, the 20 percent scenario of 50 workers represents the likely upper limit of direct population increases and associated housing impacts. Cumulative housing demand is illustrated in ***Figure 7-3.*** Further details on population impacts are provided in **Section 7.3**.

As detailed in Section 6.3.1, McKinlay Council have provided information on the number of properties that are charged rates within the Council area to enable a comparison with ABS data. Rates are charged on all properties that are either occupied or are able to be occupied. Based on the data provided, there are 249 residential dwellings in Julia Creek that Council collects rates from. The ABS census tells us that in 2016, there were 174 households in Julia Creek, and that 174 dwellings were occupied. The latest ABS population projections estimate that Julia Creek's population will have grown from 419 in 2016 to 423 in 2019. Conservatively, assuming that all of those individuals have accessed housing separately, we can assume that 178 dwellings are currently occupied. This means that based on the number of houses where rates are paid, there are a minimum of 71 vacant dwellings currently in Julia Creek.

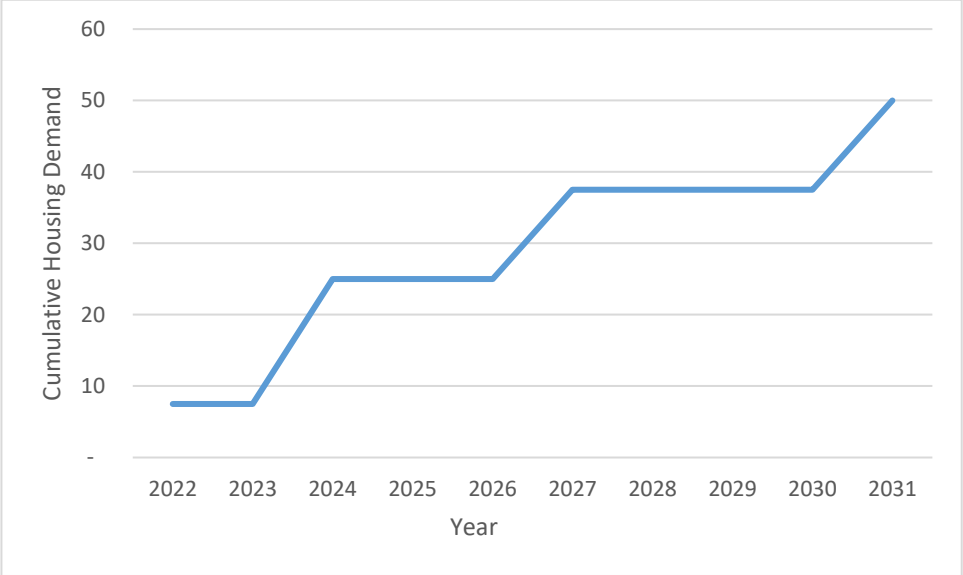


Figure 7-3 Cumulative Housing demand 2022-2031

As a result of the increase in temporary and permanent township populations within the primary and secondary Study Areas, and dependent upon the Housing and Accommodation Plan pursued by Multicom, there is a potential for the following impacts to be experienced by stakeholders:

- **Local Property Values:** As a result of the limited number of properties for sale within the Study Areas, in particular, Julia Creek (primary Study Area), it is expected that the Project will have a noticeable impact on the property market, through speculative buyers (AEC 2020). There is also the potential for local property values to rise, and for landholders to seek to capitalise on the anticipated relocation of some Project related personnel to the region. This capitalisation by landholders may be in the form of opportunities to increase incomes secured from rental properties, or through the sale of individual properties for higher prices than would have normally been expected.
- **Housing Affordability:** Whilst high local property values may facilitate increases in rental incomes and sale prices for some, others within the local community are likely to be placed under greater housing affordability stress by these changes in the property market. The Economic Impact Assessment, prepared by AEC (2020), identified that the increase in population due to the Project will impact on people looking to rent or buy within the local area, as they may not be able to locate suitable housing options within an affordable price range. In addition, if rental prices increase, existing tenants may find themselves in a situation where the rental cost has increased to a level that they are unable to afford, and they find themselves pushed out of the market. It is important to note that current rental prices are very low compared to the State average.
- **Accommodation Availability:** Given that the property market in the local area is relatively small, the increase in population may cause a shortfall in the availability of short and/or longer term accommodation within the area. This will in part depend on the ability of Multicom, working with the McKinlay Shire Council, to capitalise on the current high rate of unoccupied private dwellings, with over 100 in the McKinlay LGA and approximately 300 in the neighbouring communities of Richmond and Cloncurry (refer to **Section 6.3.1**). Market demand is likely to see some of these released to the rental or purchase markets. Multicom are also working with McKinlay Shire Council on

a Housing and Accommodation Plan (refer to **Section 8.5**), including meetings in 2019, to ensure the Project does not limit opportunities for "out-of-town"/non-Project related visitors to stay within Julia Creek.

- **Indirect Economic Benefits:** Existing accommodation options within Julia Creek including the Caravan Park, Julia Creek Villas, Julia Creek Motel, Gannon's Hotel Motel and the Julia Creek Hotel will have the opportunity to benefit economically from increased head office, Government, consultant and contractor visitors to the town as a result of the Project proceeding. Through consultation, Multicom will work to limit impacts on their existing tourist trade.

The degree to which these impacts will be felt within the communities comprising the primary and secondary Study Areas will be dependent upon the Housing and Accommodation Plan (refer to **Section 8.5**) implemented by Multicom during the various phases of the Project.

Whilst the specific issue of workforce accommodation was not raised during the community consultation sessions carried out to-date, the subsequent issues around provision of infrastructure to support increased populations was raised. This issue is considered in **Section 7.3.2**.

Assessment of Impacts

During the life of the Project there will be an increase in population in Julia Creek and surrounding townships. The Economic Impact Assessment (AEC 2020) has identified that during construction and operation phases, the local housing market will be both positively and negatively impacted, dependent upon the particular circumstances of the stakeholder.

With respect to the issue of property market capitalisation by landholders, this will be seen by these landholders as a **positive** impact, resulting in higher returns on investment. With the implementation of the proposed accommodation strategy to establish a Workforce Accommodation Village during the *construction phase*, and then either have an operations Workforce Accommodation Village or develop new residential housing during the *operations phase*, the impact on the property market will not be as pronounced. As noted by AEC (2020) in the Economic Impact Assessment, there is the potential for speculative buyers to still increase demand within the area – retaining a reduced but still **positive** impact for landholders.

As noted in the Economic Impact Assessment (AEC 2020) the Economic Catchment has sufficient workforce capacity to support the Project. To this end, the modelling undertaken by AEC (2020), was predicated on the assumption that approximately 75 percent of the workforce will be sourced within the Economic Catchment, with the remainder from outside the Economic Catchment, during construction, operation, rehabilitation and decommissioning. This comprises 10 to 25 percent from Julia Creek (including "new locals"), 30 percent from the secondary Study Area and 20-30 percent from Townsville and surrounding communities. This assumption of 75 percent of the workforce being able to be sourced from within the Economic Catchment, is supported by the baseline analysis of age (refer to **Section 6.2.2**), industry of current employment (refer to **Section 6.4.1**) and occupation (refer to **Section 6.4.3**) as well as employment status (refer to **Section 6.5.1**) of the population located within the Project Study Areas. This detail was correlated during consultation with the local community, with interest in direct employment and economic

opportunities stemming from the Project expressed by individuals, businesses and associations.

Accordingly, of the anticipated *construction* workforce of 250 persons likely to be employed during the peak of the *construction phase*, accommodation would need to be provided for non-local workers working on a FIFO / DIDO arrangement. As Multicom is proposing a Housing and Accommodation Plan that pursues a Workforce Accommodation Village within the bounds of Julia Creek, the local property market is unlikely to be impacted (therefore **minor**). Therefore, the assessment of impacts will largely relate to the population increase likely to occur during the operation phase.

The *operations* phase of the Project is expected to have a workforce of more than 150 people for production up to 10,000 tpa and an additional 100 jobs for additional production up to 20,000 tpa (labour requirement). It is estimated that over the life of the Project up to 50 workers, plus their families, will relocate to Julia Creek requiring housing, supplementing the 13 existing residents estimated to be sourced from Julia Creek. The rest of the operational workforce will be sourced from the secondary Study Area, the Economic Catchment and further afield, and will be accommodated in the Workforce Accommodation Village whilst on shift.

If all unoccupied dwellings (based on Council rates data and ABS data) were available and in suitable condition for rental or purchase, there would be sufficient existing housing to accommodate the anticipated 50 employees who may relocate to Julia Creek over the life of the project (refer to **Section 6.3.1)**. Due to difficulty in obtaining accurate housing market data for Julia Creek and based on visual assessments undertaken during consultation, it has been conservatively estimated that 30-40 percent of existing unoccupied dwellings could be available to the market (with improvements where necessary), or 21-28 dwellings. If these existing unoccupied dwellings were made available to the market, there would be sufficient housing available for Years 1 to 5 of the *operational* workforce; this is based on the estimated gradual increase in employees relocating to the Julia Creek. If only 20% were available, there would still be sufficient availability for the first 2 years of operations prior to operational expansion in Year 3. However, with the increase in the operational workforce associated with expansion to 20,000 tpa, and ongoing attraction of "new local" residents, there may be a shortage of housing in Julia Creek from Year 5 (2026) onwards (assuming no changes in the current baseline conditions). This shortage of the accommodation required for workers during the peak *operational* phase of the Project is assessed has having a **major** impact if left unmitigated. Additionally, where there is a shortage of accommodation, increased housing prices due to increased demand will likely follow. This would be experienced in the rental and sales markets. This increased demand would also have a **major** impact on housing affordability without mitigation.

The intention of Multicom to use the Workforce Accommodation Village for the purpose of housing DIDO and FIFO workers during the course of the operations phase will ease pressure on existing housing within Julia Creek and lessen the impact on the local community (**minor**).

Further, if greater than 30 percent of the existing unoccupied houses in the McKinlay LGA are made available (refer to **Section 6.3.1**) and new housing stock developed or facilitated by Multicom in partnership with McKinlay Council, accommodation affordability and availability issues would be further reduced. It is important to consider that after the life of the Project, Julia Creek may have a surplus of vacant dwellings that, dependent upon future regional activities, may not be able to be on-sold. Therefore, it is considered that a

subdivision and erection of new houses will need to consider this impact as part of ongoing discussions with McKinlay Shire Council as well as the ability of the Project to attract employees to relocate to Julia Creek. In addition, if DIDO and FIFO workers are to be housed during their stay in an operations Workforce Accommodation Village, they would not need to use the existing non-Project visitor accommodation, except for periods of additional maintenance.

Through the implementation of mitigation measures, the impact of the Project on housing affordability and accommodation availability within Julia Creek and the surrounding area will be reduced to a level more consistent with a **minor** level of impact significance.

Additionally, it is considered that existing accommodation providers within and surrounding Julia Creek will experience indirect economic benefits in both the *construction* and *operation* phases of the Project, through the provision of short-stay, temporary or transitional accommodation in relation to the Project. Further, other visitor and hospitality services may also experience such economic benefit. As such, there is expected to be a **positive** impact.

Mitigation and Management Measures

The following mitigation and measures will be implemented in order to manage impacts associated with workforce housing and accommodation:

- Develop a Workforce Accommodation Village in Julia Creek to minimise impact on the property market during the *construction phase*;
- Continue to use the Workforce Accommodation Village for operations phase DIDO and FIFO workers;
- Develop a Housing Strategy in partnership with the McKinlay Council prior to the *operations phase* commencing which is likely to include:
    - Audits of existing vacant dwellings and their suitability for "new-local" operational phase employees;
    - Updating the assessment of Project housing need;
    - Identification of policies and possible funding mechanisms to encourage owners of vacant dwellings to make the required improvements to make dwellings habitable and attractive to operation phase personnel looking to relocate to Julia Creek;
    - Establishment of a mechanism to track rental prices within Julia Creek and the surrounding townships;
    - Facilitating housing development if required through market research to identify private, Council and Government interest in housing development in response to Project need;
    - Identification and implementation of strategies and policies to attract operational phase personnel to Julia Creek; and
    - Development of a timeline for implementation of actions based on Project scale up and anticipated demand.
- Work with existing visitor accommodation providers in Julia Creek, and in surrounding townships (e.g. caravan parks or motels) to understand available supply and timing of vacancies to ensure that Project does not impact on tourists and other visitor

demands, but instead provides opportunities for those suppliers to continue to cater to tourists and other visitors;

- Contribute to the McKinlay Council Housing Needs Assessment identified in the 2019-2026 McKinlay Community Plan; and
- Establish a register of available housing in Julia Creek.

Complementing the above management measures, is ensuring open and robust communication with stakeholders, as this will play an important role in managing the potential impacts associated with workforce accommodation impacts. This communication will involve notifying the local community of how this issue will be managed. It is important that Multicom continues to work closely with the McKinlay Shire Council when considering options for management. This forms part of the Community and Stakeholder Engagement Plan (refer to **Section 8.3**).

The implementation of the Housing and Accommodation Plan (refer to **Section 8.5**) which will include the development and implementation of an internal mechanism to track rental prices within Julia Creek and the surrounding townships. Tracking of rental prices will allow discernment of Project impacts on rental affordability. If rental affordability is noticeably negatively impacted, the accommodation strategy and Housing and Accommodation SIMP for the Project will be reviewed.

As part of the engagement process, a complaints mechanism (refer to **Section 8.3.4**) will be implemented. A complaints mechanism will provide an avenue to identify, track and remediate community complaints.

7.3 HEALTH AND COMMUNITY WELLBEING

7.3.1 Population changes

This section describes potential population growth and demographic changes as a result of the Project. As described in **Section 7.1**, the Project is likely to draw labour from the existing Julia Creek community, the secondary Study Area, and the Economic Catchment. However, discernible population effects are only expected in the primary Study Area.

Construction

As described in **Section 7.1.1**, local and regional contractors, labourers and suppliers will be preferentially utilised in the *construction phase*. As a result, it is anticipated that the *construction* workforce will be able to be primarily sourced from the Economic Catchment, with this workforce supplemented by workers from other regional Queensland centres. Due to the short period of construction (12 months) (each during phase 1 and phase 2) it is not anticipated that members of the construction workforce will relocate to Julia Creek. The workforce sourced outside of a 1 hour driving radius from Julia Creek will be accommodated in the Workforce Accommodation Village while on shift. Assuming that up to 10 percent (20 workers) of the construction workforce can be sourced from the primary Study Area, approximately 180 workers will be required to be sourced from outside this one hour driving radius. Based on 75 percent of the construction workforce being onsite at any one time, this will result in up to 135 workers being accommodated in the Workforce Accommodation Village at a time. In summary, the *construction phase* is likely to have the following impacts on the Julia Creek population:

- No increase in the residential population of Julia Creek and surrounding communities; and

- A peak of 180 non-resident workers over 12 months, of whom approximately 135 would be on-shift at any one time.

The number of non-local workers (i.e. an average of 135 non-resident workers) on shift over the 12 months will require consideration in planning for Council services such as water supply and waste management. The potential for the Project's demand to exceed current and planned capacity of water and/or waste services and the need for mitigation measures to address any shortfalls in capacity will be discussed through engagement with McKinlay Shire Council during the pre-*construction phase*.

Operations

The Project operations are proposed to commence in 2022 with a workforce of approximately 150 to support the initial 10,000 tpa mine and processing facility. With the phase 2 expansion, which will increase processing capacity, the workforce is anticipated to increase to 250 people in 2024.

Multicom will have a recruitment hierarchy that prioritises local and regional recruitment from Julia Creek and the secondary Study Area communities of Mount Isa, Richmond and Cloncurry. Operations staff will also be encouraged to relocate to Julia Creek. It has been estimated that the proportion of the workforce sourced from Julia Creek, including those who have relocated for employment, will start at 12 percent in Year 1 (2022) and increase to 20 percent by Year 10 (2031) (refer to ***Table 7-2***). The majority of the increase will be associated with new residents relocating to Julia Creek.

Based on the workforce sourcing estimates developed by Multicom and outlined in **Section 7.1.3**, it is estimated that in Year 1 (2022) up to 5 percent of the workforce, or 8 employees, may choose to relocate to Julia Creek. Following the expansion of the processing facility in Year 3 (2024) and the associated increase in workforce from 100 to 250 people, it is anticipated that the new resident workforce will increase to 10 percent or 25 employees, an increase of 17 additional new resident employees. Between Year 3 and Year 10, the new resident workforce is estimated to gradually increase to up to 20 percent of the workforce or 50 new resident employees in total.

As described above, in-migration of "new local" workers and families would take some time, and is more likely to occur over a period of years. Therefore, the 20 percent scenario of 50 workers represents the likely upper limit of direct population increases.

To estimate the number of accompanying family members who would relocate with the new-resident workers, two population scenarios have been considered due to the large differences in average household sizes between Julia Creek and Queensland. Julia Creek has a low average household size of 2.1 due to its aging population and lack of secondary school facilities; while Queensland has an average household size of 2.6. To identify suitable scenarios, the average household sizes in Cloncurry (2.4) and Mount Isa (2.6), which both have larger mining and minerals processing workforces, have also been considered. Based on the above comparisons, the following have been utilised in developing population scenarios:

- Scenario 1 - average household size of 2.2. This is expected to be at the lower end of the likely range.
- Scenario 2 – average household size of 2.6. This is expected to be at the higher end of the likely range.

Using the above scenarios and sourcing estimates, the direct population increase attributable to the Project by Year 10 is 110 under Scenario 1 and 130 under Scenario 2. The cumulative increase in estimated new residents for the two scenarios is shown in ***Figure 7-3***.

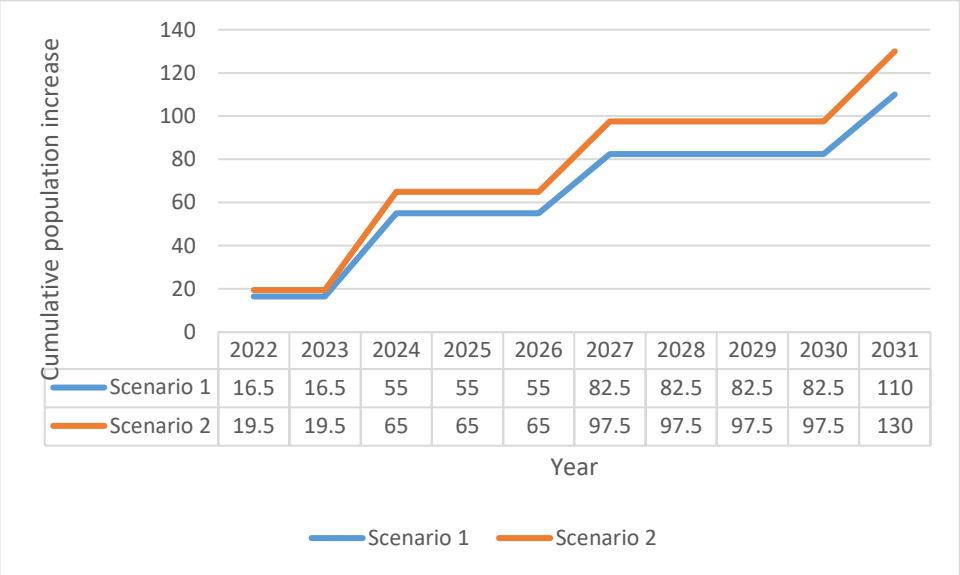


Figure 7-4 Cumulative Population Impact 2022-2031

As described in **Section 6.2** Julia Creek and the communities within the secondary Study Area have been experiencing population decline over the last 20 years and the population projections for McKinlay Local Government Area indicate that without the Project, this decline is likely to continue into the future. The Saint Elmo Project will enable Julia Creek to arrest this population decline and support a more stable population into the future.

It is anticipated that the "new local" workers likely to be attracted to relocate to Julia Creek are those from within the Economic Catchment with young families who would prefer not to have to work away while on shift and/or couples whose children have left school. As a result, the population increase may lead to a higher proportion of children and younger adults in the population than are currently there. This is consistent with the aspirations described by the Julia Creek community during consultation.

The Project is likely to have a **positive** impact on population stability by:

- Increasing job opportunities for existing local residents which may encourage people to remain in Julia Creek and surrounding communities and provide opportunities for young people finishing at boarding school or university to return to the region;
- Attracting new resident workers and their families to the community who will become long term residents; and
- Offering employment opportunities over a 30 year period.

7.3.2 Infrastructure and Services

During consultation, concerns were raised about the potential impact the Project would have on regional services. These concerns were primarily focused on a desire from local residents to better understand the rate of likely population increase, so that service providers could adequately plan for the change. Additionally, feedback from residents also highlighted a sense that a well planned increase in the population within Julia Creek, could

allow for the range and viability of services to also increase (e.g. school size and opportunities, number of healthcare facilities, etc.).

Given the likely increase in the population of the primary and secondary Study Areas during the life of the Project, it is anticipated that there will be impacts experienced in the local community, including increased pressure on community infrastructure and services. This includes:

- **Increased Pressure on Health and Emergency Services:** During the *construction* and *operational* phases, it is anticipated that the Project will have an on-site medic for use by the workforce. It is typical for mine *construction* and *operations* to provide emergency response teams which can work to provide first response for a range of emergency situations, including health related issues. The emergency response teams work in collaboration with existing emergency service providers. The health facilities and emergency services provide by the Project will help to reduce additional demand being placed on Julia Creek and Regional Health and Emergency services for basic injuries and illnesses.

  For more serious illnesses and incidents, given the size of Julia Creek Rural Hospital (McKinlay Shire Multi-Purpose Health Service), it is unlikely that the workers will be transported to this hospital, unless initial stabilisation is required. Instead, it is more than likely that workers will be transported to Mount Isa Base Hospital for treatment.

  An increase in pressure on existing health and emergency services is more likely to arise during the operational phase of the Project, when it is anticipated that a number of workers and their families will relocate to Julia Creek and the surrounding towns. If 20 percent of the operational workforce relocates, it is possible that this may include approximately 50 workers plus their families relocating to the township at peak operational capacity. As described above, this could lead to a population increase of between 110 and 130 by Year 10 of the Project.

  The Project could also place additional demands on emergency services, in the unlikely event of an emergency or incident occurring at the Project site. To assist emergency service providers, Multicom will ensure that fire and emergency service staff and police have capability for 24-hour access the Project site.

- **Increased Pressure on Child Care and Educational Services:** As outlined in the previous section, based on the average Queensland population demographics, the relocation of residents to Julia Creek could see an increase in demand for primary school services by up to 17 students in year 10. As Julia Creek only has one school (Julia Creek State School) and limited options for secondary schooling, there is an increase in the pressure placed on existing educational services. Whilst there are different schooling options in the secondary Study Area, the increased population from workers and their families may also increase pressure on local child care and educational facilities. If no mitigation measures are taken, this will lead to a decrease in the primary and secondary Study Areas' capacity to service the local community. It was highlighted during the consultation process that the child care and primary school both had additional capacity; however, capacity is dependent on resources available at the current time of enrolment and the final number of children enrolling.

- **Increased Pressures on Recreational Facilities:** Whilst Julia Creek does have recreational facilities (i.e. a gym, several parks, sports centres, tennis courts, swimming pool etc.) that, from community discussions are considered to be in a reasonable to

good condition, the increased number of residents during the *construction* and *operational phases* may lead to pressures upon the existing recreational facilities for the local community. The pressures can either be from workers participating in after work activities or as a result of their family using the facilities if they were to relocate to Julia Creek during the operation phase. During the *construction phase*, it is intended that the Workforce Accommodation Village will provide some recreational facilities (e.g. gym). Despite these possible pressures, the increase in the number of population may make some recreational options more viable in the longer term and assist the workforce to integrate into the community (e.g. more people for sporting teams, more volunteers to participate in organisation).

Assessment of Impacts

Whilst it is estimated that there will be 250 people employed during the peak period of the *construction* phase, a large proportion of these workers will be non-local and will access the medical facilities within their home communities for general health matters. They will be able to access the on-site medic for any medical issues that arise while on shift. As such, it is expected that the local community's health care services will only be marginally affected. In the case a medical emergency, given that the workers will likely be transported to Mount Isa Base Hospital, the impact on the number of available beds and/or staff at Julia Creek Rural Hospital (McKinlay Shire Multi-Purpose Health Service) will be negligible. Although there could be an increase in the numbers admitted to emergency at the Mount Isa Base Hospital, it will be a rare occurrence, and therefore it is considered that the impact during the *construction phase* is of **minor** significance.

Once fully operational, a peak workforce of more than 250 people is anticipated for the Project. This has the potential to increase the population of Julia Creek and surrounding townships. Based on workforce sourcing estimates, this could lead to an additional 130 residents at peak operations. Given the current population size of Julia Creek, it is considered the estimated number of new families in the community have the potential to place pressure on the existing health care and emergency services within the primary Study Area, particularly with respect to increasing wait times and decreasing capacity of the medical professionals to meet the demands of residents. Accordingly, the impact is considered to be **moderate**.

As noted above, there is a potential that workers' families may relocate to Julia Creek or surrounding townships, which may result in an increased number of children in the population. As there is only one school within Julia Creek, and only a limited number of schools within the secondary Study Area, population growth may impact upon the capacity of the existing educational services. The consultation process revealed that the child care and primary school both had additional capacity; however, ongoing capacity is dependent on resources available at the current time of enrolment and the final number of children enrolling. Accordingly, the impact is considered to be of **moderate** significance.

With respect to recreation, the potential relocation of workers and their families during the *operational* phase has the potential to place pressures on the existing recreational facilities. It has been considered that workers may partake in after work activities and their family and children may use other recreational facilities such as the park, swimming pool or sports centres, and this may have an apparent impact on the local community. Despite this, anecdotal evidence collated during community consultation indicated that the existing facilities have additional capacity. In conjunction with the proposed Workforce

Accommodation Village recreational facilities, this impact is considered to be of **minor** significance.

Mitigation and Management Measures

The following mitigation and management measures will be implemented to manage impacts from increased pressures on existing infrastructure and services:

- Provide on-site medical treatment similar to other mine developments for Project workers (e.g. provision of isolated stick bays to prevent spreading of illnesses; employing necessary staff with paramedical or nursing qualifications to manage minor health issues etc.);
- Consult with local, regional, and possibly external, health providers (e.g. Julia Creek Hospital, local GPs) within the primary and secondary Study Areas to provide information on the anticipated workforce numbers and "new local" workers to assist in capacity planning and in identifying pressure points. Seek advice on the provision of additional Project specific medical/health care services for employees to minimise additional pressure on existing emergency services;
- Proactively engage with existing medical emergency services, in relation to emergency response planning and treatment hierarchies;
- Proactively engage with fire and emergency service providers and police in relation to emergency response planning and access to the Project site;
- Promote worker health, safety and wellbeing as fundamental to Project success, by establishing a Healthy Workforce Policy, developing and implementing Health and Wellbeing Programs/Strategies for construction and operation personnel, and by promoting and a positive, inclusive, and safety oriented culture within the workforce;
- Contract an EAP provider to assist construction and operation personnel to confidentially seek support and/or assistance with various concerns, such as mental health issues, domestic and family violence, etc. This will increase mental health capacity in the region;
- Devise and implement an education campaign aimed at minimising non-local employees' demands on local medical services. This campaign would provide content to educate non-local employees and contractors on routine medical matters, and encourage non-locals to address existing health issues prior to commencement of their shift rosters, so as to minimise demands on local services for minor and routine health issues;
- Investigate future investment in local child care facilities and early learning facilities and services consistent with the 2019 Community Plan to support the local community, and the increase in families stemming from the Project;
- Incorporate basic recreational facilities into the Workforce Accommodation Village, including a gym.
- Investigate potential for Project-provided recreational facilities to be accessible to community members; and
- Jointly plan for new and/or improved recreational facilities with McKinlay Shire Council to complement existing local facilities and investigate future investment and/or partnerships with recreational facility providers.

Further detail as to these mitigation and management measures is provided in the Stakeholder Impact Management Plan (**SIMP**) Health and Community Wellbeing Plan (refer to **Section 8.7**).

In addition to the above management measures, communication with stakeholders will play an important role in managing the potential impacts associated with increased population resulting to pressures on the existing infrastructure and services. Further detail as to this communication is provided in the Community and Stakeholder Engagement Plan (refer to **Section 8.3**).

Additionally, as part of the engagement process, a complaints mechanism (refer to **Section 8.3.4***)* will be implemented. A complaints mechanism will provide an avenue to identify, track and remediate community complaints.

7.3.3 Traffic

The Flinders Highway will provide vehicle access during all phases. It is proposed that all process chemical reagents, diesel fuel and vanadium product elements will be transported via rail between the Project site (MLA100162) and the Port of Townsville. A new rail siding within the site to enable train loading and unloading will be established. The creation of a new rail connection may require upgrades to some of the existing network, with ongoing discussions being held between Multicom and Queensland Rail to determine if any upgrades will be required.

The Project site (MLA100162) will be formally accessed from a new access road from the State-controlled Flinders Highway and a new spur from the Mount Isa rail line to a new siding.

During consultation with stakeholders, the impact of traffic on the Flinders Highway associated with the Project was raised as a key concern.

The reduction in the amount of traffic on the road network through the use of rail will diminish the potential negative impacts arising from the Project in this regard. The remaining road traffic generated by the Project will be via construction and operation personnel driving to and from the Project site and other consumables and equipment not moved by rail. During both the construction and *operations phases*, staff will be encouraged to use a bus service to and from the site to minimise traffic on the highway and driver fatigue.

In order to support mining activities, an operating water supply will be stored in an OWSF. The OWSF and associated infrastructure is located approximately 21 km east of the Project site, with access off Old Nelia Road. Vehicular access for the construction of the OWSF will be provided along Old Nelia Road, with access for the associated pipeline via the site and along Punchbowl Road.

The OWSF and associated pipeline is expected to be constructed in the second year. The construction of the pipeline along Punchbowl Road will be subject to short term traffic management arrangements. The pipeline is within the road reserve and the required traffic guidance schemes and a Traffic Management Plan (**TMP**) will be developed as required in order to obtain permits from the authorities prior to construction activities taking place. During operation, the OWSF will be accessed via a maintenance track for use by utes and service vehicles up to Medium Rigid Vehicle (**MRV**) size.

With respect to impacts on Julia Creek State School, consultation with the Principal has indicated that most drop-offs and pick-ups happen at the back entrance of the school and the pedestrian crossing at the front of the school over the Flinders Highway is an effective mitigation measure.

Whilst reduced, it is expected that the Project will still increase the volume of traffic on the surrounding roads. Due to the increase in traffic, there is a potential for the following impacts to be experienced by Project stakeholders:

- **Wear and Tear:** An increase in wear and tear along the roads from vehicle movements, particularly heavy vehicles, may result in the Department of Transport and Main Roads (**DTMR**) and local governments needing to repair roads more regularly, costing additional money. Degradation of the road surfaces also has the potential to negatively impact commuters along the affected roads by causing delays and/or creating potential traffic hazards. Wear and tear of the road surface was not identified as a concern during community consultation carried out to-date.
- **Traffic Congestion:** An increase in traffic can lead to congestion and inconveniencing existing road users. Delays may also lead to frustration and anxiety for commuters, particularly if congestion occurs for long periods of time. Increased traffic was identified as a concern for the majority of stakeholders during community consultation. It should be noted that the incorporation of rail will reduce the impacts to road users as there is a reduction in the number of heavy vehicles required to transport chemical reagents and fuel to site and the finished product from site to the Port of Townsville. This will also be mitigated through the use of bus transportation from the Julia Creek to the site for workers coming on and off shift and between regional towns at the end of shift.
- **Traffic Accidents:** Increased rate of traffic-related accidents as a result of increased volume of vehicle movements and associated increased risk of an accident occurring. Whilst traffic accidents were not identified as a specific concern during the community consultation carried out to-date for the Project, it is still considered an issue that will need to be appropriately addressed to lower the risk of accidents occurring during construction and operation.
- **Stock Routes:** The Project site contains a stock route which traverses east-west through the northern section of the Project site. Mining activities will impact on the functionality and connectivity of the existing stock route during the first 30 years of mining activities. Development of the Project would require the realignment of the stock route to permit land access and development rights. Whilst impacts to this stock route were not raised as a specific concern in the community consultation carried out to-date, this may have an impact on the grazing industry.

Assessment of Impacts

During construction of the Project, there will be an increase in the number of vehicles travelling to and from the site via Flinders Highway. Additionally, during construction of the OWSF and associated infrastructure there will be an increase in the number of vehicles travelling along Punchbowl Road and Old Nelia Road, which provides access to the OWSF. Given that the Flinders Highway is the main point of entry to Julia Creek, there may be impacts to residents and businesses entering/exiting the township.

The assessment of traffic congestion related impacts considered both *operation* and *construction phase* impacts concurrently, as the Traffic Impact Assessment (**TIA**) (TTM 2020) indicated that the vehicle movements per day will be similar. Despite this however, the impact differs depending on the receptor, and their distance from the Project site.

There is potential for wear and tear to arise from heavy vehicle operation on the existing road network. Thus, a pavement impact assessment was undertaken as part of the Traffic Impact Assessment (TTM 2020), which found that the impact to Flinders Highway during all phases is less than five percent and is within the Guidelines for Assessment of Road Impacts of Development Proposals[2]. Accordingly, this impact was assessed to be of **negligible** impact to direct and adjoining landholders, local community, business operators and representatives, special interest groups and government during construction and operational phases. As there is negligible impact, this potential impact will not be specifically assessed or mitigated.

TTM (2020) assumes that peak hour traffic volumes are equal to 15 percent (worst case) of the daily traffic volumes. The TIA found that during *construction* the site will be serviced by a total of 1,105 vehicles (equal to 2,210 two way movements), which is equivalent to an average of up to three truck deliveries or six total truck movements per day.

During operation, it is anticipated that several service vehicles will visit the site every two to three days. On average however, it is estimated that there will be approximately one truck delivery (two two-way movements) per day throughout the operational phase. A total of 29 mining fleet vehicles will require specialist transport to the site, equivalent to a maximum of 15 vehicles per year in years one to three. It is expected that these vehicle movements will be carried out over several weeks / months to minimise the impacts on other road users. During *operations*, the Project will require continual supply of daily materials such as food, water and replacement maintenance equipment, which is anticipated to generate an average of one truck per day. Occasional infrequent trips which include operators, additional maintenance personnel, authorities and visitors among other purposes are also expected during the *operation phase* via private vehicles.

Further, the TIA found that the incorporation of the rail will reduce impacts on the existing road network as it will reduce the number of heavy vehicles travelling to and from site and the Port of Townsville.

Therefore, the impacts associated with traffic congestion on direct and adjoining landholders and the local community (Julia Creek) is considered to be **minor** in their significance. This is due to the magnitude of impact, as the incorporation of rail and use of buses to transport the workforce to and from Julia Creek and site will significantly reduce the traffic volumes for the duration of the Project.

For business operators and representatives, and special interest groups, however, it is considered that there will be a **negligible** impact as while there will be an increase in traffic above the baseline conditions, it is considered that the traffic volume generated by the site will diminish as distance from the site increases, and there is potential for these receptors to adjust their travel routes to avoid this impact.

[2] The guideline requires traffic operation impacts to be considered for State Controlled Roads where 5 percent equivalent standard axles (ESA) are exceeded.

Between July 2008 and June 2018 there was one reportable accident within 2.5 km of the crossing location with no known physical changes to the road geometry during the same period. The TIA (TTM 2020) indicated that this is evidence of safety of the prospective access points. Despite this however, it is considered that regardless of the current safety record along the Flinders Highway, an increase in the number of vehicles will result in an increase to the potential for accidents to occur on the highways, as well as surrounding access roads.

Traffic accident impact poses risks to direct and adjoining landholders, local community, business operators and representatives, and special interest groups. The impact was assessed as having a **moderate** significance, largely due to the high magnitude of the impact and the vulnerability of the community. The worst case scenario is that a traffic accident results in a serious injury or fatality. Although the increase in Project traffic is not considerable, it could increase the likelihood of an accident occurring due to a greater number of vehicles on the road network. This assessment also considers Julia Creek State School, the impact on which is expected to be limited due to the school is access routes, including the existing pedestrian crossing, and the variable speed limit that allows students and residents to cross the Flinders Highway safety in front of the school.

As the stock route is classified as a 'minor and unused, open' stock route, it is determined that there will be negligible impact from the Project on stock route movements and the grazing industry. The stock route will be realigned to follow a route around the southern boundary of the MLA to maintain connectivity and functionality through the construction and operations period. Additional economic considerations for the stock route impacts are assessed in **Section 7.3.1**.

Mitigation and Management Measures

The following mitigation and measures will be implemented in order to manage impacts associated with traffic:

- Provide buses/coaches to transport workers from the proposed Workforce Accommodation Village in Julia Creek to the Project site;
- Limit road use during severe wet weather;
- Ensure Project personnel strictly adhere to speed limits through enforcing a Driver Code of Conduct;
- Ensure vehicle operations are licenced and trained appropriately;
- Construction equipment/plant delivered will be located on site for the duration of construction activities and not transported to and from as required;
- Utilise local suppliers where practicable;
- Coordinate vehicle movements for delivery of main plant components and construction materials for access road on days when other users' requirements are at their lowest;
- Promote road safety awareness activities within the workforce and the community (e.g. schools) to assist in creating awareness of hazards associated with traffic, including heavy vehicles;
- Place signage to identify new site access points, line marking on both approaches of new site access, and warning signage where turning vehicles may create a hazard.

Design the access point in line with the Austroad standard to provide appropriate turn capacity (including deceleration and turn radii);

- Implement the Road-Use Management Plan prior to commencement of construction activities;
- Realign the stock route around the MLA so that connectivity of the existing stock route is maintained; and
- Implement the following measures to maintain functionality of the stock route:
    - Maintain corridor width of 100m;
    - Fence corridor on both sides;
    - Include a water facility that has a permanent supply; and
    - Install a level crossing over the proposed rail spur.

In addition to the above management measures, communication with stakeholders will play an important role in managing the potential impacts associated with an increase in traffic. This communication will provide residents and business owners an understanding of likely timeframes, in particular when the Project will start construction and traffic will likely ramp up (i.e. construction of the new intersection resulting in short-term delays). In addition, communication will involve notifying direct and adjoining landholders and local community of when large deliveries will occur, and when, if any, detours will be established. This will be included in the Community and Stakeholder Engagement Plan (refer to **Section 8.3**).

As part of the engagement process, a complaints mechanism (refer to **Section 8.3.4**) will be implemented. A complaints mechanism will provide an avenue to identify, track and remediate community complaints related to Project traffic concerns.

The development and implementation of road safety management policies and procedures for all Project personnel will be a priority prior to construction commencement. The use of tools, such as Journey Management Plans, will ensure safeguards are put in place around fatigue management. Further, the implementation of road safety management policies that require all workers and suppliers to follow the road rules (e.g. Driver Code of Conduct) will disincentives recklessness and increase understanding of safety issues.

Additionally, the promotion of road safety awareness activities within the workforce and the community (e.g. schools) will assist in creating awareness of hazards associated with traffic, including heavy vehicles.

7.3.4 Dust

Dust will likely be generated by construction and operation of the Project as a result of:

- **General Construction Activities:** This includes loading and unloading of goods and materials and construction of structures at the Project site. Dust from general construction activities were not assessed as part of the Air Quality Assessment, however, dust generated from earthworks, mining and vehicles on dirt roads (considered below) were identified in the Air Quality Assessment (ASK 2018a) as potential sources of increased dust.
- **Clearing/Earthworks:** Activities such as land clearing, excavation and trenching typically generate dust. Exposed earth can also contribute to increased dust emissions.

- **Mining:** Open cut mining using truck and excavator operations is proposed. This will include the removal of topsoil and, back-filling, stockpiling and mining related excavating. Any ore processing could also generate dust. It is noted that blasting is not proposed as part of the Project, and therefore no dust will be generated from blasting (ASK 2019b).
- **Increased Unsealed Road Traffic:** Many of the on-site roads will be unsealed dirt roads and as such, increase the exposure of dirt, and the potential for dirt to be distributed by wind and vehicular movement. The Air Quality Assessment (ASK 2019a) determined that there will only be a short duration of exposure on Flinders Highway (sealed road). Furthermore, as distance from the site increases, it is expected that the potential impact of dust diminishes.

Increased dust is likely to occur within and in proximity to the Project site and can decrease the amenity value of an area and can be a nuisance. Furthermore, dust has been linked to health impacts, such as exacerbating the effects of asthma.

It is important to note that dust was raised as a key concern during the community consultation carried out to-date.

Assessment of Impacts

Dust impacts are expected to vary according to the different phases of the Project and for different receptors based on their proximity to the Project site.

The dust impacts from general construction activities will occur during both construction and operational phases, however impacts differ based on receptors' proximity to the Project site. For direct and adjoining landholders during the *construction phase*, this impact is considered to be **minor**, as dust from this impact is considered to be low in magnitude and these stakeholders have a moderate level of vulnerability to adapt to these impacts due to their proximity to the Project site. For local community, business operators and representatives and special interest groups, this impact will be of **negligible** significance as there will be a low magnitude and vulnerability due to the low perceptible difference from baseline conditions as these stakeholders are located further from the Project site (ASK 2019a).

Dust resultant from earthworks is perceived to impact direct and adjoining landholders during the *construction phase*. Despite this, the Air Quality Assessment determined that emissions will likely be short-lived and located relatively far from direct and adjoining landholders (ASK 2019a). Given this, the impact was assessed as **minor**, as any impact experienced will be short in duration, and will not differ significantly from baseline conditions.

Mining activities will occur during the operational phase of the Project and have differing impacts for stakeholders. The results of the Air Quality Impact Assessment (ASK 2019a) found that dust deposition levels at the nearest sensitive receptor (St Elmo Homestead) during the worst-case scenario will exceed relevant criteria. A **major** impact significance will therefore be experienced by this sensitive receptor due to its proximity to the Project site and therefore experiencing a high level of change and little ability to adapt to the change in circumstance as the Project is expected to operate on a 24 hour basis.

The impact significance from airborne dust as a result of mining activities for all other sensitive receptors, the local community, business operators and representatives and special interest groups, however, will be different, with the likely impact to be of **minor**

significance. The reason for this reduced level of impact significance is that dust deposition resulting from mining activities during operations is predicted to occur within stipulated criteria limits, thus there will be a low magnitude of the impact and moderate level of vulnerability experienced. After implementation of the management measures it is expected that these stakeholders will only experience a **negligible** impact.

Increased road traffic along dirt roads will impact during both construction and operation. As above, direct and adjoining landholders will experience **minor** impact in both phases due to their proximity to the Project site, which will lessen to a **negligible** level of significance post-management measure implementation. Local community, business operators and representatives and special interest groups, will be of **minor** significance as it is expected that there will be a low magnitude of the impact and moderate level of vulnerability. The significance of this minor impact is expected to lessen further to a **negligible** significance post-mitigation implementation.

Mitigation and Management Measures

The following mitigation and management measures will be undertaken to minimise impacts from increased dust:

- Use dust suppressant measures on haul roads, such as watering or chemical surface suppressants (ASK 2019a);
- Use windbreaks using shad cloth on fresh dumps, revegetation as soon as practical and hydraulic mulch seeding to prevent wind erosion (ASK 2019a);
- Minimise drop height of trucks dumping overburden (ASK 2019a);
- Install a vegetation buffer to reduce spray drift and dust (ASK 2019a);
- Establish a dust monitor at or near Saint Elmo Homestead;
- No dozer and scraper activities shall be undertaken between 6pm to 7am during the months of March to May in the pit closer to the Saint Elmo homestead if monitoring shows exceedance of the PM10 criterion;
- Monitor wind data so that appropriate management measures can be undertaken, such as water of exposed areas during adverse weather conditions (ASK 2019a);
- Notify stakeholders of any high dust generating activities. This forms part of the Community and Stakeholder Engagement Plan (refer to **Section 8.3**); and
- Implementation of a complaints mechanism (refer to **Section 8.3.4**) to identify, track and remediate community complaints related to dust generating activities from the Project *construction* and *operation phases*.

7.3.5 Visual Amenity

Visual amenity of the local area could be impacted during the *construction* and *operation phases* of the Project. There are several potential causes, including:

- Light spill, which will likely result from the Project being lit 24 hours a day, 7 days a week for safety and security reasons during construction and *operations*;
- Presence of structures and machinery, during construction and *operations*; and
- The degradation of the outback/rural character of the locality through the construction and operation of the Project.

The impact to the amenity value of the area (e.g. disrupted landscapes or view sheds) can lead to annoyance and frustration on the part of the community. It can also impact on the community's sense of place.

Assessment of Impacts

The Project site, and its surrounds, are currently dominated by cattle grazing operations with limited landscape character or visual amenity value. It is anticipated that the surrounding areas will remain operational throughout the Project's lifecycle. Given the limited number of sensitive receptors surrounding the Project site, a history of intensive grazing has occurred within the site, and that operation of the Project will comprise of progressive mining and staged rehabilitation, the impacts to visual amenity resulting from construction, operation and associated infrastructure are considered to be **minor**. The implementation of mitigation and management measures will reduce the impact to **negligible**, although this will likely only be the case in the *operations phase*, due to time required for landscaping to mature**.**

Mitigation and Management Measures

The following mitigation and management measures will be taken to minimise impacts on the visual amenity:

- Consideration given to landscaping, design and colour of buildings at the Project site to help it blend with the local environment;
- Rehabilitation areas that are cleared as quickly as reasonably practical following the completion of construction works;
- Development and implementation of a Construction and Environmental Management Plan (**CEMP**), which will detail measures to minimise light spill; and
- Ongoing engagement with stakeholders, especially direct and adjoining landholders, including provision of information regarding works to minimise visual impact. Visuals showcasing the view shed pre and post-Project, from multiple angles would be advantageous in this regard.

7.3.6 Public Safety

The presence of new infrastructure, large machinery, and an active construction/*operations* site can lead to accidents and injuries if not managed appropriately. The presence of hazards around construction sites and laydown areas can create a range of safety issues, particularly when in close proximity to residents or other sensitive receptors.

Assessment of Impacts

The potential public safety issues for the local community associated with construction and operation of the Project and associated infrastructure was assessed as **minor**. The impact was considered to be of minor significance rather than moderate due to the exclusion zones that will be established, and the buffers that separate the site from the local residents, therefore reducing the likelihood of accidents occurring.

The potential public safety issues for direct and adjoining landholders associated with the construction of the mining infrastructure is assessed as **moderate**. This was largely due to the close proximity of residents to the Project site. People, particularly children, are often curious about construction sites, which could lead to possible accidents and/or incidences.

Through the implementation of mitigation and management measures, it is considered that the impacts' significance can be considered to be **negligible**.

Mitigation and Management Measures

The following mitigation and management measures will be taken to ensure public safety, including:

- The Project site will be lit 24 hours a day;
- Active construction areas and laydown areas will be fenced;
- Site entry will be restricted to construction/operation personnel only;
- Communicating with stakeholders, especially direct and adjoining landholders, well in advance of construction commencing, and other public safety related activities. Multiple communication channels should be utilised to maximise the likelihood that residents receive the message;
- Ensure construction equipment and materials are secured and sign-marked so that the community is aware of potential hazards; and
- In order to minimise the potential for vandalism to occur, and to minimise the risk of damage to Project property, ensure all Project equipment and materials are stored securely.

7.3.7 Noise and Vibration

Noise and vibrations will likely be generated as a result of construction and mining activities. Sources of noise and vibration include:

- **Vehicle Noise:** Reversing beepers and vehicle horns used on site as a safety precaution produce sharp sounds intended to startle. These noises could have a negative impact on stakeholders if these sounds occur regularly.
- **General Construction Activities:** Noise experienced from general construction activities, such as the transport and loading and unloading of goods and materials.
- **Mining Activities:** Noise and vibration produced from mining activities occurring on a 24 hour basis (ASK 2019b). It is noted that blasting is not proposed and therefore the potential impact of vibration will not be specifically assessed or mitigated (ASK 2019b).

Increased noise can decrease the amenity value of an area and can disrupt community activities (e.g. sleeping, recreational pursuits). Notably, disruptions associated with noise (such as sleep disruptions) have been linked to increases in depression and anxiety. Increased noise was not identified during community consultation as a concern.

Vibration can be associated with a range of construction and mining activities. As blasting is not proposed as part of the Project, however, it is not anticipated that vibrations will be experienced and therefore will not be specifically assessed or mitigated. Vibrations were not identified during community consultation as a concern.

Assessment of Impacts

Given the rural locality of the Project site, it is anticipated that noise impacts will only affect direct and adjoining landholders during the *construction* and *operation phases*.

Site vehicle noise will likely have a **moderate** significance due to the frequency of the impact and limited ability for stakeholders to influence change of the impact during construction and operation.

General construction noise is categorised as likely being a **moderate** impact due to the lack of noise buffers, and the proximity of sensitive receptors (residents) to the potential impact throughout construction and operation.

As mining activities are proposed to on a 24 hour basis, it is considered that the proximity of the St Elmo homestead to the Project site will result in a high designation of magnitude, with a moderate level of vulnerability to adapt to the noise impact and therefore considered a **major** impact.

The significance of these noise and vibration impacts will be reduced upon implementation of the mitigation and management measures. Site vehicle noise and general noise can be reduced to **minor** impact significance, whilst mining activities can be reduced to **moderate** impact.

Mitigation and Management Measures

The following mitigation and management measures will be taken to minimise impacts from noise and vibration:

- Optimise mine layout to shield noise generation (ASK 2019b);
- Construct bunding between equipment and Saint Elmo Homestead;
- Strategically plan the haul locations to limit total haulage required (ASK 2019b);
- Regularly service and maintain mining equipment exhaust systems;
- Limit speeds of mining equipment;
- Consider noise abatement fittings on mine vehicles prior to procurement;
- Use of lower noise equipment and machinery and proper maintenance;
- Locate construction equipment such as generators furthest from sensitive receptors;
- Shut down equipment/plant which are not required to be operated (instead of unnecessary idling for extended periods);
- Establish a noise monitoring system at Saint Elmo Homestead;
- Development of a Noise Management Plan with the objective of achieving compliance with the noise criteria in the Plan at sensitive receptors. This may require discussion with St Elmo homestead regarding dwelling upgrades to allow increased noise limits if the combined effect of other mitigation measures is insufficient, as determined at the time of those operations;
- Ongoing engagement with stakeholders, especially direct and adjoining landholders (refer to the Community and Stakeholder Engagement Plan in **Section 8.3**). Notify in advance of when high noise and/or vibration impact activities will be occurring, and restricting these to daytime to minimise disturbance and annoyance; and
- Implementation of a complaints mechanism (refer to **Section 8.3.4**) to identify, track and remediate community complaints related to noise and vibration. Measures for reducing noise levels will be identified as part of the complaint response process.

7.3.8 Water

Water was identified as an issue of community concern, and there are a range of potential impacts that may be experienced by receptors, including:

- **Water Availability:** Water availability was identified by stakeholders as an issue. Mining related and processing activities at times may require high volumes of water. To meet this demand without sourcing water from the GAB, the Project will construct an OWSF and harvest water from the Flinders River rather than the GAB, which is where the majority of water is sourced by local users in times of flow. On 5 July 2019, the Project was recognised by DNRME as a Project of Regional Significance under the Water Plan (Gulf) 2007 and as such is eligible to apply for a water allocation from unallocated supply in the Flinders River. The establishment of the OWSF and water harvesting is supported by the McKinlay Council in its 2019-2026 Community Plan, which also identifies potential positive impacts through increased access to water for agricultural use either during or after mining.
- **Water use and values:** As described above, water for the Project will be sourced through water harvesting from the Flinders River during times of high flow, consistent with the conditions imposed through the Water Plan (Gulf) 2007 and associated allocation. The Punchbowl waterhole is located approximately 5 km downstream from the proposed aqueduct which will transfer water from the River to the OWSF. The waterhole is used by the community when there is water for swimming, fishing and picnicking. There may be perceived impacts associated with water flow to the waterhole when water is being harvested for use by the Project. There are also downstream users who have an allocation to take water from the Flinders River who may be concerned about the Project's impact to their allocation.
- **Water Quality:** Due to the nature of the Project, and the usage of water, there is potential that sediments and chemical associated with the mine will impact upon the quality of water streams due to surface water runoff to Julia Creek. The Surface Water Technical Assessment Report (Engeny 2019) has acknowledged this to be a potential issue due to increased presence of contaminants in the water from mining activities and operation of the mine. During the consultation process water quality was raised as an issue for the stakeholders.
- **Flooding:** Flooding may be an issue as the onsite infrastructure and activities can potentially change run-off patterns. In February 2019, Julia Creek and parts of North Western Queensland experienced devastating flooding. During this event large areas from Julia Creek to Richmond experienced major flooding (BoM 2019). The highest 7 day rainfall total for Julia Creek Airport weather station (BoM Station: 029058) was 510.2 mm ending on 6 February 2019. Several sites in Northwest Queensland had 7 day rainfall accumulations of more than 600 mm, and receiving more than four times their February average rainfall (BoM 2019). The issue of flooding was not raised during community consultation prior to the February 2019 flooding event. However, following the event, Multicom distributed a Project newsletter and carried out face to face meetings in the region with relevant stakeholders (i.e. Hughenden and Richmond Council and adjacent landholders) providing potential scenarios and water management strategies if a similar event were to occur during the Project lifetime.

Assessment of Impacts

The main source of water for the community of Julia Creek is groundwater from the GAB, obtained through the use of bores. Therefore, if water is used for the purpose of mining

activities from the GAB, water availability for the region will be affected. Further, dependent upon the quantity of water sourced, the water table may be negatively impacted. As groundwater modelling has indicated the extraction and supply of groundwater from the GAB for mining activities would exceed the cumulative allowable drawdown identified under the GABORA Protocol (DNRME 2017). The Project has sought an alternative water supply option through the OWSF for mine and processing water and third party supply for potable water. Consultation with stakeholders (See **Section 6.9**) indicated that they were concerned with large scale GAB extraction. In response, the Project does not plan to use groundwater in any capacity.

Douglas Partners (2019) identified that open cut mining methods at the Project site will not significantly impact on shallow groundwater system. Further, the development of a Shallow Groundwater Monitoring Plan will allow for the identification of any contamination of groundwater. As such, any impact on groundwater availability quality would be **minor** in significance.

In order to further reduce the amount of water used during *operations*, the Project will recycle approximately 77 percent of the processing water used for mining activities on-site, which would reduce the demand for externally sourced water (Engeny 2019). It should be noted although there are water storage dams on site, if there is a lack of rainfall, the water reserves on site would be low. On the other hand, in heavy rainfall events the Project will use the water collected in the dams to operate the mine. Due to the proposed management measures, it is considered that the Project will have **negligible** impact on water availability in the region during the *construction* and *operation phases*.

The OWSF is located immediately south-west of the Flinders River on private property and is proposed to have four separate cells approximately 40 ha each, with a total capacity of approximately 11,300 megalitres (**ML**) and an average depth of 7.2 m. Water will be diverted from the Flinders River along a channel with a control structure to manage flow. The point where water will be harvested from the Flinders River is not currently used for recreational or commercial purposes, however there is a waterhole approximately 5km downstream that is used by the community in times of water flow (i.e. the Punchbowl waterhole). There is one other water license in the vicinity of Project areas for the purpose of taking surface water, the licence holder is 72 km downstream from the Project. Given the limited use of the river for recreational or commercial purposes and the lack of any existing documented cultural heritage sites in the Project region, the Project presents a **minor** level of impact to water use and values of the Flinders River.

The Project will implement sustainable water use principles that are consistent with the allocation provided by the DNRME to ensure there are no significant impacts to downstream users. The allocation will detail required flow scenarios that must be achieved at nominated gauging stations before water can be harvested from the Flinders River and diverted to the OWSF. In addition to these measures, the approved Cultural Heritage Management Plan will be implemented for the construction and operations of the OWSF and associated infrastructure including an aqueduct to avoid impacts and manage chance finds. With these measures implemented, it is considered that the impact on recreation and commercial use of the Flinders Rivers and values attached to it will be **negligible.**

Based on consultation with McKinlay Shire Council and the directly affected landowners, there is also the potential for a **positive** impact on the community from the OWSF through potential future water access and recreation use of the facility. The McKinlay 2019-2026 Community Plan is supportive of the innovative water harvesting and storage approach,

identifying opportunities for provision of water to farms either during or post mining (depending on availability and demand). The directly affected landowners have identified potential recreational and commercial opportunities for the water storage facility. Multicom will continue to engage with stakeholders on the potential medium and long-term opportunities for the facility.

Given that there will be sediments and chemicals generated from the mining activities, contaminated waters may run off into the receiving waters, in this case Julia Creek. Julia Creek leads into the GAB and a water source for stock watering purposes; therefore, the quality of water is vital to the local community and present a **moderate** level of impact significance. The Project will have an erosion and sediment control plan in place during construction works, and will progressively construct a number of on-site dams, which will act to separate raw water, clean water and dirty water. As there are treatment protocols to treat water, at the end of the mine life Julia Creek will have a three percent water quality reduction when compared to original baseline conditions (Engeny 2019). Therefore, given the water treatment management measures to be implemented, it is considered the impact on water quality to be of **minor** significance during the *construction* and *operation phases*.

Due to the added infrastructure, overflow flood paths may be altered, and has the potential to impact the local community during a flood event. The record-breaking rainfall, which occurred in February 2019, resulted in major flooding across large areas of Julia Creek and Richmond. During this 1 in 200 year flood event, large areas received more than four times their February average rainfall, with Julia Creek to Richmond receiving the highest daily rainfall totals.

Given that flash flooding often occurs at Flinders River around January / February, the impact to surrounding sensitive receptors is considered of **moderate** significance. As part of the Project, however, dams will be located on-site to reduce the impact of flooding to adjoining properties. As part of this design, the adjoining neighbour will only experience flooding during flood events (Engeny 2019). As such, it is considered that this impact is **minor**, given that the Flinders River regularly experiences flash flooding during seasonal rain which occurs regardless of Project construction and/or operation.

Mitigation and Management Measures

The following mitigation and management measures will be undertaken to minimise impacts associated with water used for the Project:

- Water required for the Project will be sourced from the OWSF;
- Operation of the OWSF will implement strict sustainable water use principles that are consistent with the allocation provided by DNRME to ensure there are no significant impacts to downstream users;
- The Cultural Heritage Management Plan will be implemented for construction and operations of the OWSF and associated infrastructure to manage any chance finds;
- Consultation will be undertaken with McKinlay Shire Council, direct and adjoining landowners regarding potential access to water and/or infrastructure either before or post mining;
- Surface water for other site water demands, such as dust suppression, will be sourced from on-site sediment dams rather than raw water dams;

- Restrict use of bore water to ensure no adverse impacts to groundwater supply for existing users;
- Recycle the majority of processing water used;
- Redirection of clean surface water runoff and waterways around mine infrastructure and pits to reduce contaminants in the water;
- Treat dirty water prior to release into the receiving environment;
- Surface water for other site water demands, such as dust suppression, is sourced from on-site sediment damns rather than raw water dam;
- Site access roads and haul roads will be constructed at natural surface level and gradients and will not impede flood waters; and
- The water management infrastructure is capable of preventing the ingress of floodwaters to mining voids.

The following measures are proposed by Engeny (2019) as part of the to minimise impacts associated with water used for mining related activities:

- Reduce use of water and/or production of waste water or contaminants;
- Prevention of waste water or contaminations into waters;
- Recycle, re-use or treat waste waters or contaminants;
- Treatment and release of waters to facilities, land or waters, including erosion and sediment controls; and
- Measure the impact and effectiveness of the Project's water management system during the operational phase through the Surface Water Monitoring Program.

The following mitigation measures are proposed by Douglas Partners (2019) to minimise the impacts associated with groundwater from the Project:

- Placing soil back into mined pits will assist to reduce the effects of evapotranspiration in the long term, and maintain groundwater levels as they were previously;
- Alternative water supply options, including third-party supplier; and
- shallow groundwater monitoring system to allow for the identification of any contamination of groundwater, or any adverse drawdown in the environment.

In addition to the above management measures, communication with stakeholders will play an important role in managing the potential impacts associated with increased water usage and will be conducted in accordance with the Community and Stakeholder Management Plan (refer to **Section 8.3**).

As part of the engagement process, a complaints mechanism should be developed and implemented. A complaints mechanism will provide an avenue to identify, track and remediate community complaints. Further detail is provided in **Section 8.3.4**.

7.3.9 Cultural Heritage

Current desktop assessments of Indigenous and European cultural heritage have not identified any existing heritage records on-site, and there are no Native Title claims on the site or Cultural Heritage bodies.

To ensure their duty of care will be met, Multicom has voluntarily developed a Cultural Heritage Management Plan (**CHMP**) pursuant to Part 7 of the *Aboriginal Cultural Heritage Act 2003*. The CHMP has been Approved by the chief executive of DATSIP accordance with Section 107 of the ACHA. The CHMP covers the MLA area. The area covered by the CHMP will be expanded to incorporate the OWSF and associated infrastructure areas (MLA100244, MLA100245 and MLA100246) in order to ensure the duty of care is met through an Approved CHMP for these areas as part of the project development.

The CHMP makes provision for managing the Project in a way that will:

- Avoid harm to Aboriginal cultural heritage; and
- To the extent that harm cannot reasonably be avoided, to minimise harm to Aboriginal cultural heritage.

As part of this process, QSNTS were notified of the intention to develop the CHMP.

The CHMP is designed to ensure that an Aboriginal party may become involved in any process under the CHMP should they be identified in the future while Project activities are being carried out. In the absence of an Aboriginal party, Multicom intend to utilise the services of an experienced cultural heritage professional or an archaeologist.

7.4 LOCAL BUSINESS AND INDUSTRY PROCUREMENT

7.4.1 Business and Industry

A number of direct and indirect economic impacts have the potential to result from the Project. These impacts include:

- **Revenue for Business and Indirect Employment:** Increased revenue will be generated by the Project in the form of purchase of goods and services, the purchase of goods and services by workers living in/around Julia Creek (and the potential increase in demand of these goods and services leading to an indirect increase in employment in these businesses). Revenue will also be generated through taxes and royalties, enabling government spend (AEC 2020). This impact was identified during the community consultation carried out to-date.
- **Increased Competition for Labour:** Employment opportunities generated by the Project will likely negatively impact business operators and representatives during the *construction* and *operation phases* through increased competition for labour.
- **Business and Industry:**
    - **Beneficial:** The Economic Impact Assessment (AEC 2020) identified the mining industry will be the greatest beneficiary of the Project, with moderate beneficiaries being electricity and water, trade and business services and business activity for the Port of Townsville, for the Economic Catchment within which the Project is located. It is noted that the Economic Catchment includes the LGAs of McKinlay, Charters Towers, Cloncurry, Flinders, Mount Isa, Richmond and Townsville (AEC 2020).
    - **Detrimental:** The manufacturing industry has been identified as the primary industry expected to experience a reduction in relative growth as a result of reduced industry output, compared to if the Project did not occur (AEC 2020). This is due a number of reasons including increased competition for labour (as the

Project and the manufacturing industry require similar skillsets) and, the (increased cost of resources for conducting business (including the cost of securing a workforce) (AEC 2020). Additionally, as the Project is located on land currently used for cattle grazing, this land will be removed from grazing thereby having a corresponding impact on the grazing industry. The disturbance area accounts for only 0.1 percent ($323,400) of the livestock grazing area in the Northern Highlands SA2 area, limiting the impact to the industry as a whole.

Assessment of Impacts

While these projected workforce outcomes are **positive** for the local communities, they will likely present a moderate impact to business operators and representatives during the *construction* and *operation phases*, as the Project will likely increase competition for labour. The impact has been assessed as **moderate**, largely due to the vulnerability of local businesses, and the degree of uncertainty surrounding number of people likely to be removed from existing business operators. Upon the implementation of the mitigation and measurement measures, however, this impact is expected to decrease to **low**.

Increased revenue was assessed as **positive** during both the construction and *operation phases*. The Project is estimated to contribute approximately $223.3M per annum additional Gross Regional Product (GRP) to the Catchment during ramp up and construction, and an additional $213.8M per annum on average during steady state production (AEC 2020).

In terms of business and industry, there will be a **positive** impact in construction and operational phases in the mining industry, affecting the local community, special interest groups and business operators and representatives involved in this industry. The positive nature of this impact relates to the economic opportunity created for employment (as stated above), and supply of goods and services to the Project.

Due to competition for labour and increased cost of resources, the manufacturing industry is expected to experience less growth than would be the case without the Project (AEC 2020). It is expected that a **minor** impact significance will be experienced by these business operators and representatives in construction and operational phases. This is largely because of the low magnitude of impact, compared with the size of the manufacturing sector and location of manufacturing primarily taking place outside of the primary Study Area. Multicom are also currently considering through a related company, the establishment of a lithium battery manufacturing facility in Townsville, which would limit the impact of the Project on the Manufacturing industry.

The impact of the Project on direct landholders and business operators and representatives of the grazing industry will experience a **negligible** impact during construction and operation. Notably, the disturbance area of the Project only accounts for 0.1 percent ($323,400) of the livestock grazing area in the Northern Highlands SA2 area and it would be possible to intensify this use elsewhere to account for the loss (AEC 2020) and landowners will be compensated for use of their land.

Mitigation and Management Measures

The following mitigation and management measures will be undertaken in relation to the anticipated economic impacts of the Project:

- Minimise adverse impacts on agricultural production in the local region (AEC 2020) by:

- Avoiding or minimising disturbance of productive land in any areas not immediately affected by mining activity (e.g., ensure location of stockpiles and tailings does not interfere with productive land uses); and

- Undertake progressive rehabilitation of the site during Project life, and at Project completion, ensure all disturbed land is rehabilitated to the extent practical.

- Provide appropriate opportunity for local businesses to secure supply contracts through collaboration with Local Government, economic development opportunities, local chambers of commerce and State Government (AEC 2020) to:

  - Inform local business of the goods and services required of the Project, service provision opportunities and compliance requirements of business to secure contracts;

  - Collaborate with local business and encourage local business to meet the requirements of the Project for supply contracts;

  - Develop relevant networks to assist qualified local and regional businesses tender for provision of goods and services to support the Project;

  - Investigate opportunities and potential Project partners for the development of VRFBs within the Economic Catchment and Queensland using mined product. In addition to enhancing employment outcomes and economic activity, this would also reduce impacts on exchange rates by reducing exports generated and support manufacturing; and

  - Work with DSDMIP to hold business briefings for local suppliers throughout the Economic Catchment.

- Development and implementation of a detailed 'Buy Local Plan', (refer to **Section 8.6**) which identifies how local and indigenous businesses will be involved in the Project to maximise the social benefits.

In addition to the above management measures, communication with stakeholders will play an important role in managing the potential impacts associated with competition for labour and/or increased cost of resources (including workforce). This communication should involve notifying the local community and business operators and representatives when opportunities for training, employment and/or business collaboration will arise, in a timely manner. This also involves providing local businesses the opportunity to bid in tenders and effectively communicate these expectations.

Consistent with this plan, Multicom has already commenced working with McKinlay Shire Council and the DSDMIP to hold two business readiness workshops in Julia Creek (5 July 2018 and 15 August 2018). Working with McKinlay Shire Council on this initiative is consistent with the Shire's Community priority projects. Further, Multicom will align their procurement processes with the McKinlay Shire Council, so that there is a consistent local tendering process in the region. This will improve accessibility to local businesses.

The McKinley Shire Council has proposed a potential new Julia Creek Smart Hub which aims to provide access to high speed internet, increase business and educational capabilities, improve digital literacy, and provide training facilities. Multicom has provided its support

for this initiative which would contribute to the increased capability of local residents to participate, as either employees or contractors, in the Project. Such a hub could also be used in providing local access to online recruitment, induction and training processes.

Specific to the grazing industry, Multicom has also proposed to liaise with farmers regarding the suitability of the Project site for agricultural purposes, as required.

As part of the engagement process, a complaints mechanism should be developed and implemented (refer to **Section 8.3.4**). A complaints mechanism will provide an avenue to identify, track and remediate community complaints, and provide feedback in meeting compliance requirements of supply contracts. In order to lessen the impact on graziers, and as an extension of the complaints mechanism, the development of a compensation policy is to be explored by Multicom.

7.5 CUMULATIVE IMPACTS

As noted in **Section 4.1.4**, the closest major mine to the Project is the South 32 Cannington Mine, located 205 km from the Project, within the secondary Study Area. Given the location of the Cannington Mine, it is not anticipated that there will be cumulative social impacts will arise in the event of the Project proceeding.

Whilst there are some local workers who currently DIDO to Cannington from both Cloncurry and Julia Creek, the majority of workers at the Cannington Mine are FIFO with flights from Townsville and Brisbane. Further, with the reductions in Cannington Mine employee numbers in 2015, it is considered more likely that some skilled locally-based former Cannington Mine employees may become part of the Project.

Outside the Saint Elmo Vanadium Project, the CopperString Project is the only other project that is located in the McKinlay LGA (in addition to seven other LGAs). Once operational, the CopperString Project is only anticipated to have a workforce of approximately 30 people (State Development, 2019a). These workers will likely primarily work at proposed substations. As none of the proposed substations are in McKinlay, it is anticipated that there will be negligible direct operational employment in McKinlay LGA. The 400-worker construction workforce is not anticipated to impact the local property market, with workers expected to be accommodated in camps.

Irrespective of the above, it is important to consider that if future development of resource activities (particularly mining) within the primary and secondary Study Areas of this Project is proposed, it will be important to initiate and maintain ongoing engagement with representatives from these developments. A key aspect of this communication should be to understand the specific timing and lifecycles of any future project, to minimise the potential for cumulative impacts to arise.

7.6 DECOMMISSIONING IMPACTS

Decommissioning of the Project will occur in 2051, with the potential impacts likely to comprise:

- **Traffic:** As per the Traffic Impact Assessment (TTM 2019), heavy vehicle traffic generated during the *decommissioning phase* will similar to that of the construction phase, however, the decommission phase will lack the transportation of construction materials. The traffic is expected to utilise the same routes as identified. A similar level of traffic management and mitigation will be implemented by Multicom at this time in order to avoid or ameliorate the significance of resultant impacts.

- **Air Quality, Noise and Vibration:** The Acoustic and Air Quality Report (ASK 2019a) identifies that the air quality and noise emissions generated during the decommissioning phase will likely to be minimal in comparison to the *operations phase*. Furthermore, it is predicted that the decommissioning phase will be relatively brief in duration, located relatively far away from sensitive receptors, and have existing revegetated areas acting to minimise possible wind erosion (dust). It is considered that a similar level of impact significance would be experienced by direct and adjoining landholders during the decommissioning phase, as was experienced during the construction phase.
- **Employment:** During decommissioning it is anticipated that approximately 75 roles will be required. It is expected that these will likely be comprised of existing employees, with specific demolition expertise brought in as required. The non-local workforce will be accommodated in a workforce accommodation facility or other available accommodation as the village is decommissioned. The impacts associated with the reduction in the availability of jobs in the surrounding area will need to be considered as part of the decommissioning and closure phase. If no new projects come on-line at the time of decommissioning there is the possibility that unemployment will become an issue in the community, which has the potential to further result in a range of additional negative impacts (e.g. mental health concerns, etc.).
- **Infrastructure and Services:** Given the reduction in the number of jobs availability within the local community following decommissioning, there will likely be a decrease in population numbers. This decrease in population may reduce pressures on local infrastructure and services (e.g. health care, child care, educational facilities, and recreational facilities), but this may also lead to a decline and/or reducing in the service operation or availability. As persons living within the community will have become accustomed to a certain level of service afforded to them when the population was larger, it is likely that those who remain within the community will experience a feeling of disenfranchisement. Further, the decrease in the population may also result in unused facilities and housing remaining in-situ, which poses its own issues with respect to community pride and wellbeing.

Despite the impacts identified above, verification of impacts will need to occur closer to the expected date of closure, given that the Project is expected to be in operation for 30 years and specific circumstances in the primary and secondary Study Areas, particularly Julia Creek, may have changed during this time. Accordingly, an updated assessment of decommissioning impacts will be provided by Multicom closer to the end of the mine lifecycle.

7.7 IMPACT MITIGATION AND MANAGEMENT SUMMARY

A summary of the proposed impact mitigation and management measures are outlined in Table 7-3. The rankings have been awarded in accordance with the Impact Assessment Process, outlined in **Section 3.4.1**.

Table 7-3 Impact Mitigation and Management Measures

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
Workforce Management						
Economic – creation of employment opportunities for local communities.	C / O	Local Community Special Interest Groups	Positive	• Implement a recruitment hierarchy that prioritises employment opportunities for Julia Creek and McKinlay Shire residents who are within a commute time of one hour; • Give priority to the recruitment of female and Indigenous employees; • Require Construction contractors to prioritise local and Indigenous employees and businesses and to report on their performance; • Develop and implement a 'Training and Development Plan'; • Develop and implement an Indigenous Training and Employment Plan for Operations; • Support the McKinley Shire Council in its proposal to develop a Smart Hub in Julia Creek; and • Clearly communicate in a timely manner, all employment and training opportunities to local and regional communities throughout the construction and operations phases.	Positive	Workforce Management Plan Community and Stakeholder Engagement Plan
Workforce Integration – Sourcing of external workers, including use of FIFO and DIDO rosters, leads to an increase in disruption to community cohesion, sense of place and cultural identity.	C	Local community, Business operators and representatives, special interest groups (particularly Julia Creek)	Moderate	• Develop and implement a Workforce Code of Conduct; • Contract an EAP provider to assist construction and operation personnel to confidentially seek support and/or assistance with various concerns, such as mental health issues, domestic and family violence, etc.; and • Establish a Workforce Accommodation Village for the non-local construction workforce	Minor	Workforce Management Plan
	O	Direct and adjoining landholders, Local community, Business operators and representatives, special interest groups (particularly Julia Creek)	Minor	• Maintain Code of Conduct for operations as above; • Engage key local stakeholders, including business operators and representatives and special interest groups to develop positive relations, better understand community values and expectations, bolster community resilience, and develop opportunities to foster integration; and • Investigate opportunities for operation phase workforce community involvement in community events, and volunteering with local organisations and services. • Implement a complaints mechanism, which will provide an avenue to identify, track and remediate community complaints.	Negligible	Workforce Management Plan
Workforce integration - External workforce contributes to community capacity, including increased participation in sporting / recreational clubs, interest groups and volunteering.	O	Local community, Business operators and representatives, special interest groups (particularly Julia Creek)	Positive	• Work with McKinlay Shire Council and community organisations to develop Community Welcome Packs to provide information on local communities, opportunities for participation and to help better understand community values and expectations. Incorporate into employee / contractor inductions. • Investigate opportunities for operation phase workforce community involvement in community events, and volunteering with local organisations and services;	Positive	Community Health and Wellbeing Plan
Housing and Accommodation						
Increased demand from construction contractors and suppliers for rental accommodation may lead to increased rental costs, negatively impacting on housing affordability stress for existing residents in the rental market and potential displacement of low-income residents.	C	Low to moderate income households In Julia Creek	Moderate	▪ Establish a Workforce Accommodation Village to house all non-local construction workforce during the course of the construction phase; and ▪ Work with existing visitor accommodation in Julia Creek, and in surrounding townships (e.g. caravan parks or motels); to understand available supply and timing of vacancies to ensure that Project demand doesn't impact on tourists and other visitors but provides opportunities for those suppliers through the Project.	Minor	Housing and Accommodation Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
The increase in residential population associated with Project operations may lead to reduced housing affordability due to increased costs driven by demand. This may impact existing residents and potential future resident's ability to locate suitable housing options within an affordable price range.	O	Low to moderate income households in Julia Creek, key service workers, Julia Creek renters, future residents, local businesses	Major	• Continue to use the Workforce Accommodation Village for operations phase DIDO and FIFO workers; • Develop a Housing Strategy in partnership with McKinlay Council prior to the operations phase commencing • Contribute to the McKinlay Council Housing Needs Assessment identified in the 2019-2026 McKinlay Community Plan; and • Establish a register of available housing in Julia Creek.	Minor	Housing and Accommodation Plan
Project personnel's demand for housing purchase in Julia Creek may lead to increased housing property values, sales prices and associated rental income.	O	Julia Creek and regional property owners	Positive		Positive	Housing and Accommodation Plan
Existing accommodation providers within and surrounding Julia Creek may experience indirect economic benefits through the provision of short-stay, temporary or transitional accommodation in relation to the Project.	C / O	Accommodation providers	Positive	• Work with existing visitor accommodation in Julia Creek, and in surrounding townships (e.g. caravan parks or motels) to understand available supply and timing of vacancies to ensure that Project demand doesn't impact on tourists and other visitors but provides opportunities for those suppliers through the Project.	Positive	Housing and Accommodation Plan
Health and Community Wellbeing						
Increased demand on existing health and emergency services from non-local construction and operational workforce who reside in the Workforce Accommodation Village while on shift.	C / O	Health and emergency services providers, local residents (particularly Julia Creek)	Minor	• Provide an on-site medic for first emergency response; • Provide basic health facilities for Project workers at the Workforce Accommodation Village during the construction phase; • Proactively engage with existing medical emergency services in relation to emergency response planning and treatment hierarchies (refer also to SEP); • Devise and implement an education campaign to encourage non-local employees and contractors to address existing health issues prior to commencement of their shift rosters and to minimise demands on local services for minor and routine health issues; • Establish and implement a Healthy Workforce Policy. • Consultation with the McKinlay Shire Council as part of the Local Disaster Management Group; and • Ensuring Fire and Emergency service staff have capability for 24-hour access to the Project site.	Negligible	Workforce Management Plan Community and Stakeholder Engagement Plan Health and Community Wellbeing Plan
Increased demand on existing health and emergency services from new local employees and their families who have relocated to Julia Creek for employment. Between 20 and 130 new residents may relocate to Julia Creek over the life of operations.	O	Health and emergency services providers, local residents (particularly Julia Creek)	Moderate	• As above; • Establish and implement a Healthy Workforce Policy; and • Continue to liaise with Local Government and State Government regarding the potential impacts on existing health services and infrastructure due to an increased population, and the potential to increase service provision.	Minor	Workforce Management Plan Community and Stakeholder Engagement Plan Health and Community Wellbeing Plan
Increased pressure on child care and educational services including Julia Creek State School and Council-run childcare service through increased demand associated with new residents.	O	Childcare and education services, local residents (particularly Julia Creek)	Moderate	• Investigate future investment in local child care and early learning facilities to support the local community, and the increase in families stemming from the Project; and • Provide regular updates to Julia Creek State School and childcare services on employees relocating to Julia Creek and family composition to aid in planning.	Minor	Community and Stakeholder Engagement Plan Health and Community Wellbeing Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
Increased pressure on recreational facilities.	C	Recreational facility providers, local residents (particularly Julia Creek)	Negligible	• Incorporate basic recreational facilities into the Workforce Accommodation Village, including a gym. • Investigate potential for Project-provided recreational facilities to be accessible to community members	Negligible	Workforce Management Plan Health and Community Wellbeing Plan
	O	Recreational facility providers, local residents (particularly Julia Creek)	Minor	• As above • Monitor impacts on local recreational facilities. If necessary, jointly plan for new and/or improved recreational facilities with McKinlay Shire Council to complement existing local facilities, and investigate future investment and/or partnerships with recreational facility providers;	Negligible	
Increased vehicle movements, particularly heavy vehicles has the potential to negatively impact commuters along the affected roads by causing delays and/or creating potential traffic hazards.	C	Direct and Adjoining Landowners, Local Community, Business Operators and Representatives, Special Interest Groups, Government	Negligible	• Provide buses/coaches to transport workers from the proposed Workforce Accommodation Village in Julia Creek to the Project site; • Construction equipment/plant delivered will be located on site for the duration of construction activities; • Utilise local suppliers where practicable; • Schedule vehicle movements for delivery of main plant components and construction materials for access road on days when other users' requirements are at their lowest; • Promote road safety awareness activities within the workforce and the community. • Incorporation of rail will reduce the impacts to road users.	Negligible	Transport Management Plan
	O		Negligible		Negligible	Transport Management Plan
Traffic congestion leading to impacts on existing road users; including inconvenience, delays, frustration and anxiety for commuters.	C / O	Direct and Adjoining Landowners, Local Community	Minor	• Timely and critical communications with stakeholders as outlined in the Community and Stakeholder Engagement Plan; • Implementation of a complaints mechanism; and • The development and implementation of road safety management policies and procedures for all Project personnel, including Journey Management Plans and Driver Code of Conduct.	Negligible	Transport Management Plan
Traffic Accidents- Increased rate of traffic-related accidents as a result of increased volume of vehicle movements and associated increased risk of an accident occurring.	C / O	Direct and Adjoining Landowners, Local Community, Business Operators Special Interest Groups	Moderate	• Provide buses/coaches to transport workers from the proposed Workforce Accommodation Village in Julia Creek to the Project site; • Coordinate vehicle movements for delivery of main plant components and construction materials for access road on days when other users' requirements are at their lowest; • Limit road use during severe wet weather; • Ensuring Project personnel strictly adhere to speed limits; • Ensure vehicle operations are licenced and trained appropriately; • Promote road safety awareness activities within the workforce and the community (e.g. schools) to assist in creating awareness of hazards associated with traffic, including heavy vehicles; • Provision of warning signage and line marking on both approaches of new site access; and • Implement the Road-Use Management Plan prior to commencement of construction activities.	Minor	Transport Management Plan

Mining activities will impact on the functionality and connectivity of the existing stock route during the first 30 years of mining activities and may impact the grazing industry.	O	Direct and Adjoining Landowners,
		Grazing industry
			Negligible	• Realign the stock route around the MLA so that connectivity of the existing stock route is maintained.
				• Implement the following measures to maintain functionality of the Stock route:
				  ○ Maintain corridor width of 100m;
				  ○ Fence corridor on both sides;
				  ○ Include a water facility that has a permanent supply; and
				  ○ Install a level crossing over the proposed rail spur.
					Negligible	Environmental Management Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
Dust from general construction activities.	C	Direct and Adjoining Landowners	Minor	• Install a vegetation buffer to reduce spray drift and dust (ASK 2019a); • Watering by watering truck dedicated to reducing dust from dozers and scarpers; • Notify stakeholders in advance of any high dust generating activities. This forms part of the Community and Stakeholder Engagement Plan; and • Implementation of a complaints mechanism to identify, track and remediate community complaints related to dust generating activities from the Project construction and operation phases.	Negligible	Environmental Management Plan
Dust from land clearing and earthworks.	C	St Elmo Homestead	Major		Moderate	Environmental Management Plan
		Direct and Adjoining Landowners	Minor		Negligible	Environmental Management Plan
Dust from mining operations.	O	St Elmo Homestead	Major	• Watering, chemical surface suppressant e.g. salt, lignosulphonate or polymer; • Larger haul trucks to reduce number of trips; • Limiting vehicle speeds to 40 km/hr; • Implement windbreaks using shade cloth on fresh dumps, revegetating as soon as practical including use of hydraulic mulch seeding; • Watering by watering truck dedicated to reducing dust from dozers and scarpers; • Minimise drop height for trucks dumping overburden; • Establish a dust monitor at or near Saint Elmo Homestead; • Monitoring of wind data to ensure appropriate and timely management measures, especially during adverse weather conditions; • No dozer and scraper activities shall be undertaken between 6pm to 7am during the months of March to May in the pit closer to the Saint Elmo homestead if monitoring shows exceedance of the PM_{10} criterion; and • Ongoing engagement with stakeholders, especially direct and adjoining landholders, including provision of information regarding works to minimise.	Minor	Environmental Management Plan
		Direct and Adjoining Landowners	Moderate		Minor	Environmental Management Plan
		Local Community, Business Operators and Representatives, Special Interest Groups	Minor		Negligible	Environmental Management Plan
Dust from increased unsealed road traffic.	C / O	Direct and Adjoining Landowners, local community	Minor	• Use dust suppressant measures on haul roads, such as watering or chemical surface suppressants (ASK 2019a).	Negligible	Environmental Management Plan
Visual amenity impacts caused by light spill, disrupted landscapes or view sheds.	C / O	Direct and Adjoining Landowners	Minor	• Consideration given to landscaping, design and colour of buildings at the Project site to help it blend with the local environment; • Carry out rehabilitation works of areas that are cleared as quickly and as reasonably practical following the completion of construction works; • Development and implementation of a CEMP, which will detail measures to minimise light spill; and • Ongoing engagement with stakeholders, especially direct and adjoining landholders, including provision of information regarding works to minimise visual impact. Visuals showcasing the view shed pre and post-Project, from multiple angles would be advantageous in this regard.	Negligible	Environmental Management Plan
		Local Community, Business Operators and Representatives, Special Interest Groups	Negligible		Negligible	
Public Safety – accidents and injuries related to construction and operations sites.	C / O	Workforce, Direct and Adjoining Landowners	Moderate	• The Project site will be lit 24 hours a day; • Active construction areas and laydown areas will be fenced; • Site entry will be restricted to construction/operation personnel only;	Negligible	Environmental Management Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
		Local Community, Business Operators and Representatives, Special Interest Groups	Minor	• Communicating with stakeholders, especially direct and adjoining landholders, well in advance of construction commencing, and other public safety related activities. Multiple communication channels should be utilised to maximise the likelihood that residents receive the message; • Ensure construction equipment and materials are secured and sign-marked so that the community is aware of potential hazards; and • In order to minimise the potential for vandalism to occur, and to minimise the risk of damage to Project property, ensure all Project equipment and materials are stored securely.	Negligible	Community and Stakeholder Engagement Plan
Noise and Vibration – General Construction Activities including from reversing beepers and horns.	C	Direct and Adjoining Landowners	Moderate	• Locate construction equipment such as generators furthest from sensitive receptors; • Shut down equipment/plant which are not required to be operated (instead of unnecessary idling for extended periods); • Consider use of noise attenuation devices on vehicles and regularly maintain equipment; • Limiting vehicle speeds to 40 km/hr; • Communicate with affected landholders at sensitive receptors regarding construction activities and likely timing via phone, email and post as appropriate; • Where construction activities are scheduled outside regular construction hours, affected landholders would be advised in advance; • Install a noise monitoring station at Saint Elmo Homestead prior to construction; and • Planting of well-designed vegetation buffers adjacent to Saint Elmo Homestead.	Minor	Environmental Management Plan Community and Stakeholder Engagement Plan
Noise and Vibration – Mining Activities including from reversing beepers and horns.	O	St Elmo Homestead	Major	• Optimise mine layout to shield noise generation (ASK 2019b); • Regularly service and maintain mining equipment exhaust systems; • Limit speeds of mining equipment; • Consider noise abatement fittings on mine vehicles prior to procurement; • Use of lower noise equipment and machinery and proper maintenance; • Construct bunding between equipment and Saint Elmo Homestead; • Establish a noise monitoring system at Saint Elmo Homestead; • Development of a Noise Management Plan with the objective of achieving compliance with the noise criteria in the Plan at sensitive receptors. This may require discussion with St Elmo homestead regarding dwelling upgrades to allow increased noise limits if the combined effect of other mitigation measures is insufficient, as determined at the time of those operations; • Ongoing engagement with stakeholders, especially direct and adjoining landholders (refer to the Community and Stakeholder Engagement Plan in **Section 8.3**); and • Implementation of a complaints mechanism (refer to **Section 8.3.4**).	Moderate	Environmental Management Plan Community and Stakeholder Engagement Plan Noise Management Plan
Water – Water availability due to high volume requirements of mining and processing activities and concern regarding impacts to the GAB.	O	Direct and Adjoining Landowners, water users, Local Community, Business Operators and Representatives, Special Interest Groups, Government	Major	• Water will not be sourced from the GAB • Water required for the Project will be sourced from the OWSF. • Surface water for other site water demands, such as dust suppression, is sourced from on-site sediment dams rather than raw water dam; • Restrict use of bore water to ensure no adverse impacts to groundwater supply for existing users. • Ongoing communication with stakeholders in accordance with the Community and Stakeholder Management Plan	Negligible	Environmental Management Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
Water – The quality of water bodies is impacted by surface water runoff and increased presence of contaminants from mining activities.	C / O	Direct and Adjoining Landowners, Local Community, Business Operators and Representatives, Special Interest Groups, Government	Moderate	• Recycle the majority of processing water used; • Redirection of clean surface water runoff and waterways around mine infrastructure and pits to reduce contaminants in the water; • Treat dirty water prior to release into the receiving environment; • Reduce use of water and/or production of waste water or contaminants; • Prevention of waste water or contaminations into waters; • Recycle, re-use or treat waste waters or contaminants; • Treatment and release of waters to facilities, land or waters, including erosion and sediment controls; • Measure the impact and effectiveness of the Project's water management system during the operational phase through the Surface Water Monitoring Program. • A complaints mechanism will be implemented and will provide an avenue to identify, track and remediate community complaints.	Minor	Environmental Management Plan
Water – impacts to the shallow groundwater system	O	Direct and Adjoining Landowners, Local Community	Minor	• Placing soil back into mined pits will assist to reduce the effects of evapotranspiration in the long term, and maintain groundwater levels as they were previously; and • Establish a shallow groundwater monitoring system to allow for the identification of any contamination of groundwater;	Negligible	Groundwater Monitoring Plan
Water – an increased risk of flooding due to changes in runoff patterns.	O	Direct and Adjoining Landowners, Local Community,	Moderate	• Site access roads and haul roads will be constructed at natural surface level and gradients and will not impede flood waters; and • The water management infrastructure will be capable of preventing the ingress of floodwaters to mining voids.	Minor	Environmental Management Plan
Water - Recreational and other community impacts associated with the extraction of water from the Flinders River for the Off-site water storage facility.	C / O	Direct and Adjoining Landowners, Local Community, Special Interest Groups	Minor	• Implement the strict sustainable water use principles that are consistent with the allocation provided by DNRME to ensure there are no significant impacts to downstream users; • Implement the CHMP during constructions and operations of the OWSF and associated infrastructure; and • Provide updates to local community and direct and adjoining landowners throughout the Project.	Negligible	Community and Stakeholder Engagement Plan Cultural Heritage Management Plan Environmental Management Plan
OWSF – Opportunities to increase access to water for agricultural uses and recreational either during and or post mining.	O / D	Direct and Adjoining Landowners, Local Community, Agricultural Industry	Positive	• Multicom will continue to engage with stakeholders on the potential medium and long term opportunities for access to water and use of the OWSF.	Positive	Community Health and Wellbeing Community and Stakeholder Engagement
Local Business and Industry Procurement						
Economic - potential impacts associated with competition for labour and/or increased cost of resources (including workforce).	C / O	Business Operators and Representatives	Moderate	• Ongoing communication with local and regional businesses in accordance with the Stakeholder Engagement Plan. • Providing local businesses the opportunity to bid in tenders and effectively communicate these expectations to contractors.	Minor	Local Business and Industry Procurement Plan Community and Stakeholder Engagement Plan

Impact/Opportunity Description	Phase	Stakeholders	Signif.	Mitigation/Enhancement	Residual risk / benefit	SIMP or other Management Plan
Economic - Potential for increased purchasing of local goods and services for the Project leading to increased revenue for local businesses and indirect employment.	C / O	Local Community, Special Interest Groups, Business Operators and Representatives.	Positive	• Provide appropriate opportunity for local businesses to secure supply contracts through collaboration with Local Government, economic development opportunities, local chambers of commerce and State Government (AEC 2020) through: ○ Inform local business of the goods and services required of the Project, service provision opportunities and compliance requirements of business to secure contracts; ○ Collaborate with local business and encourage local business to meet the requirements of the Project for supply contracts; ○ Develop relevant networks to assist qualified local and regional businesses tender for provision of goods and services to support the Project; and ○ Investigate opportunities and potential Project partners for the development of VRFBs within the Economic Catchment and Queensland using mined product. In addition to enhancing employment outcomes and economic activity, this would also reduce impacts on exchange rates by reducing exports generated. • Develop and implement a 'Buy Local Plan', which identifies how local and indigenous businesses will be involved in the Project to maximise the social benefits as a result.	Positive	Local Business and Industry Procurement Plan Community and Stakeholder Engagement Plan
Economic: Potential for economic benefits to flow to businesses and industries outside of the local area (the broader region).	C / O	Electricity and water operators Trade and business services The Port of Townsville	Positive	• Develop and implement a 'Buy Local Plan', which identifies how local and indigenous businesses will be involved in the Project to maximise the social benefits as a result. This will also consider the broader economic catchment; • Develop relevant networks to assist qualified regional businesses tender for provision of goods and services to support the Project; and • Work with DSDMIP to hold business briefings for local suppliers throughout the Economic Catchment.	Positive	Local Business and Industry Procurement Plan Community and Stakeholder Engagement Plan
Economic: Potential for economic dis-benefits to be experienced by some local and regional industries.	C / O	Manufacturing Industry	Minor	• Investigate opportunities and potential Project partners for the development of Vanadium Redox Flow Battery (VRFBs) manufacturing facility within the Economic Catchment and Queensland using mined product.	Negligible	
	C / O	Grazing Industry	Minor	• Minimise adverse impacts on agricultural production in the local region (AEC 2020) by: ○ Avoiding or minimising disturbance of productive land in any areas not immediately affected by mining activity (e.g., ensure location of stockpiles and tailings does not interfere with productive land uses); ○ Undertake progressive rehabilitation of the site during Project life, and at Project completion, ensure all disturbed land is rehabilitated to the extent practical; and • Maintain active engagement with the grazing industry and monitor feedback / complaints.	Negligible	Landholder Agreements Progressive Rehabilitation and Closure Plan Community and Stakeholder Engagement Plan

8.0 SOCIAL IMPACT MANAGEMENT PLAN

A Social Impact Management Plan (**SIMP**) describes the management measures established to minimise the potential negative, and maximise the potential positive, social impacts identified through an SIA. It also provides a process for monitoring the impacts over time and pursuing continual improvement.

In Queensland, a SIMP is required to be prepared in accordance with Chapter 2.3.6 of the SIA Guideline (DSDMIP 2018b). Development of the Project's SIMP, which is set out in this section, has been informed by the SIA Guideline.

To ensure that the Project's social management measures remain current and effective, implementation of the SIMP is monitored throughout the Project lifecycle. The purpose of monitoring is to:

- Track the progress and assess the appropriateness and effectiveness of the management measures;
- Assess the actual Project impacts against the potential impacts and social indicators identified in the SIA;
- Capture information with which to advise potentially impacted communities and government on progress and achievements; and
- Facilitate engagement, consultation and collaboration with stakeholders.

Stakeholder feedback and data collected through the monitoring process will be used to update the SIMP to support continual improvement and ensure responsiveness to changes either in the Project or local context.

8.1 INTRODUCTION

In line with the SIA Guideline, the Project's SIMP includes management strategies for:

1. Community and stakeholder engagement;
2. Workforce management;
3. Housing and accommodation;
4. Health and community wellbeing; and
5. Local business and industry content.

The purpose of these management strategies is to ensure that:

- Any predicted negative social impacts that are may be experienced by on local communities and stakeholders residing within the primary3 and secondary4 Study Areas are mitigated;

[3] The primary Study Area encompasses the Project site (defined as the mining lease area), the five sensitive receptors in the immediate vicinity of the Project site, and the Julia Creek township.

[4] The secondary Study Area encompasses nearby regional communities, and as such, comprises the townships of Cloncurry, Richmond and Mount Isa.

- The Project targets local employment, engagement, and spending as a priority with a view to sustainably developing the region;
- Growing the local workforce and businesses, including through training programs to encourage the entry for youth and local residents to the market; and
- Encourage any workforce who are not currently local to relocate to become residentially based in Julia Creek.

Each management plan includes key objectives, a summary of impacts, key mitigation strategies and a summary table outlining actions against KPIs, responsibility/partnerships and indicative timing. An integrated monitoring and reporting process is also provided to maintain a focus on continual improvement and adaptive management processes.

The SIMP will be reviewed annually and updated based on monitoring data, including stakeholder feedback. A comprehensive review of the SIMP will be undertaken during Year 3 of operations, and/or prior to the development of the second phase of production. These reviews will be based on a continuous improvement approach throughout the Project lifecycle involving the review and adaption, where required, of potential impacts, management measures, and outcomes. Subsequent SIMP revisions will be undertaken for ensuing ten year periods. Future activities will include development of community development programs, in consultation with local stakeholders.

8.2 PROJECT SUMMARY

The Saint Elmo Vanadium Project is located on MLA100162 and is a greenfield site located approximately 25 kilometres (km) east of Julia Creek in the priority North West Minerals Province of north western Queensland, within the McKinlay Local Government Area (LGA).

The Project will consist of a shallow open cut mine, ranging in depth from 20 to 40 m (depending on depth of overburden), with associated dump and haul operations in order to obtain access to large known deposits of vanadium bearing sedimentary material. Strip mining is proposed to be carried out sequentially from mining panels along the north-south axis of Mining Lease Application (MLA) 100162, a greenfield site. Once the material is removed, the panel will be back filled with beneficiated gangue and overburden material, then contoured and sheeted with topsoil. Subsequently, revegetation with native species or as otherwise agreed with relevant stakeholders will take place.

Operational production is scalable and based on market demand, with an initial target of 5,000-10,000 tonnes per annum (tpa) and a maximum tonnage of 20,000 tpa vanadium pentoxide (V2O5) product over at least a 30 year mine life. Run of Mine (ROM) operations to produce the maximum 20,000 tpa will be up to 15 million tpa. Mine processing will occur on-site, with overburden and process tailings that are unsuitable to go directly into the mined pit, managed in a Tailings Storage Facility (TSF). The assessment of impacts within this Social Impact Assessment is based on the conservative maximum tonnage of 20,000 tpa . A Locality Plan is provided in ***Figure 2-2***.

The Project will consist of:

- Shallow (on average 20 m, however in some areas may reach depths of up to 40 m depending on the depth of overburden) open cut pits, with north-south aligned strip mining panels to be sequentially mined, backfilled and rehabilitated;
- A ROM stockpile area, with adequate storage capacity to stockpile at least three days mine production;

- Overburden and topsoil storage and management areas;
- A processing plant, to extract V205;
- Access for semi or B-double trucks to deliver reagents to the processing plant and pick up product for transport off-site;
- A rail spur line into the site, connected to the pre-existing Northern Rail Line;
- An infrastructure area, including security and administrative offices, laboratories, workshops and stores;
- A sewerage treatment plant and effluent disposal area;
- A water management network including a potable water treatment plant, potable water storage and a reverse osmosis plant as required;
- An operating water supply stored in an Offsite Water Storage Facility (OWSF). The OWSF and associated infrastructure are located approximately 21 km to the east of MLA100162;
- A tailings storage facility;
- Progressive rehabilitation of disturbed areas;
- Electrical transmission infrastructure, located to minimise distance between major power demand elements and existing grid power infrastructure;
- Suitable electricity generator from a third-party supplier, located near to primary infrastructure with sufficient access for fuel delivery and storage or appropriate considerations for solar power generation; and
- Workforce Accommodation Village within the Julia Creek township.

8.2.1 Project Workforce

If approved, construction of the Project will commence in early 2021, with production of the first vanadium expected in 2022. There are two phases of construction: phase 1 will enable construction of the mine to process 10,000 tpa of product and phase 2 will be an expansion of the processing facility to enable processing to 20,000 tpa of product.

In summary, the Project workforce will include:

- Up to 200 jobs during phase 1, which will involve construction of the MIA and processing facility able to produce 10,000 tpa of product. This phase would be over a period of 12 months starting in early 2021;
- Approximately 150 operational jobs commencing in 2022 to support the first 10,000 tpa of processed ore;
- A further 150 construction jobs is expected for phase 2 to enable the expansion of the processing facility to 20,000 tpa. The expansion will require an additional 100 operational roles once construction finishes. For the purposes of assessing a maximum development case, phase 2 is assumed to begin construction in 2023 with a peak operating workforce of 250 in 2024; and
- Approximately 75 jobs during mine decommissioning, estimated to occur in 2053.

The construction phase 1 of the Project is expected to occur over a 12 month period and commence in in January 2021. Expansion to 20,000 tpa (phase 2) in approximately Year 3

(2023) would require construction of a second processing train, which would create an additional 150 construction jobs construction over a further 12 months and an additional 100 operational roles. Figure 2-1 outlines the estimated peak annual employment over the first 10 years of the Project, including overlap of the construction and operations phases. During construction of the expanded processing facility to allow 20,000 tpa of product, up to 300 construction and operational workers are anticipated to be employed by the Project.

Figure 8-1 Project workforce 2021-2030

For construction, local and regional contractors, labourers and suppliers will be preferentially utilised, in accordance with relevant legislation, including the *Anti-Discrimination Act 1991* (QLD). Local and regional labour availability will need to be tested as part of the recruitment process, but for the purposes of assessment it has been assumed that approximately 25 percent of workforce will be sourced from the primary and secondary Study Area, 50 percent from rest of the Economic catchment (Townsville and Charters Towers) and a further 25 percent of the construction workforce will be sourced from regional Queensland centres.

For operations, Multicom will have a recruitment hierarchy that prioritises local and regional recruitment from Julia Creek and the secondary Study Area communities of Mount Isa, Richmond and Cloncurry. Operations staff will also be encouraged to relocate to Julia Creek. It has been estimated that 75 percent of the workforce will be sourced from the Economic Catchment (Townsville to Mount Isa) and up to 25 percent of the workforce will be sourced from elsewhere in Queensland. It is estimated that a total of 25 percent of the workforce will be sourced from Julia Creek by 2031, comprising both existing residents and new residents relocating for employment. Over the life of the Project it is estimated that up to 50 employees will relocate to Julia Creek, starting with approximately eight in the first two years of operations.

8.2.2 Summary of Existing Socio-Economic Environment

The Project is located in Queensland's North West Minerals Province. Centred around Mount Isa and Cloncurry, the North West Minerals Province is one of the world's richest mineral-producing regions. It has delivered significant economic benefits to Queensland for decades.

Julia Creek is located approximately 25 km to the west of the Project site and is the only town within daily driving distance with respect to management of driver fatigue. Julia Creek can be characterised as a family-oriented rural township of approximately 400 people. The McKinlay LGA has a population of approximately 800 people, falling from approximately 1,000 persons in 2011. In order to promote population growth across the Shire, the McKinlay Shire Council is actively seeking economic diversification to improve the resilience of the area (McKinlay Shire Council 2018a). Accordingly, through the likely construction and operational workforce numbers, this Project has the potential to return the population to 2011 levels.

The 2016 Census data indicates that the local population has skills relevant to the mining industry, and there is existing underutilised housing as well as plans for new subdivisions in the town, which may provide options for longer-term accommodation. The viability of local businesses also has the potential to increase through having creation of new sources of revenue, through both direct and indirect spending associated with the Project.

Beyond Julia Creek are the townships of Cloncurry, Richmond and Mount Isa. While all three towns are located more than a one hour[5] drive from the Project, it is noted that Cloncurry, Richmond and Mount Isa:

- Comprise larger communities than Julia Creek, and therefore have increased community infrastructure and housing opportunities. For example, the Mount Isa Hospital is the nearest major hospital to the Project site. As such, these communities (particularly Cloncurry and Mount Isa) have the potential to attract and support a regional workforce, and therefore are likely to be a source of DIDO personnel for the Project;
- Have access to a large skilled mining workforce (particularly Cloncurry and Mount Isa); and
- Increase the range of suitable suppliers and service operators who can support the Project.

[5] The Department of Natural Resources and Mine's Guidance Note for Fatigue Risk Management (2013) consideration that a commute time of one hour, with a 12 hour shift length, can influence the opportunity for sleep and fitting in other daily activities.

8.3 COMMUNITY AND STAKEHOLDER ENGAGEMENT PLAN

Multicom's social license is a critical element of its success. In accordance with Company values, it is imperative that Multicom demonstrates that it is contributing to society and, in particular, enhancing Julia Creek and the surrounding region in which they operate.

Key to achieving this has been working with the McKinlay Shire Council to establish a suitable social framework in which the Project can contribute and integrate operations and people within the communities.

The Project will target local employment, engagement, and spending as a priority with a view to sustainably developing and growing the local workforce and businesses. This will extend across the north west region of Queensland to reflect the long-term strategy for Multicom to grow its business in this region. This engagement will also extend beyond the townships and into the more rural communities, including indigenous communities, to maximise their opportunity for participation in Multicom's projects.

In the early stages of Project development and prior to EIS or SIA consultation, a scoping study was undertaken to define the key stakeholders who would be potentially directly and/or indirectly affected by the Project. This list was reviewed and refined throughout the consultation and engagement program. The stakeholders that were provided with opportunities to participate in consultation as part of the EIS and SIA process are summarised in ***Table 8-1***.

Table 8-1 Project Stakeholders

Category	Stakeholder
Direct landholders	The three landholders whose property the mine infrastructure may be located, including the McKinlay Shire Council. Property owners within Mine Lease Area (MLA100162).
Adjoining landholders	Landholders whose property is adjoining the Project site. There are four identified landholders.
Federal, Federal, State and Local Government Representatives	**Federal** • Department of Environment and Energy • Kennedy Federal Division

Category	Stakeholder
	State • Department of Environment and Science • Department of Natural Resources, Mines and Energy • Department of Communities, Disability Services and Seniors • Department of Child Safety, Youth and Women • Department of State Development, Manufacturing, Infrastructure and Planning • Department of Environment and Science • Department of State Development Infrastructure and Planning (including Northwest Minerals Province Taskforce and Office of the Coordinator General) • Department of Housing and Public Works • Department of Employment, Small Business and Training • Department of Aboriginal and Torres Straight Island Partnerships • Department of Education • Traeger State Electorate
	Local Government • McKinlay Shire Council • Cloncurry Shire Council • Mount Isa City Council • Richmond Shire Council • Townsville City Council
	Government Service Representatives • Queensland Police • Queensland Ambulance Service • Queensland Fire and Emergency Services • Queensland Health
	Infrastructure and Utilities Providers • Aurizon • Queensland Rail • Cloncurry Airport • Department of Natural Resources, Mines and Energy • Department of Transport and Main Roads • Ergon Energy • Julia Creek Airport (McKinlay Shire Council) • Mount Isa Airport • Port of Townsville • Telstra • Townsville City Council
Indigenous Stakeholders	• Refer to **Section 6.10** • Department of Aboriginal and Torres Strait Islander Partnerships Mount Isa • Gidgee Healing, Mount Isa • Queensland South Native Title Services

Category	Stakeholder
Business Operators and Representatives	• Queensland Resources Council • North West Chamber of Commerce • Mount Isa Townsville Economic Zone • Townsville Enterprise Short term accommodation providers, including: Julia Creek Caravan Park, Julia Creek Villas; Corella Creek Country Farm Stay; Cloncurry Discovery Parks; Gannon's Hotel. • Retail businesses, including Elders Rural, Information Centre, Julia Creek News, Pharmacy and Gift Shop; Corina's Catering; Grocery shops; hardware shops, roadhouse tyre distributor. • Contractors including bulk haulage, plumbers, construction companies, distribution companies; field mining services, mobile workshops; electrical contractors; grader and water tanker hire.
Special Interest Groups	• Community associations such as Country Women's Association, Julia Creek Lions Club and Julia Creek Lions Ladies • Educational providers such as Julia Creek Early Learning Centre and Julia Creek State School • Various sporting and social groups such as Julia Creek Pony Club, Julia Creek Campdraft Association, Julia Creek Sporting Shooters Association, Julia Creek Swimming Club • Major event organisers such as Dirt N Dust Festival • Relevant groups associated with natural area management and species protection such as Southern Gulf NRM and the University of Queensland as research partners • Emergency Service Committees such as the Julia Creek Local Ambulance Committee and Fire Captain
Local Community	Other interested members of the McKinlay, Cloncurry and Richmond shires and North West broader region

8.3.1 Engagement Objectives

The objectives of the Community and Stakeholder Engagement Plan are:

- To identify stakeholders who have an interest in the Project;
- Facilitate two-way engagement with stakeholders;
- Providing accurate, timely and relevant information on the Project;
- Identify any concerns or potential issues stakeholders may have with the Project;
- Explore areas of the Project with the potential to have a positive impact on the region;
- Develop appropriate strategies to mitigate any concerns; and
- Incorporate feedback into the Project SIMP.

8.3.2 Engagement Tools

The engagement program will continue throughout the EIS process, and through the construction and operation phases of the Project. Feedback from stakeholders indicated that, due to their remoteness, they require a diverse range of communication channels.

Engagement mechanisms during construction and operations are expected to include:

- The Project free call phone and email;

- Maintenance of the Project website;
- Dedicated staff for Project communications, engagement and social impact management;
- Distribution of fact sheets;
- Regular Project newsletters (quarterly) and Project website;
- Attendance at community and business committee meetings; and
- Specific information sessions as required.

8.3.3 Engagement Actions

Advanced notice will be provided to all key stakeholders regarding the proposed construction activities and any major Project changes. Details of how this will be communicated will be outlined within the Projects Community and Stakeholder Engagement Plan (**Section 8.3.6**). Specific engagement actions to be undertaken include:

- **Landholders** – finalise any outstanding arrangements with landholders, if any are outstanding, and agree directly on their ongoing engagement preferences. All landholders will be provided with Project representatives' contact details to enable immediate 24 hour contact with the Project from the commencement of construction, in the event of any impacts, issues or concerns.
- **McKinlay Shire Council** – continue meetings to progress the workforce accommodation options in 2020; potential changes to Shire infrastructure and services (such as childcare) and other long lead planning items. Council feedback on the effectiveness of the Project's SIMP will be sought and considered in the annual review.
- **Government Representatives** – engagement with Government agencies during the pre-construction, construction and first 3 years of operations will focus on the key impacts of the Project's anticipated workforce build up (schools, hospitals, other healthcare providers etc.) and training and skill development opportunities. The Project will provide updates to emergency services, schools, hospitals and other agencies about workforce build up and local settlement plans, to assist agencies with resource planning. This will be on a quarterly basis during construction and then on a half yearly basis once operations commence.
- **Local Community and Special Interest Groups** – continue regular (at least quarterly) newsletters throughout the Project approvals and construction phases and then as part of an ongoing operations program. Workshops should be held on specific topics based on local interest feedback. Feedback will be sought to ensure the social engagement program and proposed mechanisms are delivered in an accessible, appropriate and meaningful way.
- **Business Operators** – specific engagement with business and industry groups is detailed in **Section 8.6**.

8.3.4 Complaints Management Process

Multicom is committed to working with stakeholders that may be impacted by the Project who wish to make a complaint or raise an issue. A senior representatives of the Project will be responsible for all stakeholder liaison and will be the first point of contact for dealing with complaints, enquiries and comments related to the Project. They will be responsible

for coordinating responses to complaints received and for monitoring the frequency and number of complaints received.

Issues and concerns that may affect staff, employees and contractors shall be treated confidentially. The senior representative of the Project will treat all complaints or personal concerns in a sensitive, fair, timely and confidential manner.

Should complaints be received, which are directly related to the construction, operation or decommissioning phases of the Project, the following detail will be logged within the Project's complaints register:

- Name, address and contact number for the complainant;
- Time and date of complaint;
- Reason for the complaint;
- Investigations undertaken;
- Conclusions formed;
- Actions taken to resolve the complaint;
- Any abatement or mitigation measures implemented; and
- Person responsible for resolving the complaint.

All complaints will be investigated to determine validity, the source and underlying cause, provide a summary of corrective actions and follow-up to ensure corrective actions are implemented. Additional investigation/s will be carried out where necessary. Where complaints cannot be resolved by this process, third party mediation will be undertaken.

Multicom will establish and maintain a Community Complaints Register, including a complaints form which will be appended to the CEMP. Complaints related to the Project will be able to be lodged in writing and via email or phone.

8.3.5 Stakeholder Agreements

In addition to the above management measures, Multicom will execute landholder mining compensation and consent agreements with all directly impacted landholders.

The Project requires approvals under the Queensland *Environmental Protection Act 1994* (and bilateral under the *Environment Protection and Biodiversity Conservation Act 1999*) and the Queensland *Strong and Sustainable Resource Communities Act 2017.*

8.3.6 Plan Summary

The following table outlines the objectives, key performance indicators, actions, responsibilities, monitoring, feedback and reporting for the Community and Stakeholder Engagement Plan. Further details of who will be responsible, within Multicom, for undertaking these actions will be included in the Plan.

Community and Stakeholder Management	
Summary of Issues	• Engaging with stakeholders about Project progress; • Communicating key data to government and social infrastructure agencies to assist in planning; • Communicating opportunities for local employment and business engagement opportunities.
Objectives	• Ensure transparent and inclusive community and stakeholder engagement informs the ongoing management and monitoring of potential social impacts during the construction and operational phases of the Project.

Actions	KPIs	Responsible	Timeframe
Prepare detailed program of community engagement and communication incorporating feedback and complaints mechanisms, prior to construction.	Establish an engagement program and agree on the metrics for ongoing tracking of engagement.	Multicom	Prior to construction
Provide regular updates to direct and adjoining landowners regarding Project construction and operations.	Communication with landowners is undertaken to advise of activities.	Multicom	Life of construction and operations
Review and update community engagement program prior to operations.	Engagement program amended based on feedback to ensure it continues to be fit for operations.	Multicom	Prior to operations
Keep Government agencies updated on likely workforce and local resettlements.	Social infrastructure able to support workforce.	Multicom	Quarterly during construction 6 monthly during operations

Performance Monitoring and Review		
Goal	**Evidence**	**Frequency**
Engagement program remains current and relevant to Project phase for all stakeholders.	SIMP Report Complaints	Annual

8.4 WORKFORCE MANAGEMENT PLAN

The objectives of the workforce management plan are to:

- Target local employment, including access for women, youth and Indigenous people, as a priority with a view to sustainably developing the region;
- Grow the local workforce through targeted training programs to encourage the participation for McKinlay Shire residents, residents from neighbouring Shires, and people who would like to move to the region;
- Support active workforce integration in the Julia Creek community through sport, recreation and volunteering; and
- Mitigate potential social implications including possible disruption to community cohesion, particularly in Julia Creek.

8.4.1 *Areas of Impact*

The key impacts and opportunities associated with workforce management include:

- Access to Project jobs for communities within Julia Creek and the Project's economic catchment, including apprenticeships and development of tertiary pathways;
- Potential for an outside workforce to disrupt community cohesion, particularly in Julia Creek; and
- Potential for an outside workforce to contribute to community capacity, particularly during the operational phase.

8.4.2 *Workforce Management Mitigation and Enhancement Measures*

Recruitment Hierarchy and Policies

For both construction and operations, the Project's recruitment hierarchy will ensure equitable access to employment opportunities and prioritise recruitment of local, regional, female and indigenous employees.

Recruitment will prioritise:

1. Julia Creek and McKinlay Shire residents who are within a commute time of one hour;
2. Residents of Cloncurry, Richmond and Mount Isa who will require accommodation between shifts but who will be able to either DIDO or Bus-In Bus Out (**BIBO**) (to minimise traffic and fatigue) at the end of a shift rotation;
3. People from other regions who are willing to move to Julia Creek; and then
4. FIFO for workers who cannot be sourced from any of the above.

It is anticipated that 75 percent of the workforce will be able to be sourced from options 1, 2 and 3. Up to 25 percent of the workforce will be sourced from outside the Economic Catchment (AEC 2020).

The Project will also prioritise female and Indigenous employees and will set appropriate diversity employment targets prior to the commencement of operations.

Provisions to support this recruitment hierarchy include:

- Providing workshop briefings for interested residents in Julia Creek, Richmond, Cloncurry and Mount Isa prior to the commencement of construction and operations to learn about the Project and register for contact.
- Utilising the networks of the North West Chamber of Commerce, MITEZ, DSDMIP Mount Isa to promote contracting and employment opportunities.
- Requiring all Principal Contractors to report on their local and diversity employment statistics.
- Developing a recruitment policy, using the identified sourcing estimates as goals for local and regional employment, attraction of "new local" personnel, female participation and Indigenous participation.
- Working with McKinlay Council to publish an information pack including a profile of local communities to support "new local" employees to understand the amenity, services and housing options on offer.
- Initiating a welcoming and community integration process for new Julia Creek employees and families.

Training and Development

Construction –Major contractors will be required to include details of their proposed training and recruitment strategies, targeting local, regional, female and Indigenous people as part of the tendering for the construction, and will be required to report on the delivery and outcomes of these strategies.

Operations – Prior to Operations, Multicom will develop a detailed Training and Development Plan which will include:

- An updated profile of the local and regional labour market, likely availability of personnel with skills relevant to the Project compared to operational labour requirements;
- Consultation with relevant State and Federal departments, as well as local industry associations, if any skills gaps and availability are identified; and
- Develop partnerships with regional providers such as Cloncurry or Mount Isa TAFE; DSDMIP Mount Isa and local Indigenous training organisations, to deliver appropriate training programs.

Training programs will include a focus on youth who are post-secondary education, including apprenticeships and identification of tertiary pathways, particularly those which will allow children of local residents to remain in the area or return following tertiary education, an identified priority during consultation.

The Training and Development Plan will be implemented throughout the life of the Project.

Indigenous Training and Employment

During construction Multicom will work with key stakeholders, including DATSIP Mount Isa and local Indigenous training organisations, to develop a detailed Indigenous Training and Employment Plan for operations. Both direct employment and indirect employment (through Indigenous businesses) will be targeted.

Safe and Healthy Workforce

Multicom is committed to a safe and healthy workforce, including all aspects of wellbeing including:

- Promoting worker health, safety and wellbeing as fundamental to Project success, promoting a positive, inclusive, and safety oriented culture within the workforce; and
- Full compliance with all relevant mine safety and health legislation.

Construction - Major contractors will be required to demonstrate their previous safety record and include details of their proposed health and safety plans as part of the tendering for the construction, and will be required to report on the delivery and outcomes of these strategies. During construction, the Project will have an on-site medic and have basic health facilities.

Operations – Multicom will work with key stakeholders to develop a detailed Healthy Workforce Plan, which will include:

- Promoting worker health, safety and wellbeing as fundamental to Project success, establish a healthy workforce policy and a positive, tolerant and safety oriented culture within the workforce;
- During the operational phase, it is anticipated the Project will have an on-site medic and have basic health facilities. These facilities will provide initial emergency response teams which can work to provide first response for not only health issues but also other emergencies, and will work in collaboration with existing emergency service providers;
- Proactively engaging with existing emergency services in relation to emergency response planning;
- Contracting an EAP provider to assist construction and operation personnel to confidentially seek support and/or assistance with various concerns, such as mental health issues, domestic and family violence, etc. This will increase mental health capacity in the region;
- To minimise any non-local employees' demands on regional services, communicate to all employees and contractors that minor health issues should be addressed before they commence their shift rosters and that demands on local services should be minimised; and
- Promoting return to work after illness or injury.

Workforce Integration

Julia Creek has an active and vibrant community, with many associations including Julia Creek Pony Club, Julia Creek Campdraft Association, Julia Creek Sporting Shooters Association, Julia Creek Swimming Club and a local gym. The Indoor Sports Centre and Kev Bannah oval are utilised for people to participate in touch football, tennis, netball, basketball, indoor cricket, volleyball and indoor soccer just to name a few.

Multicom will work with McKinlay Shire Council to provide a 'Welcoming and Community Integration Process' for new Julia Creek employees and families to become involved in the community, including through a volunteering program.

8.4.3 Plan Summary

The following table outlines the objectives, key performance indicators, actions, responsibilities, monitoring, feedback and reporting for the Workforce Management Plan.

Workforce Management Plan			
Summary of Potential Issues and Opportunities	• Access to Project jobs for communities within the Project's economic catchment, including apprenticeships and development of tertiary pathway, prioritising Julia Creek residents; • Potential for an outside workforce to disrupt community cohesion, particularly in Julia Creek; and • Potential for an outside workforce to contribute to community capacity.		
Objectives	• Prioritise recruitment of workers from local and surrounding communities and workers who will live in these regional communities; • Grow the local workforce through targeted training programs to encourage the participation for McKinlay Shire residents, residents from neighbouring Shires, and people who would like to move to the region; • Avoid negative impacts on community cohesion and sense of place through workforce management strategies; and • Support active workforce integration in the Julia Creek community through sport, recreation and volunteering.		
Actions	**KPIs**	**Responsible**	**Timeframe**
Ensure Construction contracts prioritise local and Indigenous employees and businesses.	Major contractors to report on local content, local employment and Indigenous employment	Multicom Contractors	Pre and during construction
Ensure Construction contracts include Training and Development and Health and Safety Strategies	Major contractors to report on delivery of Training and Development and Health and Safety Strategies	Multicom Contractors	Pre and during construction
Develop local employment policies, procedures and practices to support the recruitment hierarchy	Number of employees from McKinlay Shire Number of employees from Richmond, Cloncurry, Flinders and Mount Isa Shires Number of employees moving to Julia Creek Number of employees on FIFO	Multicom DSDMIP TAFE MITEZ	Pre and during operations
Develop Indigenous Training and Employment Plan	Percent of employees of Indigenous background Number of Indigenous people receiving relevant training	Multicom DATSIP	Pre and during operations
Develop and implement a Healthy Workforce Plan	Health and safety incidents Project and workforce related hospital visits and admissions	Multicom Health Service Providers	Pre and during operations

Actions	KPIs	Responsible	Timeframe
Develop community integration processes for new employees to Julia Creek	Record involvement of Project employees in local community organisations and events Information pack to support "new local" employees published	Multicom McKinlay Shire Council	6 monthly during operations
Develop a workforce code of conduct	Number of breaches of code of conduct	Multicom McKinlay Council	Quarterly during construction 6 monthly during operations

Performance Monitoring and Review		
Goal	**Evidence**	**Frequency**
A locally based, healthy workforce integrated into Julia Creek and surrounding communities.	Employment diversity data Community engagement survey Complaints	Annual public reporting

8.5 HOUSING AND ACCOMMODATION PLAN

The objectives of the Housing and Accommodation Plan are to:

- Ensure housing and accommodation arrangements do not significantly impact affordability and availability local and regional communities; and
- Provide a range of housing and accommodation options for the Project workforce.

During the life of the Project there will be an increase in population in Julia Creek and surrounding townships. The Economic Impact Assessment (AEC 2020) has identified that during the construction and operation phases, the local housing market will be both positively and negatively impacted, dependent upon the particular circumstances of the stakeholder. This Housing and Accommodation Plan, currently being developed between Multicom and the McKinlay Shire Council, is designed to ensure the provision of adequate and affordable housing and to ensure the Project does not limit opportunities for non-Project related visitors to stay within Julia Creek.

8.5.1 *Areas of Impact*

Local Property Values – It is expected that the Project will have a noticeable impact on the property market through speculative buyers, particularly in Julia Creek (AEC 2020). There is also the potential for local property values to rise, and for landholders to seek to capitalise on the in-migration of persons in the region as a result of the Project. This capitalisation by landholders may be in the form of opportunities to increase incomes secured from rental properties, or through the sale of individual properties for higher prices than would have normally been expected.

Housing Affordability – The Economic Impact Assessment, prepared by AEC (2020), identified that the increase in population due to the Project will impact on people looking to rent or buy within the local area, as they may not be able to locate suitable housing options within an affordable price range. In addition, if rental prices increase, existing tenants may find themselves in a situation where they are unable to afford to rent.

Accommodation Availability - Given that the property market in the local area is relatively small, the increase in population may cause a shortfall in the availability of short and/or longer term accommodation within the area. This will in part depend on the ability of Multicom, working with the McKinlay Shire Council, to capitalise on the current high rate of unoccupied private dwellings, with over 100 in the McKinlay LGA and approximately 300 in the neighbouring communities of Richmond and Cloncurry (refer to **Section 6.3.1**). Market demand is likely to see some of these released to the rental or purchase markets. Further impacts are possible if “out-of-town”/non-Project related visitors are unable to stay within Julia Creek due to Project related demands on accommodation.

Indirect Economic Benefits - Existing accommodation options within Julia Creek including the Caravan Park, Julia Creek Villas, Julia Creek Motel, Gannon’s Hotel Motel and the Julia Creek Hotel will have the opportunity to benefit economically from increased head office, Government, consultant and contractor visitors to the town as a result of the Project proceeding. Through consultation, Multicom will work to limit impacts on their existing tourist trade.

8.5.2 Key Housing and accommodation management strategies

Non-Local Workforce

To mitigate impacts on housing and accommodation availability, a Workforce Accommodation Village will be developed to support construction and will remain in place for operations. The Workforce Accommodation Village will accommodate the non-local employees that that reside greater than a one hour drive from the Project site while on shift and then travel home at the end of their swing. For those personnel based in other towns within the secondary Study Area, including Richmond, Cloncurry and Mount Isa, bus transport and car-pooling to the Project will be made available. The Workforce Accommodation Village will be of a sufficient size to accommodate the peak non-local construction workforce. This is anticipated to be sufficient to also accommodate the peak non-local operational workforce.

The Workforce Accommodation Village will be sited in Julia Creek in collaboration with the McKinlay Shire Council and local land owners. It will be constructed to be fully self-contained for water and sewer services, reliant only on a raw water supply being provided by Council from their existing town raw water supply and a designated waste water irrigation area designated by Council. Power demand will be sourced from the Ergon substation at Julia Creek. A power line extension to the village site will also be required. Communications will be from the existing Telstra services in Julia Creek. Council will be engaged if necessary, as a contractor, to provide road and pedestrian access to the village.

Discussions with the McKinlay Shire Council are progressing in regard to the optimum location of the village, such that it provides appropriate integration with the existing community, offers services which complement the existing town facilities, and which may also be available to the community, and has sufficient infrastructure provided.

Housing for "New Local" Workforce

Operations personnel will include existing Julia Creek and McKinlay residents, DIDO workers from neighbouring Shires and "new local" recruits. It is estimated that over the life of the Project up to 50 workers, plus their families, will relocate to Julia Creek requiring housing, supplementing the 13 existing residents estimated to be sourced from Julia Creek. In-migration of "new local" workers and families would take some time and is more likely to occur over a period of years. Therefore, it has been estimated that 5 per cent of the workforce or up to 8 employees may relocate over the first two years, a further 17 over the next three years as the Project is developed and expanded and so on. Rates data from McKinlay Council, combined with ABS data and analysis of households and occupied dwellings has indicated that there are currently approximately 71 vacant dwellings in Julia Creek. If 30-40 percent of these dwellings were made available to the market, there is enough housing available for Years 1 to 5 of the operation based on the estimated gradual increase in employees relocating. However, with the increase in the operational workforce associated with expansion of capacity to 20,000 tpa, and ongoing attraction of "new local" residents, there may be a shortage of housing in Julia Creek from Year 5 (2026) onwards. This shortage is likely to impact on housing affordability if not managed. To manage impacts of this anticipated additional demand for housing in Julia Creek, Multicom will develop a **Housing Strategy** in partnership with McKinlay Council, key elements of which are likely to include:

- Auditing of existing vacant dwellings and their suitability for "new-local" operational phase employees;

- Updating the assessment of Project housing needs;
- Identifying policies and possible funding mechanisms to encourage owners of vacant dwellings to undertake the required improvements to make dwellings habitable and attractive to operation personnel looking to relocate to Julia Creek;
- Establishing a mechanism to track rental prices within Julia Creek and the surrounding townships;
- Facilitating housing development if required through market research to identify private, Council and Government interest in housing development in response to Project need;
- Identifying and implementing strategies and policies to attract operational phase personnel to Julia Creek; and
- Developing a timeline for implementation of actions based on Project scale up and anticipated demand.

In addition to the Housing Strategy, Multicom will also contribute to the McKinlay Council Housing Needs Assessment identified in the 2019-2026 McKinlay Community Plan and establish a register of available housing in Julia Creek.

As described in **Section** Error! Reference source not found. Multicom will provide a 'Welcoming and Community Integration Process' for new Julia Creek employees and families to become involved in the community.

Other Accommodation Providers

To mitigate impacts of availability of visitor accommodation on the tourism industry and other businesses in Julia Creek, Multicom will work with existing visitor accommodation providers in Julia Creek and in surrounding townships (e.g. caravan parks or motels). Consultation will seek to understand available supply and timing of vacancies, particularly during construction of the Workforce Accommodation Village, to ensure that Project demand does not impact on tourists and other visitors but provides opportunities for those suppliers through the Project, e.g. through Project visitors, suppliers and as transitional arrangements for workers relocating to Julia Creek.

8.5.3 *Plan Summary*

The following table outlines the objectives, key performance indicators, actions, responsibilities, monitoring, feedback and reporting for the Housing and Accommodation Plan.

Housing and Accommodation Plan			
Summary of Issues	• Local Property Values; • Housing Affordability; and • Accommodation Availability		
Objectives	• Ensure housing and accommodation arrangements do not significantly impact affordability and availability local and regional communities; • Provide a range of housing and accommodation options for the Project workforce.		
Actions	**KPIs**	**Responsible**	**Timeframe**
Develop a plan, in conjunction with McKinlay Shire Council, for the Workforce Accommodation Village for workers who need to DIDO / FIFO	Detailed plan for Workforce Accommodation Village Monitor employee satisfaction with Workforce Accommodation Village	Multicom McKinlay Shire Council	Prior to construction
Work with McKinlay Shire Council on a housing strategy to minimise the potential for unsustainable increases in rental and housing costs, including opportunities to develop additional housing stock and monitor the market	Rental prices House prices Rental availability House availability Number of usable vacant dwellings	Multicom McKinlay Shire Council	Prior to operations
Engage with accommodation providers in Julia Creek and surrounds on accommodation availability including timing	Vacancy rates	Multicom Accommodation Providers Tourist Information Centre	Prior to construction
Encourage the operational workforce to reside in Julia Creek, or other neighbouring communities, via recruitment strategy.	Number of new local residents	Multicom	Prior to and during operations
Performance Monitoring and Review			
Goal	**Evidence**	**Frequency**	
Ensure visitor accommodation remains available within Julia Creek for non-Project personnel.	Monitor vacancy rates in visitor accommodation.	Quarterly during construction 6 monthly during operations	
Increase availability of dwellings in Julia Creek for new local workforce	Document number of unoccupied houses made available / rented Document new dwellings constructed	Annual reporting	

8.6 LOCAL BUSINESS AND INDUSTRY PROCUREMENT PLAN

The Project targets local engagement, and spending as a priority with a view to sustainably developing the region and will provide opportunities for local, regional and Indigenous businesses within the McKinlay LGA and throughout the Project's Economic Catchment[6].

The objectives of the Local Business and Industry Procurement Plan are to:

- Maximise opportunities for competitive and capable local businesses to provide goods and services to the Project; and
- Minimise impacts to existing industries where possible.

8.6.1 *Areas of Impact and Opportunity*

A number of direct and indirect economic impacts and opportunities have the potential to result from the Project. These impacts include:

Revenue for Businesses and Indirect Employment – Increased revenue will be generated by the Project in the form of purchase of goods and services from businesses, the purchase of goods and services by workers living in/around Julia Creek and the potential increase in demand of these goods and services leading to an indirect increase in employment in these businesses. During consultation, which included a number of business focussed workshops, local businesses did not identify any barriers to participation in the Project. They are familiar with tendering with the McKinlay Shire Council, which Multicom has aligned its processes to, as well as to other major organisations such as Queensland Rail (See **Section 6.3.1**).

Increased Competition for Labour – Employment opportunities generated by the Project will likely negatively impact business operators during the construction and operation phases through increased competition for labour.

Industry Benefit - The Economic Impact Assessment (AEC 2020) identified the mining industry will be the greatest beneficiary of the Project, with moderate beneficiaries being electricity and water, trade and business services and business activity for the Port of Townsville, for the Economic Catchment within which the Project is located. It is noted that the Economic Catchment includes the LGAs of McKinlay, Charters Towers, Cloncurry, Flinders, Mount Isa, Richmond and Townsville (AEC 2020).

Impacts on Existing Industries - The manufacturing industry has been identified as the primary industry expected to experience adverse impacts as a result of reduced industry output. This is due to a number of reasons, including increased competition for labour and the increased cost of resources for conducting business (including the cost of securing a workforce) (AEC 2020). Additionally, as the Project is located on land currently used for cattle grazing, this land will be removed from grazing leading to a corresponding impact on the grazing industry. Despite this, the disturbance area accounts for only 0.1 percent ($323,400) of the livestock grazing area in the Northern Highlands SA2 area.

[6] The area of potential economic impact associated with the import and export of materials by road and rail. This area extends along the corridor between Townsville and the Project site, through the LGAs of Mount Isa, Cloncurry, McKinlay, Richmond, Flinders, Charters Towers and Townsville.

8.6.2 Local Industry and Procurement mitigation and enhancement strategies

Buy Local Plan

Multicom will develop a 'Buy Local Plan' during the pre-construction phase to ensure both construction and operations maximise opportunities for local, regional and Indigenous businesses. This Plan will be published on their website. The Plan will be compliant with the QRC's Code of Practice for Local Content, including reporting requirements.

The objectives of this Plan include:

- To create Local and regional awareness of the Project's procurement opportunities;
- To provide the framework for full, fair, and reasonable opportunity for local, regional and Indigenous businesses to participate; and
- To ensure all Major Contractors are aligned to the Project's Buy Local Plan.

Actions to be taken as part of the Buy Local Plan for both construction and operations may include:

- Develop and maintain a register of local, regional and Indigenous businesses;
- Provide this business register to Major Contractors;
- Major contractors will be required to include details of their proposed local procurement strategies as part of the tendering, and will be required to report on the delivery and outcomes of these strategies.
- Promoting tendering opportunities via the Multicom website, with a link to company procurement procedures which have been aligned with the McKinlay Shire Council, to facilitate local participation;
- Develop procedures which facilitate the full and fair participation of local, regional and Indigenous businesses in the procurement processes.
- Annually report and publicise local content and complete a CIR to assist the QRC in completing the annual Code Effectiveness Report.

The Project will review its Buy Local Plan outcomes and procurement policies prior to commencement of operations to ensure their ongoing effectiveness.

In developing its 'Buy Local Plan' Multicom will consult with Regional Economic Development (**DSDMIP**), MITEZ, North West Chamber of Commerce and the McKinlay Shire Council to understand the status of local businesses relevant to the Project.

Multicom, in conjunction with DSDMIP and the McKinlay Shire Council, conducted two business readiness workshops in Julia Creek in 2018. This included a range of businesses who would be both directly related to the Project (construction, mining, etc.) as well as those which will be required to support the growing population (catering, accommodation, etc.). These local business briefings will continue to be held to promote Project supply opportunities ahead of the Project's construction phase, with further briefings planned in 2020.

The risk of monopolisation of local businesses in relation to local accommodation and provision of food and beverages was identified. This has been addressed by the ongoing use of the Workforce Accommodation Village (see **Section 8.5.2**).

Indigenous Business Participation

The Project will ensure that local and regional Indigenous businesses have full, fair and reasonable opportunities to supply goods and services to the Project. Indigenous businesses will be:

- Identified through the Black Business Register and DATSIP;
- Invited to register with the Project's Business Register; and
- Encouraged to attend business briefings and business readiness workshops.

8.6.3 Impacts and opportunities for existing Industries

Although impacts to other industries such as manufacturing and grazing are anticipated to be minor, Multicom has considered a number of mitigation strategies.

Multicom will investigate opportunities and potential Project partners for the development of Vanadium Redox Flow Batteries (**VRFBs**) within the Economic Catchment and Queensland using mined product. In addition to enhancing employment outcomes and economic activity, this would also reduce impacts on exchange rates by reducing exports generated and support manufacturing.

Specific to the grazing industry, Multicom has also proposed to liaise with farmers regarding the suitability of the Project site for agricultural purposes, as required.

Local businesses and industries are also expected to benefit from the proposed Julia Creek Smart Hub being developed by McKinlay Council. the Hub aims to provide access to high speed internet, increase business and educational capabilities, improve digital literacy, and provide training facilities. Multicom has provided its support for this initiative.

8.6.4 Plan Summary

The following table outlines the objectives, key performance indicators, actions, responsibilities, monitoring, feedback and reporting for the Local Business and Industry Procurement Plan.

Local Business and Industry Procurement Plan			
Summary of Issues and Opportunities	• Opportunities for increased revenue and indirect employment for local and regional businesses; • Increased competition for labour; • Opportunities for partnerships with businesses across the economic catchment; and • Potential for impacts to existing industries, particularly manufacturing and grazing.		
Objectives	• To maximise opportunities for competitive and capable local businesses to provide goods and services to the Project; and • To minimise impacts to existing industries where possible.		
Actions	**KPIs**	**Responsible**	**Timeframe**
Develop and implement the Buy Local Plan	Record the number of, and value of contracts for local, regional and catchment-based businesses as an absolute and percentage spend.	Multicom Contractors Local Businesses	Pre construction

Actions	KPIs	Responsible	Timeframe
Develop and implement the Indigenous component of the Buy Local Plan	Record the number of, and value of contracts for Indigenous businesses as an absolute and percentage spend.	Multicom Contractors	Pre construction
Support McKinlay Council's Julia Creek Smart Hub	Number of businesses using the Smart Hub Facilities. Number of business training sessions provided through the Smart Hub.	Multicom McKinlay Council	Construction through operations
Engage with grazing and other existing industries to monitor any trends of Project impacts negative.	Percentage of complaints satisfactorily resolved. Amount of land rehabilitated.	Multicom Local Graziers	Operations

Performance Monitoring and Review		
Goal	**Evidence**	**Frequency**
Maximise local business participation	Procurement spending analysis.	6 months prior to operations and annually thereafter

8.7 HEALTH AND COMMUNITY WELLBEING PLAN

The objectives of the Health and Community Wellbeing Plan are to:

- Mitigate any predicted negative social impacts on social infrastructure (community facilities and services) that may be experienced by local communities and stakeholders residing within the primary and secondary Study Areas; and
- Minimise potential environmental and amenity impacts (dust, noise, traffic, visual amenity) associated with the construction and operational phases of the Project on direct and adjoining landowners and the local community.

8.7.1 *Areas of Impact*

Construction – During construction the Project is expected to have a temporary impact on social infrastructure as a result of increased demand for health and emergency services. The Project is also expected to have potential environmental impacts such as dust, noise, traffic and visual amenity which may impact direct and adjoining landowners and the local community.

Operations – During operations the Project is expected to have an impact on social infrastructure as a result of increased demand for health and emergency, services and education facilities. The Project is also expected to have potential environmental impacts which may affectdirect and adjoining landowners and the local community - such as dust, noise, traffic and visual amenity.

8.7.2 *Community Health and wellbeing mitigation strategies*

Working with Community Infrastructure and Service Providers

During community consultation as part of the SIA process, health and emergency care and educational providers indicated that detailed information about population growth and Project demand will be important for their planning to ensure there is sufficient capacity to respond to increased demand.

To mitigate impacts from additional demand on emergency service and healthcare providers during construction and operations, Multicom proposes to:

- Promote worker health, safety and wellbeing as fundamental to Project success, establish a healthy workforce policy and a positive, tolerant and safety oriented culture within the workforce;
- During the operational phase, it is anticipated the Project will have an on-site medic and basic health facilities These facilities will provide initial emergency response teams which can work to provide first response for not only health issues but also other emergencies, and will work in collaboration with existing emergency service providers;
- Developing relationships with local and regional, and possibly external, healthcare providers (e.g. Julia Creek Hospital, local GP) to provide additional Project specific medical / health care services for employees to minimise additional pressure on existing emergency services;
- Consulting with local and health providers to understand concerns and pressure points;
- Proactively engaging with existing emergency services in relation to emergency response planning; and

- Communicating to all employees and contractors that minor health issues should be addressed before they commence their shift rosters and that demands on local services should be minimised.

In response to direct Project related demand on education and early learning services and to encourage families to relocate to Julia Creek and support working families, the Project will:

- Investigate future investment in local child care and early learning facilities to support the local community, and the increase in families stemming from the Project;
- Provide regular updates to Julia Creek State School and childcare services on employees relocating to Julia Creek and family composition to aid in planning with information provided prior to operations and then on a 6 monthly basis once operations commence; and
- Consult with all recruits when they are offered employment to identify any childcare needs and refer them to local services.

Section 8.3 details how the Projects ongoing needs with regard to the provision of social infrastructure will be communicated to government agencies to minimise the impact on existing communities.

8.7.3 Emergency Services Mitigation Strategies

During the pre-construction phase, Multicom will develop a strategy for co-operation with the Queensland Police, Ambulance and Fire and Emergency Services. This will include, for both construction and the life of the operation:

- Liaising with local emergency services including Julia Creek Police, Ambulance, Fire and Emergency Services and Hospital representatives with respect to workforce numbers and Project timeframes;
- Consultation with the McKinlay Shire Council as part of the Local Disaster Management Group;
- Developing an incident management, site contact and call-out protocol with local emergency service providers (Police, Ambulance, Fire and Emergency), for any incidents at the Project site and at the Workforce Accommodation Village;
- Ensuring Fire and Emergency service staff have capability for 24-hour access to the Project site; and
- Reviewing any protocols which are agreed with local emergency services and the McKinlay Shire Council annually during construction and the first three years of operation.

8.7.4 Traffic Management Mitigation Strategies

During the pre-construction phase, Multicom will develop Road Safety Management Policies and Procedures, which will form part of induction packages for employees on the Project. These Road Safety Management Plans and Procedures will cover issues such as:

- Use of buses/coaches to transport workers to/from the proposed Workforce Accommodation Village in Julia Creek and the Project site;
- Delivery of equipment, plant, and material to/from the Project site, including communication protocols for notifying adjoining landowners and the local community

as to when large deliveries are expected to occur, and when, if any, detours will be established;

- Ensuring Project personnel strictly adhere to speed limits;
- Ensure vehicle operations are licenced and trained appropriately;
- Driver education related to safety awareness; and
- Preparation and implementation of Journey Management Plans to place safeguards around fatigue management.

Additionally, the promotion of road safety awareness activities within the workforce and the community (e.g. schools), will assist in creating awareness of hazards associated with traffic, including heavy vehicles.

8.7.5 Environmental Impact Mitigation Strategies

During both construction and operation phases there is the potential that direct and adjoining landowners will be impacted by environmental emissions arising from Project related activities, such as dust, noise, and vibration. Additionally, there is the potential for the existing visual amenity experienced by stakeholders to be negatively impacted by the Project.

In order to ensure that these environmental impacts are managed, prior to commencement of the Project, Multicom will develop a Project specific CEMP. This will be transitioned to an OEMP prior to commencement of operation.

The CEMP and OEMP will generally include:

- A brief description of the construction / operation activities occurring on-site;
- Detail as to the legal and policy requirements to manage the environmental impacts;
- Outline of the roles and responsibilities for site-based and off-site personnel;
- The technical mitigation measures and recommendations identified in the various technical reports;
- Detail as to the compliance and monitoring required to ensure effective management;
- Linkages to the complaints mechanism developed by Multicom and a process for dealing with concerns raised by stakeholders; and
- Information as to the procedures and requirements for incidents, non-conformances, and corrective/preventative actions.

8.7.6 Plan Summary

The following table outlines the objectives, key performance indicators, actions, responsibilities, monitoring, feedback and reporting for the Health and Community Wellbeing Plan.

Health and Community Wellbeing Plan			
Summary of Issues	• Increased pressure on social and community infrastructure as a result of the Project, including health and emergency services, and educational and child care services • Potential increase in traffic related community impacts such as wear and tear on roads, traffic congestion, and traffic accidents • Potential environmental emissions related impacts such as dust, noise and vibration, and concerns relating to visual amenity, throughout the construction and operation of the Project		
Objectives	• Mitigate any predicted negative social impacts on social infrastructure (community facilities and services) that are may be experienced by local communities and stakeholders residing within the primary and secondary Study Areas; and • Minimise potential environmental and amenity impacts (dust, noise, traffic, visual amenity) associated with the construction and operational phases of the Project on direct and adjoining landowners and the local community.		
Actions	**KPIs**	**Responsible**	**Timeframe**
Engage with Julia Creek State School and Childcare providers on Project workforce planning to aid resource planning	Number of students per teacher at schools Availability of childcare	Multicom Julia Creek State School McKinlay Council	Quarterly during construction 6 monthly during operations
Engage with McKinlay Multipurpose Health Service on Project workforce planning to aid resource planning	Project and workforce related hospital visits and admissions	Multicom Queensland Health	Quarterly during construction 6 monthly during operations
Emergency Services Plan to be developed in conjunction with local emergency services and McKinlay Shire Council	Plan developed and reviewed annually during construction, and then three yearly	Multicom Police Ambulance QFS	Annually during construction and then 3 yearly
Development of Road Safety Management Policies and Procedures	Policies and Procedures, including associated Plans, developed pre-construction and reviewed annually during construction, and then three yearly	Multicom QPS McKinlay Shire Council	Annually during construction and then 3 yearly
Develop and implement the appropriate construction and operation environmental management plans	CEMP developed prior to construction and reviewed annually during construction. OEMP developed prior to operation, and reviewed on a three yearly basis	Multicom	Annually during construction (for CEMP) and then 3 yearly (for OEMP)

Performance Monitoring and Review		
Goal	**Evidence**	**Frequency**
Minimise pressure on health and emergency services, educational services, and child care services	Employee assistance programs provided by Multicom Number of doctors per patient at local healthcare facilities, and students per teacher at schools, commensurate with State Government requirements Percentage of complaints satisfactorily resolved.	Quarterly during construction 6 monthly during operations
Minimise the Project's contribution to traffic congestion, and traffic accidents	Number of Project related traffic incidents Percentage of complaints satisfactory resolved	Quarterly during construction 6 monthly during operations
Minimise the impact of the Project on community health and wellbeing	Number of dust exceedances Number of noise exceedances Number Percentage of environmentally related complaints satisfactorily resolved	Quarterly during construction 6 monthly during operations

8.8 MONITORING AND EVALUATION

The measures outlined in the SIMP will continue to be implemented throughout construction and operation. The SIMP will be a living document that can be updated over time to reflect:

- Changes in the Project design or implementation;
- New insights gained through primary data collection (e.g. through the complaint mechanism system or dedicated monitoring surveys);
- Changes in the social baseline reflected by secondary data (e.g. ABS Census);
- Adjustments made to impact management measures;
- Issues arising from cumulative effects of new, additional developments; and
- Any additional technical studies.

The SIMP will be regularly monitored and evaluated in order to ensure that nominated social management measures remain current and effective. The purpose of monitoring, as outlined in the SIA Guideline (DSDMIP 2018) are as follows:

- Track the progress and assess the appropriateness and effectiveness of the management measures;
- Assess the actual Project impacts against the potential impacts and social indicators identified in the SIA;
- Capture information with which to advise potentially impacted communities and government on progress and achievements; and
- Facilitate engagement, consultation and collaboration with stakeholders.

The SIMP sets out goals, objectives and monitoring and reporting requirements. These will facilitate ongoing monitoring and evaluation. Multicom will have primary responsibility for the collection and reporting of monitoring data.

In order to maintain transparency around the monitoring process, monitoring data will be published to facilitate public access and stakeholders will be involved in the monitoring process.

Data collected will be outlined in public reporting (e.g. via newsletter, link to website) on a quarterly basis during construction, and annually during operations.

8.9 INTEGRATION OF THE SIMP

The SIMP will form one of a suite of documents to guide construction and operation of the Project. In addition, Multicom will develop the following management plans (or their equivalents):

- Traffic Management Plan;
- Construction Environmental Management Plan; and
- Operation Environmental Management Plan.

These documents will include cross-cutting management measures – i.e. measures that mitigate social impacts as well as environmental or traffic related issues. To streamline implementation of the various documents, it is proposed that, where possible, the

management measures in the SIMP be integrated, or at least cross-referenced, in the other management plans.

In addition, the existing stakeholder engagement plan will also be in place. This will continue to be implemented throughout the life of the Project. Relevant engagement actions outlined in the SIMP will be captured in the Stakeholder Engagement Plan and tracked through the stakeholder database that is being maintained.

9.0 REFERENCES

ABC 2019, 'Much more than scones': CWA's 'covert' approach to caring for struggling farmers, viewed 26 April 2019, available online: <https://www.abc.net.au/news/2019-04-24/julia-creek-cwa-takes-vital-low-key-approach-to-mental-health/11019130>

AEC Group (AEC) 2019, 'Saint Elmo Vanadium Project Economic Impact Assessment', *Reference: J000797*

Alluvium 2016, 'NW Water Supply Strategy Investigation', viewed 5 September 2018, available online: <http://www.mitez.com.au/wordpress/wp-content/uploads/NW_Water_Supply_Final-Report.pdf>

ASK Consulting Engineers (ASK) 2019a, 'Saint Elmo Vanadium Project: Preliminary Air Quality Assessment', *Reference: 9461R01V01_prelim3*

ASK Consulting Engineers (ASK) 2019b, 'Saint Elmo Vanadium Project: Preliminary Noise Assessment', *Reference: 9461R01V01_prelim2*

At the Creek 2017, 'History of Julia Creek', viewed 22 May 2018, available online: <http://atthecreek.com.au/history/>

Australian Bureau of Statistics 1997, '1220.0 - Australian Standard Classification of Occupations (ASCO) Second Edition, 1997', viewed 20 June 2018, available online: <http://www.abs.gov.au/AUSSTATS/ABS@.NSF/2f762f95845417aeca25706c00834efa/F85333768B8287D1CA25697E00184CD0?opendocument>

Australian Bureau of Statistics 2013, 'SEIFA – Using and Interpreting SEIFA', viewed 3 May 2018, available online: <http://www.abs.gov.au/websitedbs/censushome.nsf/home/seifahelpansuis?opendocument&navpos=260&#02>

Australian Bureau of Statistics 2017, '2901.0 - Census of Population and Housing: Census Dictionary, 2016', viewed 19 May 2018, available online: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Chapter10702016>

Australian Bureau of Statistics (ABS) 2018a, '2016 Census Community Profiles', viewed 3 May 2018, available online: <http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/036?opendocument>

Australian Bureau of Statistics (ABS) 2018b, '2011 Community Profiles', viewed 3 May 2018, <http://www.abs.gov.au/websitedbs/censushome.nsf/home/communityprofiles?opendocument&navpos=230>

Australian Bureau of Statistics (ABS) 2018c, 'Socio-Economic Indexes for Areas', viewed 5 May 2018, available online: <http://www.abs.gov.au/websitedbs/censushome.nsf/home/seifa>

Australian Bureau of Statistics (ABS) 2019, 'Census QuickStats', viewed 25 July 2019, available online: <https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/census>

Australian Early Development Census 2018, 'Data explorer', Australian Government, viewed 15 May 2018, available online: <https://www.aedc.gov.au/data>

Australian Institute of Family Studies 2019, 'Population and households', Australian Government, viewed 15 April 2019, available online: <https://aifs.gov.au/facts-and-figures/population-and-households>

Australian Institute of Health and Welfare 2018, 'Find Hospitals', Australian Government, viewed 19 June 2018, available online: <https://www.myhospitals.gov.au/search/hospitals>

Australia's Dinosaur Trail n.d., 'Kronosaurus Korner', viewed 14 May 2018, available online: <http://www.australiasdinosaurtrail.com/richmond>

Bureau of Meteorology (BoM) 2019, 'Special Climate Statement 69 – an extended period of heavy rainfall and flooding in tropical Queensland, March 2019', Australian Government, Bureau of Meteorology, viewed 09 April 2019, available online: <http://www.bom.gov.au/climate/current/statements/scs69.pdf>

Burns, C. 2016, 'South32 cuts 772 jobs but Cannington cuts have already been made', The North West Star, viewed 20 June 2018, available online: <https://www.northweststar.com.au/story/3751980/local-south32-jobs-safe/>

Bus Queensland 2017, 'Mount Isa – Townsville Timetable', viewed 5 May 2018, available online:<https://www.busqldoutback.com.au/mount-isa-townsville>

Centacare 2018, 'Cloncurry Community Support Service', viewed 19 June 2018, available online: <https://www.centacarenq.org.au/centacare-services/community-engagement-and-support-services/cloncurry-community-support-service/>

Centre for the Government of Queensland 2018, 'Browse A-Z', The University of Queensland, viewed 22 May 2018, available online: <http://www.queenslandplaces.com.au/places>

Cloncurry Shire Council 2016, 'Cloncurry Shire Planning Scheme 2016', viewed 25 May 2018, available online: <http://www.cloncurry.qld.gov.au/documents/41953423/42055291/0177_PSA_CSC_QPP%20Planning%20Scheme%20Master%20Document_160115_v8.pdf>

Cloncurry Shire Council 2018a, 'Our History', viewed 22 May 2018, available online: <http://www.cloncurry.qld.gov.au/our-history>

Cloncurry Shire Council 2018b, 'Cloncurry History', viewed 22 May 2018, available online: <http://www.cloncurry.qld.gov.au/cloncurry-history>

Cloncurry Shire Council 2018c, 'Council Meetings', viewed 29 May 2018, available online: <http://www.cloncurry.qld.gov.au/meeting-minutes>

Cloncurry Shire Council 2018d, 'Planning Services', viewed 29 May 2018, available online: <http://www.cloncurry.qld.gov.au/development-applications-decided-by-council>

Cultural Heritage Unit (Department of Aboriginal and Torres Strait Islander Partnerships, Brisbane) 2017, 'Registered Cultural Heritage Bodies in QLD as at September 2017', *Queensland Government*, viewed 14 May 2018, available online: <https://www.datsip.qld.gov.au/resources/datsima/people-communities/cultural-heritage/heritage-bodies/chb-state-map.pdf>

Department of Education(DoE), 2018, 'Class size target achievement and average class size', viewed 26 April 2018, *Queensland Government*, available online: <https://qed.qld.gov.au/det-publications/reports/earlyyears/Documents/class-size-achievement-and-average-class-size.pdf>

Department of Environment and Science (DES) 2018, 'Terms of reference for an environmental impact statement under the *Environmental Protection Act 1994*', *Queensland Government*

Department of Natural Resources, Mines and Energy (DNRME) 2017, 'Great Artesian Basin and Other Regional Aquifers: Water Management Protocol', *Queensland Government*, viewed 05 February 2019, available online: <https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0006/1274955/water-management-protocol.pdf>

Department of Natural Resources, Mines and Energy (DNRME) 2018, 'Minister's Performance Assessment Report: Water Plan (Gulf) 2007', *Queensland Government*

Department of Jobs and Small Business (DJSB) 2018a, 'Australian Jobs 2018', *Australian Government*, viewed 23 July 2019, available online: <https://cica.org.au/wp-content/uploads/Australian-Jobs-2018.pdf>

Department of Jobs and Small Business (DJSB) 2018b, ' National Occupational Cluster Reports', *Australian Government*, viewed 15 April 2019, available online: <https://docs.employment.gov.au/collections/national-occupational-cluster-reports>

Department of Jobs and Small Business (DJSB) 2018c, 'Queensland Occupational Cluster Reports', *Australian Government*, viewed 15 April 2019, available online: <https://docs.jobs.gov.au/collections/queensland-occupational-cluster-reports>

Department of Jobs and Small Business (DJSB) 2018d, 'Queensland Individual Occupational Reports', *Australian Government*, viewed 15 April 2019, available online: <https://docs.employment.gov.au/collections/queensland-individual-occupational-reports>

Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) 2018a, 'Strong and Sustainable Resource Communities Act 2017', *Queensland Government,* viewed 10 April 2018, available online: <https://www.legislation.qld.gov.au/view/whole/pdf/inforce/current/act-2017-028>

Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) 2018b, 'Social Impact Assessment Guideline', *Queensland Government*, viewed 10 April

2018, available online: <https://www.statedevelopment.qld.gov.au/resources/cg/social-impact-assessment-guideline.pdf>

Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) 2019, 'CopperString Project', *Queensland Government*, viewed 18 May 2020, available online: <https://www.statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/coordinated-projects/current-projects/copperstring-project.html>

Downer EDI Mining 2018, 'Preliminary Feasibility Study for Open Cut Mining Multicom – St Elmo Vanadium Project'

Engeny Water Management (Engeny) 2018, 'Saint Elmo Vanadium Project: Surface Water Technical Assessment Report', *Reference: M7192_002, Rev 0*

Epic Environmental 2018, 'Saint Elmo Vanadium Project – Consultation Process'

Glencore 2019a, 'About MIM', viewed 05 February 2019, <http://www.mountisamines.com.au/en/about-mim/Pages/home.aspx>

Glencore 2019b, 'Indigenous Employment Program', Mount Isa Mines, viewed 26 April 2019, available online: <http://www.mountisamines.com.au/en/careers/Pages/Indigenous-Employment-Program.aspx>

International Finance Corporation (IFC) 2007, 'Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets', viewed 9 October 2018, available online: <https://www.ifc.org/wps/wcm/connect/938f1a0048855805beacfe6a6515bb18/IFC_StakeholderEngagement.pdf?MOD=AJPERES>

Julia Creek State School 2019, 'History', *The State of Queensland (Department of Education)*, viewed 01 February 2019, available online: <https://juliacreekss.eq.edu.au/Ourschool/History/Pages/History.aspx>

McKinlay Shire Council n.d., 'McKinlay Shire Employment Information Booklet', viewed 15 June 2018, available online: <http://www.mckinlay.qld.gov.au/documents/17564/41991344/McKinlay%20Shire%20Employment%20Information%20Booklet.pdf>

McKinlay Shire Council 2010, 'McKinlay Shire Infrastructure Plan', viewed 5 September 2018, available online: <https://www.mckinlay.qld.gov.au/c/document_library/get_file?uuid=6bf43430-6976-4ea5-830e-470524dac46a&groupId=17564>

McKinlay Shire Council 2017, 'Media Release: State Government's State Government's LGGSP approves additional McKinlay Shire Council Staff Housing', viewed 15 June 2018, available online: <http://www.mckinlay.qld.gov.au/documents/17564/42750744/State%20Government%E2%80%99s%20LGGSP%20approves%20additional%20McKinlay%20Shire%20Council%20Staff%20Housing?version=1.2&t=1508734424380>

McKinlay Shire Council 2018a, 'Economic Development Plan 2018-2022', viewed 01 February 2019, available online: <https://www.mckinlay.qld.gov.au/documents/17564/1480476/McKinlay%20Shire%20EDP%20FINAL.pdf>

McKinlay Shire Council 2018b, 'Julia Creek History', viewed 22 May 2018, available online: <http://www.mckinlay.qld.gov.au/council/history_of_council.shtml/-/journal_content/56/17564/5682541B7346AC381E304AE654EA460A?p_p_auth=t2zNJBcR&_56_showArticlTitleInPortlet=true>

McKinlay Shire Council 2018c, 'Meeting Minutes', viewed 29 May 2018, available online: <http://www.mckinlay.qld.gov.au/council/meeting_minutes.shtml>

McKinlay Shire Council 2019a, 'Primary School', viewed 01 February 2019, available online: https://www.mckinlay.qld.gov.au/primary-school

McKinlay Shire Council 2019b, 'Secondary Education', viewed 01 February 2019, available online: <https://www.mckinlay.qld.gov.au/secondary-education>

McKinlay Shire Council, 2019c, 'Community Advisory Network', viewed 26 April 2019, available online: <https://www.mckinlay.qld.gov.au/councilservices/healthservices.shtml>

McKinlay Shire Council 2019d, 'McKinlay Shire Community Plan 2019-2026', viewed 18 May 2020, available: <https://www.mckinlay.qld.gov.au/downloads/file/575/mckinlay-shire-community-plan-19-26>

Mount Isa to Townsville Economic Development Zone (MITEZ) 2015, 'Mount Isa City', viewed 05 February 2019, available online: <http://www.mitez.com.au/ourregion/mountisacity/>

Mount Isa City Council n.d., 'Mount Isa', viewed 23 May 2018, available online: <http://www.mountisa.qld.gov.au/web/mount-isa-redundant/mount-isa>

Mount Isa City Council 2011, 'Community Plan 2011-2021', viewed 25 May 2018, available online: <http://www.mountisa.qld.gov.au/c/document_library/get_file?uuid=37a74e75-4b82-4891-b4af-d5a9ef3f306e&groupId=311561>

Mount Isa City Council 2016a, 'Our Region', viewed 24 May 2018, available online: <http://www.mountisa.qld.gov.au/our-region>

Mount Isa City Council 2016b, 'Ordinary Meeting Agenda and Minutes', viewed 29 May 2018, available online: <http://www.mountisa.qld.gov.au/ordinary-meeting-schedule>

Multicom Resources 2018, 'Draft terms of reference for an environmental impact statement under the *Environmental Protection Act 1994'*

National Native Title Tribunal 2018a, 'Southern and Western Queensland Region', Australian Government, viewed 14 May 2018, available online: <http://www.nntt.gov.au/assistance/Geospatial/Pages/Maps.aspx>

National Native Title Tribunal 2018b, 'Native TitleVision', Australian Government, viewed 14 May 2018, available online: <http://nntt.maps.arcgis.com/apps/webappviewer/index.html?id=a4fab24b605b43bd9049d3a372d79e62>

National Rural Health Alliance 2017, 'Mental Health in Rural and Remote Australia', viewed 23 July 2019, available online: <https://www.ruralhealth.org.au/sites/default/files/publications/nrha-mental-health-factsheet-dec-2017.pdf>

PHN (Department of Health) 2018, 'Western Queensland PHN Profile', viewed 5 June 2018, available online: <http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Western_QLD>

Property Value 2018, 'Cloncurry', viewed 29 May 2018, available online: <https://www.propertyvalue.com.au/>

Realestate.com.au 2018, 'Explore Australia Suburbs', viewed 29 May 2018, available online: <https://www.realestate.com.au/neighbourhoods>

Richmond Shire Council 2011, 'Community Plan 2011-2021', viewed 25 May 2018, available online: <https://www.richmond.qld.gov.au/images/documents/communityplan.pdf>

Richmond Shire Council 2018, 'Council Meeting', viewed 29 May 2018, available online: <https://www.richmond.qld.gov.au/council/council-meeting>

Royal Australian College of General Practitioners (RACGP) 2018, 'General Practice: Health of the Nation 2018', viewed 23 July 2019, available online: < https://www.racgp.org.au/download/Documents/Publications/Health-of-the-Nation-2018-Report.pdf>

PSMA Australia n.d.,'Convertible_Lease', viewed 05 June 2018, available online: <http://services.ga.gov.au/site_7/rest/services/Northern_Australia_Land_Tenure/MapServer/layers>

Queensland Corrective Services 2008, 'Reform of Low Security Custody in Queensland (Draft)', *Queensland Government*, viewed 14 May 2018, available online: <https://cabinet.qld.gov.au/documents/2008/Oct/Low%20security%20custody%20reform%20consultation/attachments/greenpaper.pdf>

Queensland Corrective Services 2016a, 'The QCS Work Camp Program', *Queensland Government*, viewed 15 May 2018, available online: <https://news.correctiveservices.qld.gov.au/2016/05/10/the-qcs-work-camp-program/>

Queensland Corrective Services 2016b, 'The QCS Work Camp Program', *Correctional News*, April 2016, viewed 15 May 2018, available online: <https://news.correctiveservices.qld.gov.au/wp-content/uploads/2015/07/CNonlineApril16.pdf>

Queensland Curriculum and Assessment Authority 2018, 'Statistics', *Queensland Government*, viewed 15 May 2018, available online: <https://www.qcaa.qld.edu.au/publications/statistics>

Queensland Fire and Emergency Services (QFES) 2018, 'Northern Region', viewed 26 April 2019, available online: <https://www.qfes.qld.gov.au/about/structure/regions/Pages/nr.aspx>

Queensland Fire and Emergency Services (QFES) 2019, 'Julia Creek State Emergency Service', viewed 26 April 2019, available online: <https://www.mckinlay.qld.gov.au/documents/17564/0/Poster%20Julia%20Creek%20LC.PDF>

Queensland Government 2017, 'Neighbourhood and Community Centres', viewed 5 May 2018, available online: <https://www.qld.gov.au/community/your-home-community/neighbourhood-community-centres>

Queensland Government 2018, 'Record health budget boost for Western Queensland', viewed 01 February 2019, available online: <http://statements.qld.gov.au/Statement/2018/6/11/record-health-budget-boost-for-western-queensland>

Queensland Government 2019, 'Media Statements: Remote Queensland Communities benefit from influx of workers', The Queensland Cabinet and Ministerial Directory, Queensland government, viewed 26 April 2018, available online: <http://statements.qld.gov.au/Statement/2019/3/22/remote-queensland-communities-benefit-from-influx-of-workers>

Queensland Health n.d., 'Mental Health Activity Data Collection', *Queensland Government*, viewed 15 May 2018, available online: <https://data.qld.gov.au/dataset/mental-health-activity-data-collection-mhadc>

Queensland Health 2014, 'North West Hospital and Health Service', *Queensland Government*, viewed 5 May 2018, available online: <https://www.health.qld.gov.au/services/northwest>

Queensland Health 2018, 'Townsville Hospital and Hospital Service', *Queensland Government*, viewed 5 May 2018, available online: <https://www.health.qld.gov.au/services/townsville>

Queensland Health 2019, 'Hospital Performance', *Queensland Government*, viewed 15 April 2019, available online: <http://www.performance.health.qld.gov.au/>

Queensland Treasury 2019, 'Queensland Government population projections: Local government areas snapshot', *Queensland Government,* viewed 23 July 2019, available online: < http://www.qgso.qld.gov.au/products/reports/qld-govt-pop-proj-lga-snapshot/index.php>

QMI Solutions 2019, 'Black Business Finder', viewed 25 July 2019, available online: <http://www.bbf.org.au/about.html>

Queensland Police Service 2013, 'Queensland Police Service Divisions, Districts and Regions', Queensland Government, viewed 5 May 2018, available online: <https://www.police.qld.gov.au/RegionalPolicing/Documents/State_Divisions_Districts_Regions.pdf>

Queensland Police Service 2018, 'Queensland Crime Statistics', *Queensland Government*, viewed 12 June 2018, available online: <https://mypolice.qld.gov.au/queensland-crime-statistics/>

Queensland Rail n.d., 'The Inlander', viewed 5 May 2018, available online: <https://www.queenslandrailtravel.com.au/railexperiences/ourtrains/theinlander>

Raggatt, T. 2015, 'BHP to shed up to 70 jobs at Cannington mine', Townsville Bulletin, viewed 20 June 2018, available online: <https://www.townsvillebulletin.com.au/business/bhp-to-shed-up-to-70-jobs-at-cannington-mine/news-story/cc7822ec0dabdf84985c1c229eccc8df?nk=57779696ac819360337a12a2ef758577-1529474192>

Regional Express n.d., 'Route Map', viewed 5 May 2018, available online: <http://www.rex.com.au/FlightInfo/Network.aspx>

State of Queensland 2018a, 'Queensland Land Use Mapping Program (QLUMP) Current Land Use Map', viewed 24 May 2018, available online: <https://www.qld.gov.au/environment/assets/documents/land/vegetation/qlump-land-use-map-a0size-print-vers-600dpi.pdf>

State of Queensland 2018b, 'Queensland Globe', viewed 24 May 2018, available online: <https://qldglobe.information.qld.gov.au/f>

Tatham, H. 2018, 'Mount Isa Community Reflects on 95 Years as Australia's 'Kindergarten of Mining'', ABC (Australian Broadcasting Corporation) News, viewed 23 May 2018, available online: <http://www.abc.net.au/news/2018-02-23/reflecting-on-95-years-of-mount-isa/9464344>

Transport and Main Roads 2013, 'Road crash locations', *Queensland Governmen*t, API, licensed under Creative Commons Attribution 4.0 viewed on 28 May 2018, available online: <https://data.qld.gov.au/dataset/crash-data-from-queensland-roads/resource/e88943c0-5968-4972-a15f-38e120d72ec0>

TTM 2019, 'Traffic Impact Assessment – St Elmo Vanadium Project', *Reference: 18GCT0049*

Wave International 2018, 'St Elmo Vanadium Project – Scoping Study Report', *Reference: 4480-20-RPT-GE-00003*

ANNEX A

Stakeholder Engagement Strategy

p | PO Box 345, Clermont QLD 4721
e | mail@wallplanning.com.au
t | 07 4445 5051

wallplanning.com.au

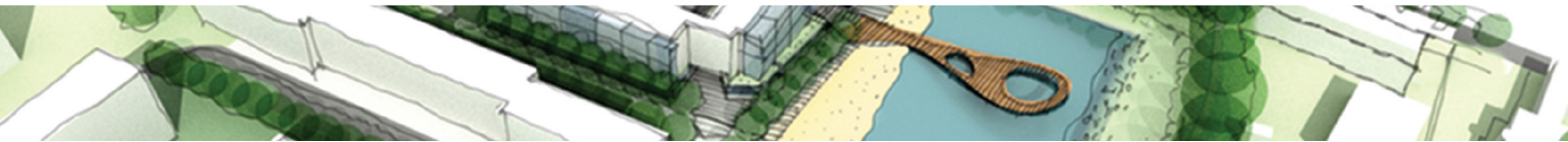
Wall Planning &
Environmental Consulting

Community and Stakeholder Engagement Strategy

St Elmo Vanadium Project

Epic Environmental for

Multicom Resources Ltd



Authors	**Renee Wall and Adrienne Baxter**
Consultant	Wall Planning & Environmental Consulting
Client	Epic Environmental
Status	Community and Stakeholder Engagement Strategy
Date	Draft V.1: 18 May 2018 Draft V.2: 27 June 2018 Draft V.3: 2 August 2018 Draft V.4: 29 November 2018 Draft V.5: 10 December 2018 Final V.6: 7 February 2019

This report includes Final Project Details, issued to Wall Planning & Environmental Consulting, 14 November 2018. Epic Environmental, on behalf of Multicom Resources have undertaken consultation between March and December 2018. It is recommended that further updates, newsletters and fact sheets continue to be provided to the community and stakeholders. Further, it is recommended that a public information session is undertaken in January/ February 2019.

Contents

1.0 Introduction 4
1.1 Project Overview 4
1.2 Project Timing and Workforce 6
1.3 Objectives of Community and Stakeholder Engagement 6
1.4 Social Impacts 12
2.0 Stakeholders & Methodology 14
2.1 Stakeholder Groups 14
2.2 Consultation Tools 16
3.0 Community and Stakeholder Engagement 21
3.1 Community Consultation 21
3.2.1 Direct Landholders 22
3.2.2 Adjoining landholders 22
3.2.3 Federal, State and Local Government 23
3.2.4 Business Operators and Representatives 24
3.2.5 Special Interest Groups 24
3.2.6 Local Community 25
3.2 Issues Raised 26
3.3 Ongoing Consultation 26
4.0 Conclusion 27

1.0 Introduction

Wall Planning & Environmental Consulting in partnership with Environmental Resources Management Australia Pty Ltd (ERM) have prepared this Community and Community and Stakeholder Engagement Strategy for Epic Environmental (Epic) for the St Elmo Vanadium Project (SEVP, the Project). Epic has been engaged as the Environmental Impact Statement (EIS) management consortia, responsible for the overarching delivery of project approvals and relevant Government liaison.

In the context of this strategy, the term "community" includes people living in the immediate or surrounding areas of Julia Creek and the McKinlay Shire Council. The greater region includes the shires of Mount Isa, Cloncurry and Richmond. These effects may be economic and social as well as environmental.

The term "stakeholder" is taken to include any individual group or organisation who is interested in, affected by or has the capacity to impact on the mining operation and could include direct landholders, adjoining landholders, state and local government agencies, government service representatives, surrounding region, broader community, elected representatives, business and commercial leaders and representatives, and special interest groups.

The Community and Stakeholder Engagement Strategy provides the framework to Multicom to undertake the community and stakeholder engagement program to gather impacts, feedback and inform potential social impacts and the development of appropriate mitigation measures and management plans as part of the Social Impact Assessment process. Note the Community and Stakeholder Engagement Strategy is additional to the statutory public notification process that will be carried out as part of the EIS Approval process.

1.1 Project Overview

Multicom Resources Ltd (Multicom) is an exploration and mining company seeking to develop the SEVP.

The Project is located approximately 25 km east of Julia creek, Queensland (Mining Lease Area (MLA)100162) and covers an area of approximately 8,882 ha. Cloncurry lies approximately 140 km to the west, with Richmond approximately 125 km to the east.

There are two landholders located within the MLA100162 boundary. Multicom have contacted the landholders who are amenable to project development occurring within their properties. As the project develops, relevant compensation agreements will be entered to facilitate mining activities.

The Saint Elmo Project Area is underlain by Freehold Land and Grazing Homestead Perpetual Lease and a historic stock route. Both freehold land and grazing homestead perpetual leases extinguish native title. However, native title does exist on a portion of the stock route. Whilst there is no native title claim registered in the project area, there is still a requirement to advertise the mining lease under S29 of the *Native Title Act 1993.* If no claims are lodged after the three-month notification period, there will be no legislative requirement for a "Right to Negotiate Agreement" under the Native Title Act to facilitate the gran of a mining lease. An approved Cultural Heritage Management Plan is in place for the Project.

Julia Creek is a regional service town located within the Shire of McKinlay, in North Western Queensland. Julia Creek has a population of 519. The main industries are cattle and sheep raising. The town also services the underground silver and lead mine at Cannington, owned by South32 (previously BHP). The predominant land use is grazing. The Cannington Mine has been in production for about 20 years.

The Project has an eventual target production of 10,000 tonnes per annum of Vanadium Pentoxide in years 1 and 2, followed by 20,000 tonnes per annum from years 3 to 30. The resource life of the mine is 30 years.

There are substantial regional benefits that will be derived from the SEVP. The Project is within the North West Minerals Province (NWMP). The NWMP has been identified as an area of focus by the Queensland Government to stimulate mining and industry development and job creation. The Queensland Outback is a priority region as it has an unemployment rate of 11.5% which is the highest in Queensland.

The Project will be a shallow (15m average), open cut mine with associated dump and haul operations. Mining is proposed to be carried out sequentially from mining panels along the north-south axis of MLA 1100162. Once the ore is removed, the panel is able to be back filled with beneficiated gangue material, overburden material, contoured and sheeted with topsoil prior to revegetation with native species, or as otherwise agreed with relevant stakeholders. Subject to appropriate approvals, including financial feasibility, it is anticipated construction will commence in 2020.

The Project is a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and is approved by the Department of Environment and Science (DES) to be assessed through a voluntary Environmental Impact Statement (EIS) process under the *Environmental Protection Act 1994* (EP Act).

The Terms of Reference (TOR) for the Environmental Impact Statement under the Environmental Protection Act 1994 for the Saint Elmo Vanadium Project was published by the Department of Environment and Science (DES) in June 2018. The Community and Stakeholder Engagement Strategy addresses the TOR (where relevant), specifically, Section 9.11, states (in part):

The construction and operation of the proposed project should ensure that:

- *Adverse social impacts arising from the proposed project are avoided or mitigated;*
- *Benefits for local and regional communities are enhanced.*

1.2 Project Timing and Workforce

Subject to appropriate approvals including financial feasibility, it is anticipated mining will commence at the SEVP in late 2021. The Project has an estimated operational mine life of 30 years. The Project is anticipated to directly employ over 200 people during the construction phase, more than 150 jobs once operational and over 75 jobs during decommissioning.

Construction is anticipated to commence in 2020. Construction duration is expected to be approximately 15-18 months. A more detailed labour profile for construction and operation will be developed during the feasibility studies.

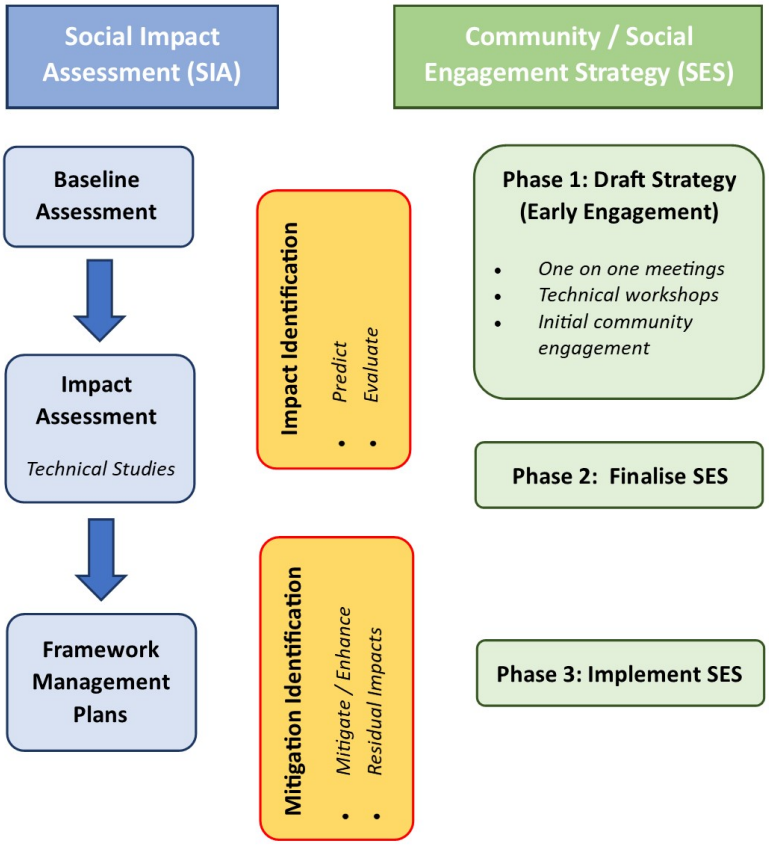
In addition to local employment opportunities, Multicom will work with Indigenous stakeholders to identify workforce capacity, skills and experience to match skills and capacity to employment on the Project. Construction will use local and regional contractors, labourers and suppliers where feasible. The construction workforce will be supplemented with a fly-in fly-out contingent. Bus transport between Mount Isa and the site will be utilised.

The offsite workforce prior to commencement of construction will include professional staff undertaking detailed design of all components, securing approvals, appointing contractors and procuring materials and equipment.

Operations staff will be encouraged to be residentially based in Julia Creek. Multicom will ensure its contractors provide reasonable opportunity for locals to gain the necessary knowledge, skills and experience to be competitive in the labour market for the Project.

1.3 Objectives of Community and Stakeholder Engagement

The objective of the Community and Stakeholder Engagement Strategy (CSES) is to ensure transparent and inclusive community and stakeholder engagement that informs the Social Impact Assessment process, and the ongoing management and monitoring of potential social impacts during the construction and operational phases of the project. The diagram below illustrates the Social Impact Assessment and CSES process:



Section 9.11 of the TOR states that the overall environmental objective and outcome of the Social Impact Assessment is:

The construction and operation of the proposed project should ensure that:

- *Adverse social impacts arising from the proposed project are avoided or mitigated;*
- *Benefits for local and regional communities are enhanced.*

Impact Assessment
Prepare a social impact assessment (SIA) for the project that is consistent with the requirements of the Strong and Sustainable Resource Community Act 2017 (SSRC Act) and the Coordinator-General's SIA guideline (March 2018).

The SIA is to be developed in consultation with the Coordinated Project Delivery Division in the Office of the Coordinator-General, Department of State Development, Manufacturing, Infrastructure and Planning. The SIA is to describe the potential social impacts (both positive and negative) of the proposed project and must identify relevant and effective impact mitigation and benefit enhancements measures.

In accordance with Part 12 of the SSRC Act[1], the information provided in the EIS (including the SIA) will assist the Coordinator-General in deciding whether personnel employed during the construction phase of the project will be for workers for the purposes of the SSRC Act.

The community and stakeholder engagement process should be adequately described and documented in the SIA as part of the EIS. The SIA Guideline (March 2018), Section 2.3.3 refers to Community and stakeholder engagement. Community and stakeholder engagement includes the following elements:

- **Project:** the proponent's project level stakeholder engagement including overall project communications, negotiations, public relations and complaints management.
- **EIS:** the statutory stakeholder notification and consultation required for the EIS process.
- **SIA:** community and stakeholder engagement for the purposes of informing the development of the SIA report.
- **Post-EIS:** community and stakeholder engagement to inform the ongoing monitoring, review and update of management measures.

It is recommended that the above elements of the engagement program are integrated to reduce the risk of engagement fatigue for potentially affected communities.

In the context of the SIA, community and stakeholder engagement is undertaken to:

- Understand who is likely to be impacted and how
- Understand the values and characteristics of potentially affected communities
- Identify and assess potential impacts
- Develop management measures to mitigate adverse impacts and enhance benefits
- Support monitoring and reporting (including outcomes and performance indicators).

A consultative and inclusive engagement program is to commence at an early stage in the SIA process, and is to consider the nature of the project and the needs of the different stakeholder groups. Stakeholders should include local residents and landholders, state unions, industry groups and businesses, community groups, and traditionally underrepresented stakeholders such as Indigenous peoples, women, youth, and vulnerable groups.

Stakeholders are to be provided with timely and relevant information about the project which presents an accurate indication of potential impacts and benefits. Stakeholder input is to inform the development of the SIA, including the baseline analysis, impact assessment, and development of management measures.

The SIA Guideline (March 2018), Section 3, refers to key matters for SIA. Section 3.1 refers to community and stakeholder engagement. The scope (Section 3.1.1) sates, this matter applies to the SIA requirement for engagement with potentially impacted communities and stakeholders. The SIA report must include an explanation of the community and stakeholder engagement undertaken doing the SIA process, as well as proposed measures for ongoing engagement during construction and operation. The objective (Section 3.1.2) states, to ensure transparent and inclusive community

[1] S.12 of the SSRC Act – Coordinator-General **may** nominate large resource project as a project for which persons employed during the construction phase are workers for this Act

and stakeholder engagement informs the SIA process, and the ongoing management and monitoring of potential social impacts during the construction and operational phases of the project. The detail required in the SIA (Section 3.1.3) states, the SIA report must include the following details for community and stakeholder engagement:

- A profile of potentially impacted communities, and analysis of key stakeholders
- A description of engagement undertaken in support of the SIA, including details such as:
    - Stakeholders consulted, and how and when they were consulted
    - Principles and processes adopted
    - An overview of the consultation program and key events
    - Stakeholder feedback and issues raised (including the means by which these have been or will be addressed)
    - Records of engagement activities and details of any negotiations or agreements with potentially impacted stakeholders
- A description of how stakeholder input has informed the baseline analysis, social impact assessment, and the development of management measures
- A community and stakeholder engagement plan for the construction and operational phases of the project, which includes:
    - Objectives and key performance indicators
    - Measures for ongoing engagement including action plans, and proposed communication tools and activities
    - Processes for incorporating stakeholder feedback into the further development of project-specific management and measures
    - Details of any stakeholder agreements to be negotiated, including agreements with state and local government agencies
    - Roles responsibilities for engagement
    - A complaints management process
    - Monitoring and reporting requirements.

The figure below illustrates the integration of the SIA process with the regulatory EIS process and the required community and stakeholder engagement.

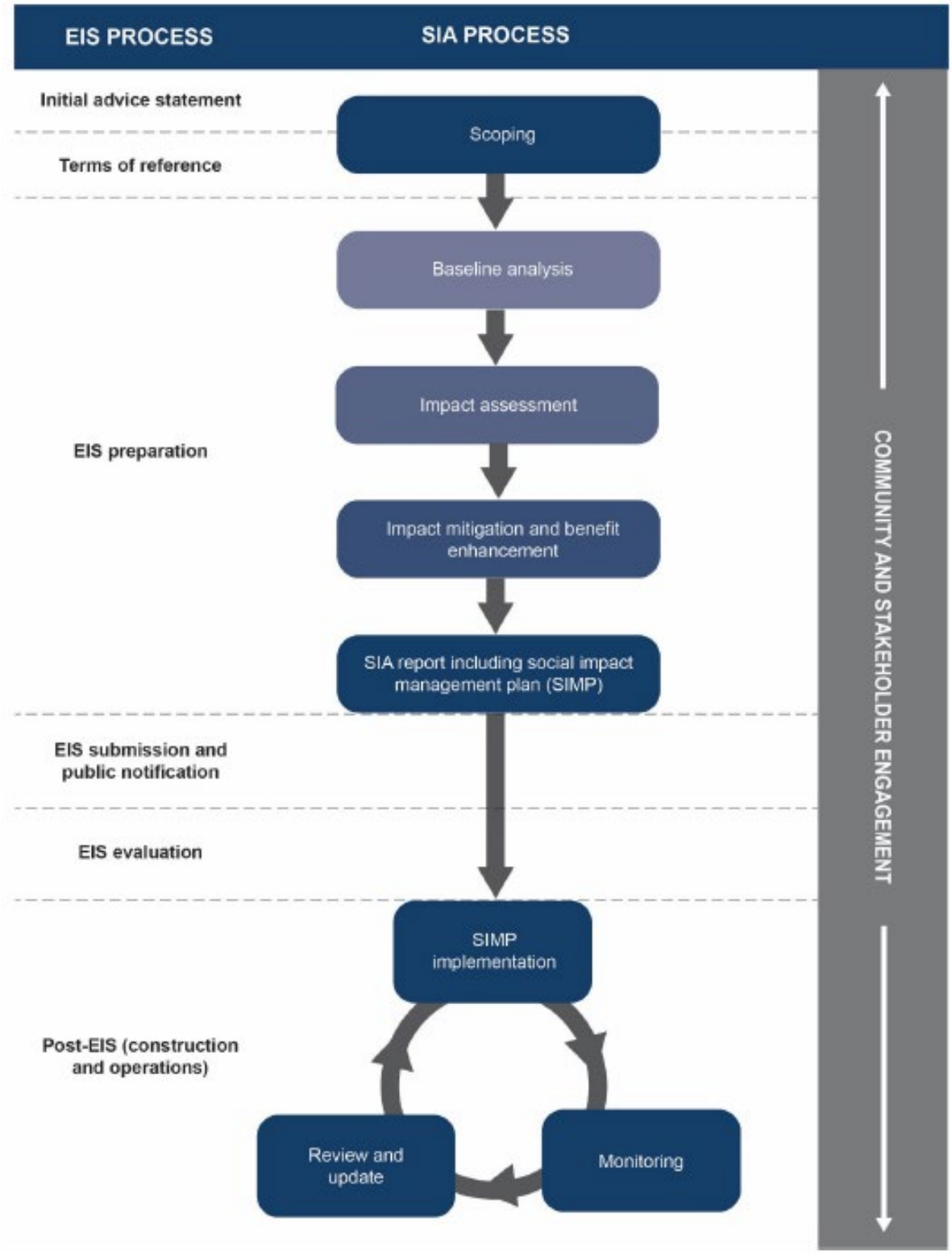


Figure 1: Integration of the SIA process with the regulatory EIS process (source: SIA Guideline – March 2018)

The following is an overview of the community and stakeholder engagement process for the Saint Elmo Vanadium Project:

Stage 1 Preparation	**Stage 2** Obtaining Community Input	**Stage 3** Strategy Formulation	**Stage 4** Implementation
1. Define 'the community' 2. Profile 'the community' • Identify local stakeholders • Conduct an issue scan • Identify socio-demographic trends 3. Map current site-community interactions	1. Decide who will be consulted and by what means 2. Undertake consultations 3. Summarise the outcomes 4. Provide follow up to stakeholders	1. Convene a site-based planning workshop 2. Prioritise impact areas for attention 3. Decide on responses 4. Select monitoring measures 5. Document the strategy 6. Inform stakeholders of outcomes and seek feedback	1. Develop an annual action plan 2. Put monitoring measures in place 3. Periodically review progress 4. Modify strategies as required 5. Continue to engage with stakeholders

Multicom want to be a part of the community and to tie in with the town growth and the major economic opportunity the Project will provide to Julia Creek and the Region. Multicom, together with Epic Environmental, have consulted a broad range of stakeholders through the Multicom Project Team.

The CSES has been designed to:

- Provide the community with information regarding the project;
- Provide a mechanism for community contact with the Project team;
- Identify any issues and concerns that the community and stakeholders may have with the Project; and
- Ensure feedback provided by the community and stakeholders can be used in relevant studies being completed during the EIS.

The CSES has been implemented by Epic Environmental on behalf of Multicom.

1.4 Social Impacts

The Social Impact Assessment assessed the potential impacts that may be experienced by direct and adjoining landowners to the Project site, and Julia Creek township residents, visitors and businesses. This area is defined as the Primary Study Area for the SIA. The Study Area includes five sensitive receptors (dwellings) in proximity to the Project site. These receptors are outlined in the figure below:

Receptor Name and Address	Location		Distance from Mining Lease Boundary	Direction from the Project Site
	Latitude	Longitude		
Saint Elmo Lot 13 EN89	-20.5900	141.864480	270m	West
Argyle Lot 4 EN30	-20.580634	141.810327	4.2km	West
Burwood Lot 4 MF16	-20.437298	141.849926	6.8km	North
Lindfield Lot 2 MF3	-20.444039	141.941575	10km	North-East
Garomna Lot 3 EN17	-20.729616	141.928028	8.2km	South

The Secondary Study Area for the SIA includes Julia Creek, Richmond, Cloncurry and Mount Isa. The additional townships are also considered as they may experience indirect impacts from the Project. It is noted that the economic catchment includes the LGAs of McKinlay, Charters Towers, Cloncurry, Flinders, Mount Isa, Richmond and Townsville.

As per the SIA Guideline, the Social Impact Assessment included the following as part of the baseline analysis:

- A demographic profile of potentially affected communities;
- An analysis of community characteristics (such as: community culture and values, community history, community well-being, land/property ownership and utilisation of natural resources);
- Details of the capacity of those potentially affected to participate in the community and stakeholder engagement;
- An overview of land use and key industries in the region, as well as relevant local and state government plans;
- The capacity and accessibility of infrastructure, facilities and services, including education, health and emergency services;
- An analysis of the existing housing and accommodation market, including availability, capacity and affordability;
- A profile of the local and regional labour market, including an assessment of the likely availability of personnel with skills relevant to the project; and

- Details of other resource and infrastructure projects in the area, both planned and currently operating, based on publicly accessible information.

The data used in the baseline analysis came from both primary and secondary data sources. A desktop review of secondary data was undertaken that included a review of the construction process, environmental data, statistical data, and government publications. Although the desktop review provided a substantial amount of information relating to the communities within the study area, there were data gaps identified, which needed to be filled through primary data collection.

Primary data collection occurred as part of the community and stakeholder engagement component of the SIA. Specifically, the objectives of the primary data collection were to:

1. Obtain additional local level information to confirm the scoping carried out in Phase 1;
2. Verify the existing secondary data (where possible);
3. Identify other data sets or studies that are not routinely published; and
4. Better understand community issues and concerns in relation to the Project.

2.0 Stakeholders & Methodology

2.1 Stakeholder Groups

Relevant stakeholders are anyone who may have an interest or stake in the Project and its outcome. Various individuals and groups will have varying degrees of interest and influence over the Project, and at different stages of the Project. Stakeholders relevant to the Project include:

- Direct landholders;
- Adjoining landholders;
- Federal, State and Local Government, including representatives and agencies;
- Indigenous peoples;
- Special interest groups; and
- Local Community.

The table below is a list of the stakeholders as they relate to the identified stakeholder groups. The Stakeholder Register, that includes the stakeholder group, representative/ contacts, main focus/ concerns, and contact to date. This register was reviewed and expanded by Multicom and will continue to be upgraded throughout the consultation and engagement program.

Category	Relevant Stakeholder
Direct landholders	Landholders whose property the mine infrastructure may be located. Property owners within Mine Lease Area (MLA100162)
Adjoining landholders	Residents located adjoining the subject site which may experience impacts during construction and operation (visual impact, noise, dust, traffic). Adjoining neighbours to Mine Lease Area (MLA100162)
Federal, State and Local Government Representatives	Government representatives at the Federal, State and Local level, including, local representatives and Government agencies responsible for the regulation of the Project. Police, emergency services, drug and alcohol services, housing, indigenous, employment and social services. Many of these are provided by the McKinlay Shire Council due to the size of the town. All infrastructure and utilities providers that the Project could have an impact on during either construction or operation. Rail, electricity, port, telecommunication, airport, road usage.
Indigenous Stakeholders	Traditional owner groups, local land councils, other Indigenous organisations, where these are related to the project area.
Business operators and groups	Business operators and employees in the locality may experience indirect impacts on business operations (e.g. increased trade during construction). Agforce (local representative), Local accommodation operators and local Chambers of Commerce
Special Interest Groups	Groups such as local Lions Club, Country Women's Association, Schools and Childcare facilities, etc
Local Community	Residents or visitors to the McKinlay Region may have an interest in the project.

Multicom have advised that a search of the records and databases found no places of cultural heritage significance in the Project area. Nor were there any Indigenous Land Use Agreements (ILUAS), native title determinations or claims over the Project area. There is a current native title claim to the west of Julia Creek (some 25km west of the Project area), extending to west of Cloncurry, by the Mitakoodi and Mayi people (QC2015/01009). As there is no native title claim registered, there

is a requirement to advertise the mining lease under s29 of the Act. Multicom advertised its notification for s29 for MLA100162 in the Koori Mail, on 27 June 2018 and in the North West Star on 28 June 2018. The notification date was advertised as 11 July 2018. As well as the public advertising process, a copy of the Section 29 notice was provided to Queensland South Native Title Services (QSNTS), as Representative Indigenous and Torres Strait Islander Body for the Project area. Multicom advised that there were no responses to this advertisement. As such, no indigenous stakeholders have been consulted as part of this project.

The table below provides a list of stakeholders included in each of these groups.

Stakeholder Groups	Stakeholders
Direct landholders	The three landholders whose property the mine infrastructure may be located, including the McKinlay Shire Council. Property owners within Mine Lease Area (MLA100162).
Adjoining landholders	Landholders whose property is adjoining the Project site. There are five identified landholders.
Federal, Federal, State and Local Government Representatives and Agencies	**Federal** Department of Environment and Energy
	State Department of Environment and Science Department of Natural Resources, Mines and Energy Department of Communities, Disability Services and Seniors Department of Child Safety, Youth and Women Department of State Development, Manufacturing, Infrastructure and Planning Department of Environment and Science Department of State Development Infrastructure and Planning (Northwest Minerals Province Taskforce)
	Local Government McKinlay Shire Council Cloncurry Shire Council Mt Isa City Council Richmond Shire Council Townsville City Council Traeger State Electorate Kennedy Federal Division
	Government Service Representatives Queensland Police Queensland Ambulance Service Queensland Fire and Emergency Services Queensland Health
	Infrastructure and Utilities Providers Aurizon Cloncurry Airport Department of Natural Resources, Mines and Energy Department of Transport and Main Roads Ergon Energy Julia Creek Airport (McKinlay Shire Council) Mount Isa Airport Port of Townsville Telstra Townsville City Council
Special Interest Groups	Community associations such as Country Women's Association, Julia Creek Lions Club and Julia Creek Lions Ladies Educational providers such as Julia Creek Early Learning Centre and Julia Creek State School. Various sporting and social groups such as Julia Creek Pony Club, Julia Creek Campdraft Association, Julia Creek Sporting Shooters Association, Julia Creek Swimming Club Major event organisers such as Dirt N Dust Festival

	Conservation and natural resource groups such as Preservation Society of Queensland Wildlife and Gulf Catchments. Emergency Service Committees such as the Julia Creek Local Ambulance Committee and Fire Captain
Business Operators and Groups	Queensland Resources Council North West Chamber of Commerce Mount Isa Townsville Economic Zone Townsville Enterprise Various Julia Creek and Regional businesses including Accommodation Providers, Retail Outlets, Contractors, Trades and Services
Broader Community	Other interested members of the McKinlay, Cloncurry and Richmond shires and North West broader region.

2.2 Consultation Tools

A range of consultation tools have been utilised to meet the objectives of the community consultation process. These included:

- Direct stakeholder contact, including telephone calls and face-to-face meetings;
- Project newsletters and fact sheets;
- Public information sessions;
- Feedback forms
- Project email address;
- Freecall number;
- Website;
- Advertisements and Media.

A summary of the consultation techniques for stakeholder groups is outlined in the table below:

Consultation Technique	Direct Landholders	Adjoining Landholders	Surrounding Region	Local Community	Government and Elected Representatives	Special Interest Groups
Landholder Agreements	✓					
One on one meetings	✓	✓			✓	✓
Newspaper Advertisement	✓	✓	✓	✓	✓	✓
Newsletter	✓	✓	✓	✓	✓	✓
Project Website/ Phone/ Email	✓	✓	✓	✓	✓	✓

Direct Stakeholder Contact

These meetings targeted key individuals and groups in the neighbouring communities, including direct land holders, adjoining landholders, local, regional and state government representatives and

special interest groups. A Project overview was given, the EIS approvals process outlined and feedback sought on potential issues or concerns.

Project Newsletters and Fact Sheets

A number of fact sheets and newsletters have been produced for the project. The key information in the newsletters and factsheets included:

- project background;
- a map of the project area;
- information about the proponent;
- timetable detailing Project milestones;
- an outline of the EIS process;
- answers to frequently asked questions;
- opportunities for the community to be involved in the EIS process;
- contact details for the Project team to encourage community input (email address, freecall number); and
- baseline studies fact sheet

Copies of the fact sheets are provided in the Saint Elmo Vanadium – Consultation Process report, prepared by Epic Environmental on behalf of Multicom Resources Ltd and are available on the Multicom website. Fact sheets will continue to be prepared and provided to stakeholders as the project progresses. This will include further frequently ask questions, details on topics of key interest such as water use and newsletter updates on the process.

Public Information Sessions

A number of public information sessions have been held including:

- Business Workshop – Co-hosted between Multicom, Department of State Development, Manufacturing, Infrastructure and Planning and the McKinlay Shire Council in Julia Creek on 5 July 2018 which provided local businesses with opportunities with information on how to best participate in future tendering opportunities.
- Business Workshop – Co-hosted between Department of State Development, Manufacturing, Infrastructure and Planning and the McKinlay Shire Council in Julia Creek on 15 August 2018 to provide small business with information on safety requirements for a future project.
- Public Information Session – Co-hosted by Multicom and Epic Environmental in Julia Creek on 19 September 2018 to provide all interested members of the community an opportunity to learn more about the project, the timeline and address any questions or concerns they had (Figure 1). This event was also promoted by Department of State Development, Manufacturing, Infrastructure and Planning and the McKinlay Shire Council. More than forty members of the local community attended the event.

Information about the Project available at the sessions included copies of Project newsletters and fact sheets. Participants were asked to register their contact details and provide information on any particular concerns they had. Staff members were available to discuss the Project and discuss any potential issues or concerns (Figure 2).

Figure 1: Public Information Session, 19 September 2018, Julia Creek

Figure 2: Community Questions after Public Information Session, 19 September 2018, Julia Creek

Additional information sessions will be held in the lead-up to and during the EIS public comment period, across the region.

Advertising and Media – Terms of Reference

The Draft TOR for the EIS was released in March 2018 and open for public comment from 19 February 2018 to close of business 02 May 2018. Advertisements were placed by DES in local, State and National newspapers to solicit public comment. A copy of this Advertisement is in the Saint Elmo Vanadium – Consultation Process report, prepared by Epic Environmental on behalf of Multicom Resources Ltd. A total of 22 submissions were received from government agencies and organisations during the submission period. Submissions were received from the following parties:

- Department of Environment and Science (41 comments);
- Aurizon (one comment);
- Department of Agriculture and Fisheries (six comments);
- Department of Aboriginal and Torres Strait Islander Partnerships (no comment);
- Department of the Environment and Energy (eight comments);
- Department of Education (no comment);
- Department of Health- Townsville Hospital and Health Service (no comment);
- Department of Housing and Public Works (excluding Sport and Recreation Services) (no comment);
- Department of Innovation, Tourism, Industry Development and the Commonwealth Games (no comment);
- Department of Natural Resources, Mines and Energy (seven comments);
- Department of State Development, Manufacturing, Infrastructure and Planning (Project Facilitation) (no comment);
- Department of State Development, Manufacturing, Infrastructure and Planning (Strategic Policy and Legislation) (four comments);
- Ergon Energy (one comment);
- Great Barrier Reef Marine Park Authority (no comment);
- McKinlay Shire Council (no comment);
- Office of the Coordinator-General (one comment);
- Port of Townsville (no comment);
- Queensland Ambulance Service (one comment);
- Queensland Police Service (one comment);
- Department of Transport and Main Roads (one comment);
- Workplace Health and Safety Queensland (one comment); and
- Queensland Fire and Emergency Services (four comments).

Nine respondents had no comment to made on the draft TOR. Many of the comments received were administrative, apart from technical comments related to hazards and safety, surface and groundwater use, associated infrastructure impacts and social and economic impacts. Terminology was changed as per suggestions by relevant government agencies.

Advertising and Media – Public Information Event

Additionally, for the Public Information event in September 2019 advertisements were placed in the North West Star and Townsville Bulletin. Copies of these advertisements can be found in the Saint Elmo Vanadium – Consultation Process report, prepared by Epic Environmental on behalf of Multicom Resources Ltd.

Media releases were made to support the consultation process. Key stakeholders were directly advised of announcements, by letter, email or telephone call, before any public announcements were made. Media releases were an additional communication tool, not the main source of information for stakeholders. Copies of online and print articles in the North West Star can be found in the Saint Elmo Vanadium – Consultation Process report, prepared by Epic Environmental on behalf of Multicom Resources Ltd.

Webpage

A specific webpage on the Multicom website was developed to provide information on the Project. The address for the website is https://www.mcres.com.au/saint-elmo-project. The webpage includes:

- a general overview of the Project;
- information about Vanadium
- links to Project newsletters; and
- contact details for the Project Team.

The Queensland Department of Environment and Science (DES) website also carries information and documents relating to the EIS, such as the Initial Advice Statement and EIS Terms of Reference.

Freecall Number and Email

A freecall number was featured on materials and communications regarding the Project. It provided an opportunity for community members to go directly to the people involved with the EIS process. The freecall number has nation-wide coverage and is answered in Brisbane by Project staff. An email address was established and advertised on promotional material. Emails sent to this address are received and responded to by the Project team.

3.0 Community and Stakeholder Engagement

3.1 Community Consultation

Following the identification of stakeholders, a consultation program was developed to ensure the consultation activities were conducted in an appropriate manner to meet the specific needs of each stakeholder group.

An initial community consultation period commenced in April 2017 with directly impacted landholders and key government agencies. This consultation increased from March 2018 and included briefings with stakeholders concerning the public announcement of the EIS and consultation with community stakeholders. In addition to the initial consultation period, comments were received from community stakeholders throughout the preparation of the EIS.

Meetings, project newsletters and fact sheets, public information sessions, advertising and media was carried out between April 2017 to December 2018.

The feedback provided throughout the consultation process was recorded on event logs, collated and analysed by stakeholder group. The feedback provided during the consultation process was considered in the Project's Social Impact Assessment (SIA) and the key issues raised during the consultation were considered during Project planning and design. The details of who was consulted, and a summary of the feedback they provided has been presented in the following categories:

- Direct landholders;
- Adjoining landholders;
- Federal, State and Local Government including representatives and agencies;
- Business operators and representatives;
- Special interest groups; and
- Local Community.

As part of this engagement process, consultation has taken place with over one hundred members of the community or region, excluding Local, State and Federal Government or agencies. Given, the small population of Julia Creek, this represents a substantial opportunity to provide information and gather feedback about the proposed Project.

3.2.1 Direct Landholders

The Project team held a series of consultations and meetings with the three directly affected landholders to introduce the project and to enable direct landholders to provide any feedback. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
April 2017 – December 2018	Property owner within Mine Lease Area (MLA100162)	Phone Calls Face to Face Meetings Provision of Factsheets	• Landholder Agreements
May 2017 – December 2018	Property owner within Mine Lease Area (MLA100162)	Phone Calls Face to Face Meetings Provision of Factsheets	• Landholder Agreements • Water requirements and source of water • Impact of water use on neighbouring properties • Impact of dust on cattle grazing • Ability of project to ramp up quickly • Likelihood of project proceeding • Opportunities to directly invest in project
July 2017 – December 2018	McKinlay Shire Council as a property owner within Mine Lease Area (MLA100162)	Phone Calls Face to Face Meetings Provision of Factsheets	• No specific issues raised as a landholder

3.2.2 Adjoining landholders

The Project team held a series of consultations and meetings with the five adjoining landholders to introduce the project and to enable adjoining landholders to provide any feedback. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
March 2018 – December 2018	Five property owners adjacent to Mine Lease Area (MLA100162)	Phone Calls Letters Face to Face Meetings Provision of Factsheets	• Water requirements and source of water • Impact of water use on neighbouring properties • Opportunities for the community and direct employment • Improved community amenities from a larger town (e.g. schooling) • Potential increase in dust • Increased traffic on Flinders Highway • Landscape scale improvements in Prickly Acacia • Final land use • Likelihood of project proceeding

3.2.3 Federal, State and Local Government

The Project team held a series of consultations and meetings with Federal, State and Local Government to introduce the project and to enable all levels of Government to provide any feedback. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
May 2017 – December 2018	Federal Government • Department of Environment and Energy	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• EIS process • Impact on Julia Creek Dunnart, Star Finch and offsets
May 2017 – December 2018	State Government • Department of Environment and Science • Department of State Development, Manufacturing, Infrastructure and Planning • Office of the Office of the Coordinator-General • Department of Transport and Main Roads	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• EIS and SIA process requiements • Water requirements and impact on Great Artesian Basin • DSDMIP support for business facilitation in North West Minerals Province • Impact of increased traffic on Flinders Highway • SIA process
May 2017 – December 2018	McKinlay Shire Council • Mayor and Councillors • CEO and Directors	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• Planning for infrastructure needs to support increased population • Water requirements and source of water • Impact of water use on neighbouring properties • Likelihood of project proceeding • Landscape scale improvements in Prickly Acacia • Emergency / Disaster Management Coordination
March 2018 – December 2018	Neighbouring Councils • Mount Isa Council • Cloncurry Council • Richmond Council • Townsville Council	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• Planning for infrastructure needs to support increased population • Water requirements and source of water • Impact of water use on neighbouring properties • Likelihood of project proceeding
September 2018	Federal and State Elected Representatives	Offer to Meet Provision of Factsheets	No issues raised
March 2018 – December 2018	Infrastructure and Utilities Providers	Letters / Emails Provision of Factsheets	• Capacity of Railway
March 2018 – December 2018	Government Service Representatives	Letters / Emails Provision of Factsheets	No issues raised

3.2.4 Business Operators and Representatives

The Project team held a series of consultations and meetings with business and commercial leaders and representatives to introduce the project and to enable business and commercial leaders and representatives to provide any feedback. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
July – September 2018	62 Business Operators in Julia Creek, Cloncurry and Mount Isa	Face to Face - Public Information Sessions (x3) Letters / Emails Provision of Factsheets Phone Calls (Freecall Number)	• Likelihood of project proceeding • Opportunities for the community and direct employment • Improved community amenities from a larger town (e.g. schooling) • Increased traffic on Flinders Highway • Local versus FIFO / external contractors
September 2018	North West Chamber of Commerce Mount Isa Townsville Economic Zone Townsville Enterprise	Face to Face Meetings Phone Calls Letters / Emails	• Likelihood of project proceeding • Opportunities for the community and direct employment • Water requirements and source of water

3.2.5 Special Interest Groups

The Project team held a series of consultations and meetings with special interest groups to introduce the project and to enable special interest groups to provide any feedback. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
September – December 2018	Local community groups • Lions Club • Ladies Lions Club • Country Women's Association • Sporting events, clubs and communities	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• Potential increase in dust • Likelihood of project proceeding • Opportunities for the community and direct employment • Landscape scale improvements in Prickly Acacia • Increased traffic on Flinders Highway • Water requirements and source of water • Opportunities to directly invest in project
September – December 2018	Local education providers • Julia Creek Early Learning Centre	Face to Face Meetings Phone Calls Letters / Emails Factsheets	• Potential increase in dust • Any toxicity from dust • Likelihood of project proceeding

	• Julia Creek State School		• Opportunities for the community and direct employment

3.2.6 Local Community

The Project team held a series of consultations and meetings with the broader community to introduce the project and to enable the broader community to provide any feedback. In a small town like Julia Creek, many residents have multiple roles within the community. For example, an individual may be a local Councillor, shop owner, President of a Sports Club and facilitator of an emergency service. Therefore, a single meeting or conversation may cover a multitude of issues. There are now a hundred registered stakeholders, excluding Government agencies, within the region all of whom have had the opportunity to comment on this Project. The table below provides a summary of the issues raised.

Timing	Stakeholder	Format	Issues Raised
September 2018	Members of community	Face to Face meetings Public Information Sessions Emails / Letters Provision of Factsheets Phone Calls (Freecall Number)	• Potential increase in dust • Any toxicity from dust • Likelihood of project proceeding • Opportunities for the community and direct employment • Landscape scale improvements in Prickly Acacia • Increased traffic on Flinders Highway • Water requirements and source of water • Opportunities to directly invest in project • Planning for infrastructure needs to support increased population

3.2 Issues Raised

Feedback from all consultation sessions were analysed by Epic Environmental on behalf of Multicom. A summary of the issues raised during community consultation is set out in the table below. It was determined that across all stakeholder groups, the issues and opportunities of greatest significance were:

- Potential increases in dust and other air emissions;
- Quantity of water required, source of water and impact on neighbouring users;
- Opportunities for social and economic enhancement of the area;
- Likelihood of project proceeding; and
- Potential impact on traffic on the Flinders Highway.

The Social Impact Assessment identifies the key positive and negative social impacts of the project and the associated proposed mitigation measures.

3.3 Ongoing Consultation

The EIS consultation and engagement program will continue throughout the EIS process. The public comment period is an important opportunity for stakeholders to provide formal input into the EIS process.

There will continue to be a range of opportunities for the community to access information about the Project and the EIS throughout the public comment period, including public meetings and displays which would be held in McKinlay and adjoining shires. A dedicated section of the Multicom website will continue to be available throughout this period, along with the freecall information telephone line and the Project email address.

A program of consultation will be undertaken by Multicom to address community issues as the Project progresses. Interaction with stakeholders who have already been consulted as part of the Project planning phase will continue over the remainder of the EIS process and throughout the construction and operational phases.

This will continue to include newsletter and fact sheets to provide consistent information, especially given the broad local community interest, specific information sessions including those in conjunction with the Department of State Development and McKinlay Shire Council to ensure business readiness as well as direct meetings.

4.0 Conclusion

The purpose of the community consultation was to:

- Communicate the Project to key local stakeholders and surrounding neighbours;
- To obtain stakeholder feedback to identify community issues associated with the Project;
- To communicate community issues to the project team and identify possible amelioration measures; and
- To identify a program of community engagement for the project.

This plan has been prepared to identify the stakeholders and consultation recommendations and report on the social engagement activities for the Saint Elmo Vanadium Project, carried out by Epic Environmental on behalf of Multicom. It is recommended that Epic Environmental on behalf of Multicom continue to undertake community consultation and stakeholder engagement, including a Public Information Session in January/ February 2019.

ANNEX B

Hospital Admissions

Annex B – Hospital Admissions

Julia Creek Hospital

Number of Stays	2011-12	2012–13	2013–14	2014-15	2015–16	2016–17
Childbirth	0	0	0	0	0	0
Medical Conditions (Emergency)	200	195	116	141	142	142
Other Acute Care (Emergency)	0	0	0	0	0	0
Surgical (Emergency)	<5	0	0	0	0	0
Mental health	0	0	0	0	0	0
Medical Conditions (Non-emergency)	<5	33	26	20	13	7
Other Acute Care (Non-emergency)	0	0	0	0	0	0
Surgical (Non-emergency)	0	0	0	0	0	0
Other subacute and non-acute care	13	51	26	<5	<5	<5
Palliative care	0	0	6	<5	5	<5
Rehabilitation	0	0	<5	0	0	0
Total	**213**	**279**	**174**	**161**	**160**	**149**

Source: Australian Institute of Health and Welfare 2018

Cloncurry Hospital

Number of Stays	2011-12	2012–13	2013–14	2014-15	2015–16	2016–17
Childbirth	<5	0	0	<5	<5	<5
Medical Conditions (Emergency)	1,041	947	969	973	791	691
Other Acute Care (Emergency)	0	0	0	0	<5	0
Surgical (Emergency)	<5	15	5	5	<5	<5
Mental health	0	0	0	0	0	8
Medical Conditions (Non-emergency)	7	5	8	13	22	42
Other Acute Care (Non-emergency)	0	0	0	0	0	0
Surgical (Non-emergency)	0	<5	0	0	0	<5
Other subacute and non-acute care	16	23	17	10	<5	19
Palliative care	0	0	<5	5	<5	5
Rehabilitation	0	0	0	0	0	<5
Total	**1,064**	**990**	**999**	**1,006**	**813**	**765**

Mount Isa Base Hospital

Number of Stays	2011-12	2012–13	2013–14	2014-15	2015–16	2016–17
Childbirth	574	531	491	529	480	438
Medical Conditions (Emergency)	3,725	3,458	3,290	3,192	3,404	3,733
Other Acute Care (Emergency)	76	72	55	42	72	99
Surgical (Emergency)	359	310	271	255	304	314
Mental health	0	0	0	0	66	189
Medical Conditions (Non-emergency)	925	1,016	1,255	1,296	1,331	1,467
Other Acute Care (Non-emergency)	557	639	619	588	516	545
Surgical (Non-emergency)	619	708	887	718	647	630
Other subacute and non-acute care	22	11	19	40	35	80
Palliative care	0	0	22	44	59	54
Rehabilitation	0	0	8	22	19	17
Total	**6,857**	**6,745**	**6,917**	**6,726**	**6,933**	**7,566**

ANNEX C

AEDC Results

Annex C – AEDC Results

Cloncurry/McKinlay AEDC Community – Developmentally on Track

AEDC Domain	2012 Developmentally on track (Number of children)	2012 Developmentally on track (Percentage of children - %*)	2015 Developmentally on track (Number of children)	2015 Developmentally on track (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	52	76.5	53	79.1	2.6	8.2	No significant change
Social competence	47	70.1	46	75.4	5.3	6.5	No significant change
Emotional maturity	39	62.9	47	78.3	15.4	6.9	Significant increase
Language and cognitive skills (school-based)	52	76.5	51	76.1	-0.4	6.7	No significant change
Communication skills and general knowledge	48	70.6	45	67.2	-3.4	7.4	No significant change

**Percentage % values have been rounded.*

Cloncurry/McKinlay AEDC Community – Developmentally at Risk

AEDC Domain	2012 Developmentally at risk (Number of children)	2012 Developmentally at risk (Percentage of children - %*)	2015 Developmentally at risk (Number of children)	2015 Developmentally at risk (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	7	10.3	9	13.4	3.1	8.7	No significant change
Social competence	9	13.4	10	16.4	3	8.3	No significant change
Emotional maturity	14	22.6	7	11.7	-10.9	8.9	Significant decrease
Language and cognitive skills (school-based)	9	13.2	11	16.4	3.2	8.4	No significant change
Communication skills and general knowledge	11	16.2	15	22.4	6.2	9	No significant change

**Percentage % values have been rounded.*

Cloncurry/McKinlay AEDC Community – Developmentally Vulnerable

AEDC Domain	2012 Developmentally vulnerable (Number of children)	2012 Developmentally vulnerable (Percentage of children - %*)	2015 Developmentally vulnerable (Number of children)	2015 Developmentally vulnerable (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	9	13.2	5	7.5	-5.8	7.1	No significant change
Social competence	11	16.4	5	8.2	-8.2	5	Significant decrease
Emotional maturity	9	14.5	6	10	-4.5	5.8	No significant change
Language and cognitive skills (school-based)	7	10.3	5	7.5	-2.8	5.2	No significant change
Communication skills and general knowledge	9	13.2	7	10.4	-2.8	6.2	No significant change

**Percentage % values have been rounded.*

Richmond AEDC Community – Developmentally on Track

Note: No data in 2012.

AEDC Domain	2012 Developmentally on track (Number of children)	2012 Developmentally on track (Percentage of children - %*)	2015 Developmentally on track (Number of children)	2015 Developmentally on track (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing			16	88.9			
Social competence			13	76.5			
Emotional maturity			13	81.3			
Language and cognitive skills (school-based)			12	70.6			
Communication skills and general knowledge			17	94.4			

**Percentage % values have been rounded.*

Richmond AEDC Community – Developmentally at Risk

Note: No data in 2012.

AEDC Domain	2012 Developmentally at risk (Number of children)	2012 Developmentally at risk (Percentage of children - %*)	2015 Developmentally at risk (Number of children)	2015 Developmentally at risk (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing			1	5.6			
Social competence			3	17.6			
Emotional maturity			2	12.5			
Language and cognitive skills (school-based)			2	11.8			
Communication skills and general knowledge			1	5.6			

**Percentage % values have been rounded.*

Richmond AEDC Community – Developmentally Vulnerable

Note: No data in 2012.

AEDC Domain	2012 Developmentally vulnerable (Number of children)	2012 Developmentally vulnerable (Percentage of children - %*)	2015 Developmentally vulnerable (Number of children)	2015 Developmentally vulnerable (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing			1	5.6			
Social competence			1	5.9			
Emotional maturity			1	6.3			
Language and cognitive skills (school-based)			3	17.6			
Communication skills and general knowledge			0	0			

**Percentage % values have been rounded.*

Mount Isa – Developmentally on Track

AEDC Domain	2012 Developmentally at risk (Number of children)	2012 Developmentally at risk (Percentage of children - %*)	2015 Developmentally at risk (Number of children)	2015 Developmentally at risk (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	292	79.6	242	69.1	-10.4	3.6	Significant decrease
Social competence	271	73.8	249	71.3	-2.5	2.8	No significant change
Emotional maturity	287	78.4	261	74.8	-3.6	2.9	Significant decrease
Language and cognitive skills (school-based)	278	75.7	258	73.7	-2	3	No significant change
Communication skills and general knowledge	268	73	247	70.6	-2.5	3.3	No significant change

**Percentage % values have been rounded.*

Mount Isa – Developmentally at Risk

AEDC Domain	2012 Developmentally at risk (Number of children)	2012 Developmentally at risk (Percentage of children - %*)	2015 Developmentally at risk (Number of children)	2015 Developmentally at risk (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	34	9.3	45	12.9	3.6	3.8	No significant change
Social competence	48	13.1	58	16.6	3.5	3.5	Significant decrease
Emotional maturity	45	12.3	50	14.3	2	3.7	No significant change
Language and cognitive skills (school-based)	40	10.9	45	12.9	2	3.7	No significant change
Communication skills and general knowledge	53	14.4	52	14.9	0.4	3.9	No significant change

**Percentage % values have been rounded.*

Mount Isa – Developmentally vulnerable

AEDC Domain	2012 Developmentally vulnerable (Number of children)	2012 Developmentally vulnerable (Percentage of children - %*)	2015 Developmentally vulnerable (Number of children)	2015 Developmentally vulnerable (Percentage of children - %*)	2012-2015 change in percent on track	Critical difference	Significant change
Physical health and wellbeing	41	11.2	63	18	6.8	3.1	Significant decrease
Social competence	48	13.1	42	12	-1	2.1	No significant change
Emotional maturity	34	9.3	38	10.9	1.6	2.4	No significant change
Language and cognitive skills (school-based)	49	13.4	47	13.4	0.1	2.3	No significant change
Communication skills and general knowledge	46	12.5	51	14.6	2	2.7	No significant change

**Percentage % values have been rounded.*

ANNEX D

NAPLAN Results

Annex D – NAPLAN Results

Key ^ no results where fewer than five students for privacy * no students due to absence, exemption or withdrawal – no students in the year level
NMS National Minimum Standard **READ** Reading **WRIT** Writing **SPEL** Spelling **GP** Grammar and Punctuation **NMCY** Numeracy

2011																					
		Year 3					Year 5					Year 7					Year 9				
School	Locality	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		^	^	^	^	^	396	416	422	441	425	507	522	530	477	517	--	--	--	--	--
Percentage (%) of students at or above NMS		^	^	^	^	^	60%	80%	60%	60%	80%	100%	100%	100%	75%	100%	--	--	--	--	--
Cloncurry State School	**Cloncurry**																				
Average score of the school		323	343	341	309	341	388	357	382	359	406	470	396	440	438	447	528	370	536	501	519
Percentage (%) of students at or above NMS		70%	83%	87%	68%	90%	54%	50%	60%	43%	62%	79%	48%	52%	43%	63%	72%	32%	84%	53%	78%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	559	539	574	552	554
Percentage (%) of students at or above NMS		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	94%	81%	90%	92%	98%
Mt Isa Flexible Learning Centre	**Mt Isa**																				
Average Score of the School		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	^	^	^	^	^
Percentage (%) of students at or above NMS		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	^	^	^	^	^
Richmond State School	**Richmond**																				
Average score of the school		302	385	339	361	300	405	394	400	448	447	468	447	480	466	486	–	–	–	–	–
Percentage (%) of students at or above NMS		70%	100%	100%	100%	67%	60%	80%	80%	80%	80%	83%	100%	83%	67%	100%	–	–	–	–	–
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	529	488	551	523	533
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	81%	55%	84%	69%	85%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		369	394	395	385	328	486	502	484	508	483	533	533	545	542	531	--	--	--	--	--
Percentage (%) of students at or above NMS		88%	88%	100%	94%	83%	93%	100%	100%	100%	100%	90%	90%	90%	100%	90%	--	--	--	--	--
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		385	363	376	388	365	475	463	487	494	458	512	489	522	502	516	--	--	--	--	--
Percentage (%) of students at or above NMS		89%	95%	90%	93%	97%	98%	96%	100%	96%	96%	98%	91%	93%	91%	93%	--	--	--	--	--
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		395	395	392	411	367	457	449	444	463	461	512	490	502	513	509	--	--	--	--	--
Percentage (%) of students at or above NMS		100%	100%	100%	100%	91%	92%	92%	96%	92%	96%	88%	92%	80%	88%	92%	--	--	--	--	--

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy	* no students due to absence, exemption or withdrawal	– no students in the year level		
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

2012																					
School	Locality	Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		^	^	^	^	^	^	^	^	^	^	492	469	513	506	504	–	–	–	–	–
Percentage (%) of students at or above NMS		^	^	^	^	^	^	^	^	^	^	70%	80%	80%	80%	90%	–	–	–	–	–
Cloncurry State School	**Cloncurry**																				
Average score of the school		359	366	383	426	371	398	387	423	390	409	489	472	483	487	473	516	479	491	494	522
Percentage (%) of students at or above NMS		80%	84%	84%	89%	88%	56%	69%	63%	44%	50%	77%	68%	77%	86%	91%	59%	29%	54%	63%	79%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	554	526	562	563	543
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	91%	71%	91%	94%	95%
Mt Isa Flexible Learning Centre	**Mt Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	^	^	^	^	^
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	^	^	^	^	^
Richmond State School	**Richmond**																				
Average score of the school		^	^	^	^	^	443	427	422	422	420	467	473	486	495	496	479	535	501	526	541
Percentage (%) of students at or above NMS		^	^	^	^	^	80%	80%	80%	80%	80%	88%	75%	75%	100%	75%	57%	67%	67%	100%	100%
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	533	487	544	526	541
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	78%	54%	78%	73%	86%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		399	407	377	398	350	490	467	474	465	461	547	466	517	558	519	–	–	–	–	–
Percentage (%) of students at or above NMS		95%	100%	84%	89%	84%	83%	92%	92%	83%	92%	100%	81%	86%	95%	95%	–	–	–	–	–
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		396	380	401	406	359	461	457	472	451	459	515	500	523	521	499	–	–	–	–	–
Percentage (%) of students at or above NMS		92%	94%	94%	94%	94%	87%	89%	95%	82%	95%	83%	88%	89%	91%	92%	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		400	364	370	391	379	420	437	453	461	449	515	500	512	513	501	–	–	–	–	–
Percentage (%) of students at or above NMS		82%	100%	91%	91%	100%	75%	88%	81%	88%	88%	89%	82%	79%	89%	89%	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy		* no students due to absence, exemption or withdrawal		– no students in the year level	
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

School	Locality	2013																			
		Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		415	383	362	407	372	^	^	^	^	^	^	^	^	^	^	–	–	–	–	–
Percentage (%) of students at or above NMS		100%	100%	100%	100%	100%	^	^	^	^	^	^	^	^	^	^	–	–	–	–	–
Cloncurry State School	**Cloncurry**																				
Average score of the school		364	366	340	359	369	468	422	454	447	435	458	410	442	410	449	521	461	492	481	480
Percentage (%) of students at or above NMS		79%	89%	69%	76%	93%	85%	64%	76%	80%	76%	68%	45%	55%	41%	60%	64%	42%	54%	42%	56%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	559	535	571	536	541
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	92%	79%	90%	71%	82%
Mt Isa Flexible Learning Centre	**Mt Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	427	303	442	359	406
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	29%	0%	17%	17%	13%
Richmond State School	**Richmond**																				
Average score of the school		378	380	365	404	353	462	496	439	455	439	^	^	^	^	^	533	486	540	472	535
Percentage (%) of students at or above NMS		100%	100%	83%	100%	83%	75%	75%	75%	75%	88%	^	^	^	^	^	90%	80%	80%	50%	89%
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	530	482	546	517	524
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	79%	56%	84%	71%	77%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		403	409	383	396	353	476	499	468	471	437	526	531	547	530	528	–	–	–	–	–
Percentage (%) of students at or above NMS		92%	100%	85%	96%	88%	100%	100%	100%	95%	79%	100%	100%	89%	95%	100%	–	–	–	–	–
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		424	429	413	428	395	480	451	486	478	456	529	523	546	509	528	–	–	–	–	–
Percentage (%) of students at or above NMS		96%	96%	96%	95%	98%	94%	83%	91%	96%	88%	96%	98%	93%	89%	100%	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		359	368	392	399	358	479	473	472	480	455	506	482	522	499	509	–	–	–	–	–
Percentage (%) of students at or above NMS		96%	100%	96%	96%	96%	93%	85%	93%	89%	89%	92%	84%	92%	76%	96%	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy	* no students due to absence, exemption or withdrawal	– no students in the year level		
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

2014																					
School	Locality	Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		^	^	^	^	^	^	^	^	^	^	^	^	^	^	^	–	–	–	–	–
Percentage (%) of students at or above NMS		^	^	^	^	^	^	^	^	^	^	^	^	^	^	^	–	–	–	–	–
Cloncurry State School	**Cloncurry**																				
Average score of the school		343	348	350	346	344	464	410	474	438	423	471	408	487	477	468	500	456	516	481	506
Percentage (%) of students at or above NMS		71%	82%	83%	70%	86%	77%	54%	85%	69%	77%	76%	44%	72%	78%	71%	46%	44%	63%	48%	78%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	561	540	573	550	547
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	89%	84%	94%	82%	91%
Mt Isa Flexible Learning Centre	**Mt Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	385	284	372	367	418
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0%	10%	20%	20%	29%
Richmond State School	**Richmond**																				
Average score of the school		335	342	378	373	331	^	^	^	^	^	^	^	^	^	^	498	453	492	502	518
Percentage (%) of students at or above NMS		78%	89%	100%	78%	78%	^	^	^	^	^	^	^	^	^	^	50%	33%	67%	83%	83%
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	526	461	532	512	534
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	68%	42%	74%	64%	87%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		406	356	396	395	361	543	495	520	514	537	524	515	503	537	533	563	520	524	528	551
Percentage (%) of students at or above NMS		92%	87%	100%	96%	100%	100%	100%	100%	100%	100%	82%	82%	82%	82%	100%	86%	71%	71%	71%	86%
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		399	383	403	404	392	494	441	499	488	477	533	511	521	510	516	–	–	–	–	–
Percentage (%) of students at or above NMS		86%	93%	95%	93%	100%	90%	88%	94%	96%	96%	89%	84%	81%	81%	95%	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		380	344	356	412	363	487	413	472	478	456	474	465	483	493	498	–	–	–	–	–
Percentage (%) of students at or above NMS		86%	86%	90%	95%	95%	94%	72%	89%	89%	95%	85%	85%	77%	77%	85%	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy	* no students due to absence, exemption or withdrawal	– no students in the year level	
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

2015																					
School	Locality	Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		429	395	361	386	389	^	^	^	^	^	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		100%	100%	78%	89%	89%	^	^	^	^	^	–	–	–	–	–	–	–	–	–	–
Cloncurry State School	**Cloncurry**																				
Average score of the school		280	332	315	301	295	443	404	444	444	441	508	464	508	474	501	511	445	519	500	534
Percentage (%) of students at or above NMS		50%	64%	55%	41%	57%	73%	55%	68%	68%	82%	76%	60%	64%	68%	80%	68%	41%	59%	53%	94%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	525	473	534	506	512	569	546	594	571	581
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	93%	74%	94%	88%	98%	90%	81%	91%	89%	95%
Mt Isa Flexible Learning Centre	**Mt Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	^	^	^	^	^	^	^	^	^	^
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	^	^	^	^	^	^	^	^	^	^
Richmond State School	**Richmond**																				
Average score of the school		^	407	377	412	378	512	434	446	492	457	503	468	485	461	519	^	^	^	^	^
Percentage (%) of students at or above NMS		^	100%	80%	100%	100%	100%	88%	63%	100%	88%	100%	67%	67%	67%	100%	^	^	^	^	^
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	493	444	508	482	487	528	469	549	513	541
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	87%	61%	77%	72%	91%	75%	44%	82%	71%	89%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		405	413	400	410	385	468	451	472	460	456	531	494	523	525	503	586	509	573	547	594
Percentage (%) of students at or above NMS		91%	95%	100%	95%	100%	89%	89%	95%	89%	95%	100%	85%	100%	100%	100%	100%	71%	86%	86%	100%
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		409	376	380	386	385	488	491	500	509	474	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		97%	95%	89%	87%	95%	93%	95%	93%	95%	98%	–	–	–	–	–	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		348	361	351	384	342	467	452	491	494	457	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		84%	96%	84%	88%	84%	96%	88%	96%	96%	96%	–	–	–	–	–	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy	* no students due to absence, exemption or withdrawal	– no students in the year level	
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

2016																					
School	Locality	Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		359	299	352	367	366	^	^	^	^	^	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		67%	67%	100%	67%	100%	^	^	^	^	^	–	–	–	–	–	–	–	–	–	–
Cloncurry State School	**Cloncurry**																				
Average score of the school		378	375	362	380	338	446	432	450	436	412	519	477	517	522	512	523	482	489	496	519
Percentage (%) of students at or above NMS		89%	89%	89%	89%	89%	64%	65%	70%	61%	61%	86%	88%	88%	88%	93%	79%	50%	47%	53%	93%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	533	488	539	530	539	568	528	564	546	576
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	92%	89%	91%	93%	94%	92%	84%	87%	84%	97%
Mount Isa Central State School	**Mount Isa**																				
Average score of the school		403	394	419	428	369	469	452	471	454	438	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		92%	100%	100%	100%	100%	97%	89%	94%	89%	85%	–	–	–	–	–	–	–	–	–	–
Mount Isa School of the Air	**Mount Isa**																				
Average score of the school		373	379	352	401	384	501	469	464	505	476	565	513	563	555	604	^	^	^	^	^
Percentage (%) of students at or above NMS		100%	100%	93%	100%	93%	90%	89%	95%	100%	100%	100%	100%	83%	83%	100%	^	^	^	^	^
Richmond State School	**Richmond**																				
Average score of the school		382	351	340	388	383	496	428	493	508	469	–	–	–	–	–	^	^	^	^	^
Percentage (%) of students at or above NMS		100%	82%	82%	100%	100%	89%	78%	89%	89%	89%	–	–	–	–	–	^	^	^	^	^
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	505	436	501	489	499	526	471	527	517	527
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	82%	58%	74%	79%	78%	78%	48%	68%	73%	81%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		447	421	427	467	417	488	467	480	479	453	521	518	531	532	518	543	^	^	^	570
Percentage (%) of students at or above NMS		95%	100%	100%	95%	100%	88%	100%	100%	100%	94%	92%	92%	92%	100%	100%	100%	^	^	^	100%
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		414	403	395	429	380	498	480	489	498	466	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		93%	95%	93%	91%	91%	96%	98%	96%	93%	98%	–	–	–	–	–	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		420	396	416	425	386	494	479	486	497	491	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		90%	95%	95%	90%	95%	95%	100%	100%	95%	90%	–	–	–	–	–	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

Key	^ no results where fewer than five students for privacy	* no students due to absence, exemption or withdrawal	– no students in the year level	
	NMS National Minimum Standard	**READ** Reading	**WRIT** Writing	**SPEL** Spelling	**GP** Grammar and Punctuation	**NMCY** Numeracy

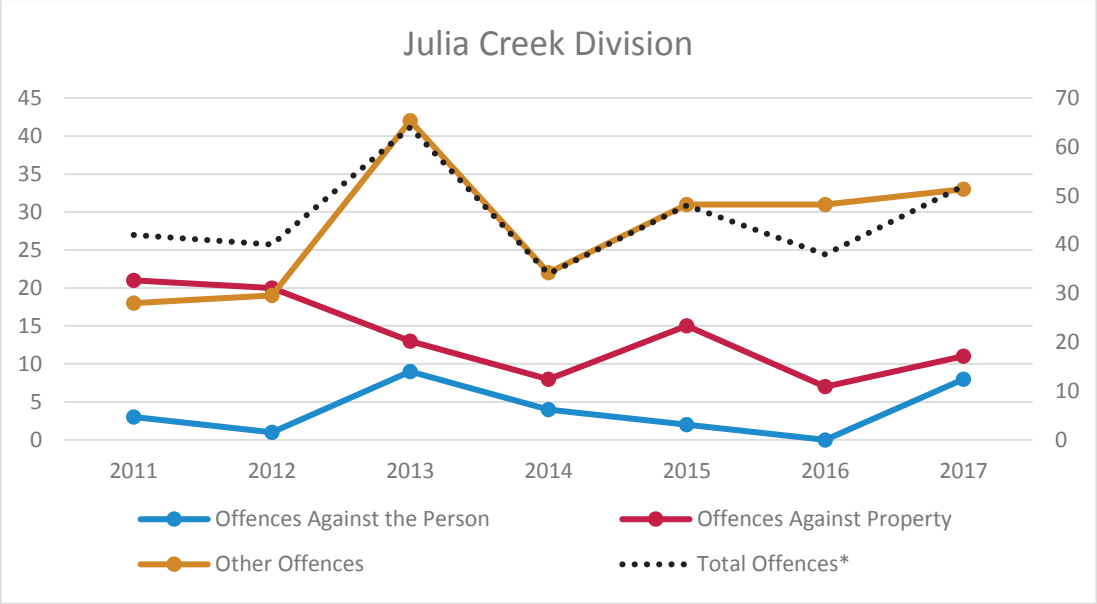
2017																					
School	Locality	Year 3					Year 5					Year 7					Year 9				
		READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY	READ	WRIT	SPEL	GP	NMCY
Julia Creek State School	**Julia Creek**																				
Average score of the school		470	425	406	473	410	496	425	484	460	466	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		100%	100%	100%	100%	100%	100%	78%	89%	100%	88%	–	–	–	–	–	–	–	–	–	–
Cloncurry State School P-12	**Cloncurry**																				
Average score of the school		444	402	419	414	384	427	387	408	389	424	531	484	539	550	505	545	517	552	527	551
Percentage (%) of students at or above NMS		83%	87%	87%	83%	87%	70%	65%	57%	61%	73%	81%	68%	80%	80%	68%	73%	52%	68%	64%	79%
Good Shepherd Catholic College	**Mount Isa**																				
Average Score of the School		–	–	–	–	–	–	–	–	–	–	542	517	553	534	546	567	532	573	556	577
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	96%	91%	98%	87%	99%	96%	79%	90%	87%	99%
Mount Isa Central State School	**Mount Isa**																				
Average score of the school		413	372	409	376	369	476	459	484	471	459	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		100%	96%	100%	96%	92%	87%	91%	86%	91%	95%	–	–	–	–	–	–	–	–	–	–
Mount Isa School of the Air	**Mount Isa**																				
Average score of the school		425	428	416	436	417	536	467	487	501	493	562	417	528	521	527	^	^	^	^	^
Percentage (%) of students at or above NMS		92%	100%	100%	100%	100%	100%	91%	91%	95%	100%	100%	80%	100%	100%	100%	^	^	^	^	^
Richmond State School	**Richmond**																				
Average score of the school		366	393	351	398	394	498	385	481	503	482	^	^	^	^	^	520	355	437	470	543
Percentage (%) of students at or above NMS		89%	89%	78%	89%	88%	100%	83%	83%	83%	100%	^	^	^	^	^	80%	40%	40%	40%	100%
Spinifex College - Junior Campus	**Mount Isa**																				
Average score of the school		–	–	–	–	–	–	–	–	–	–	495	454	509	501	504	510	434	533	514	531
Percentage (%) of students at or above NMS		–	–	–	–	–	–	–	–	–	–	79%	69%	82%	80%	84%	65%	37%	74%	71%	88%
St Joseph's School (Cloncurry)	**Cloncurry**																				
Average Score of the School		412	423	387	417	386	509	461	491	494	490	539	511	523	525	533	558	521	545	521	552
Percentage (%) of students at or above NMS		84%	100%	95%	89%	100%	100%	94%	100%	89%	100%	92%	100%	92%	85%	100%	100%	80%	100%	100%	100%
St Joseph's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		417	403	409	436	386	497	479	512	513	498	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		100%	100%	100%	95%	88%	97%	95%	97%	97%	100%	–	–	–	–	–	–	–	–	–	–
St Kieran's School (Mount Isa)	**Mount Isa**																				
Average Score of the School		388	377	389	406	388	472	409	458	449	443	–	–	–	–	–	–	–	–	–	–
Percentage (%) of students at or above NMS		89%	100%	100%	90%	100%	100%	65%	85%	90%	88%	–	–	–	–	–	–	–	–	–	–

Source: Queensland Curriculum and Assessment Authority 2018

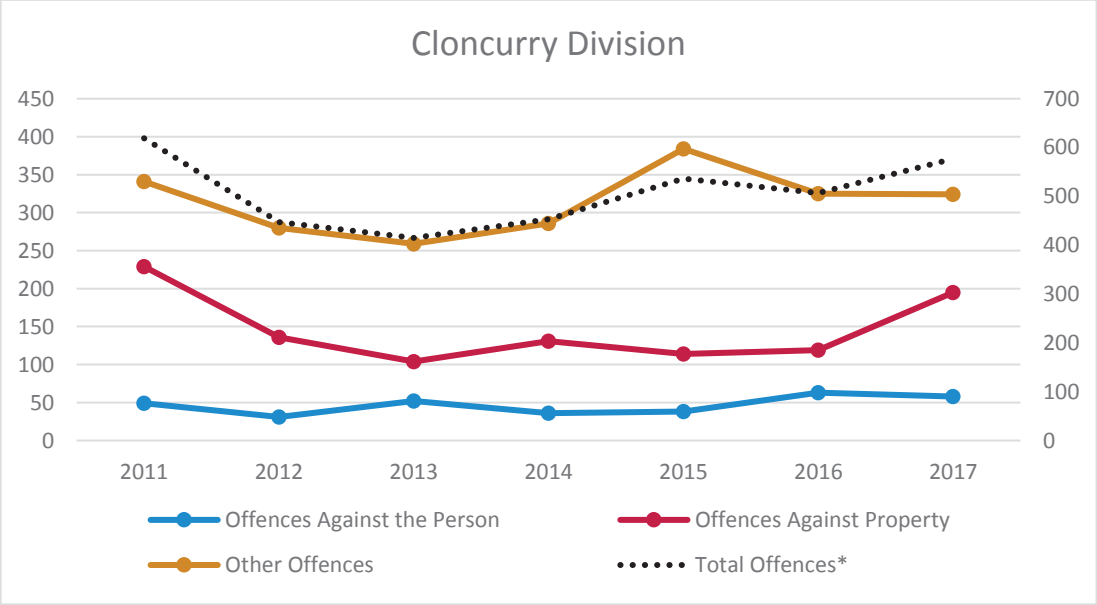
ANNEX E

Crime Statistics

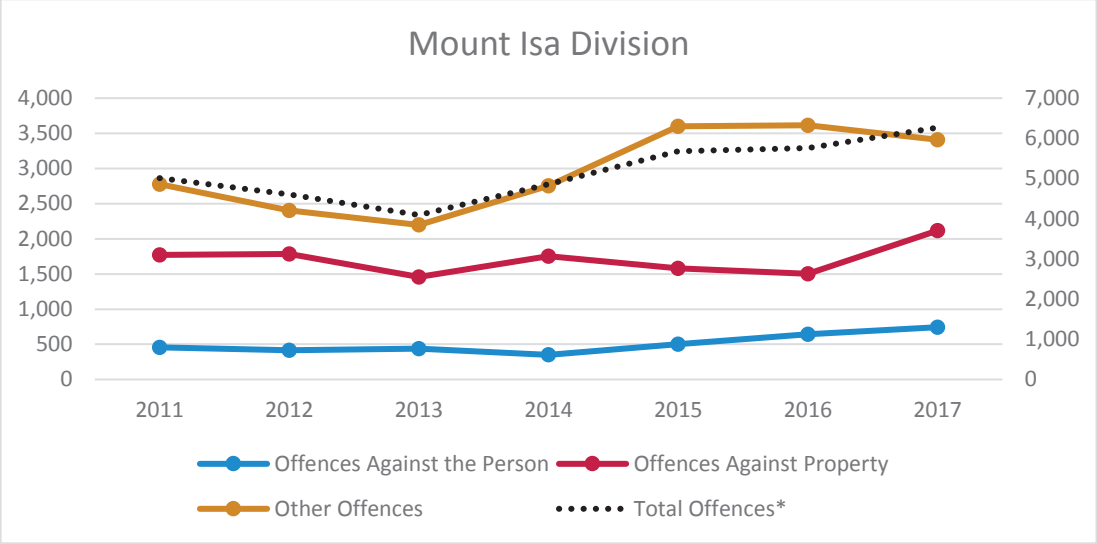
Annex E – Crime Statistics



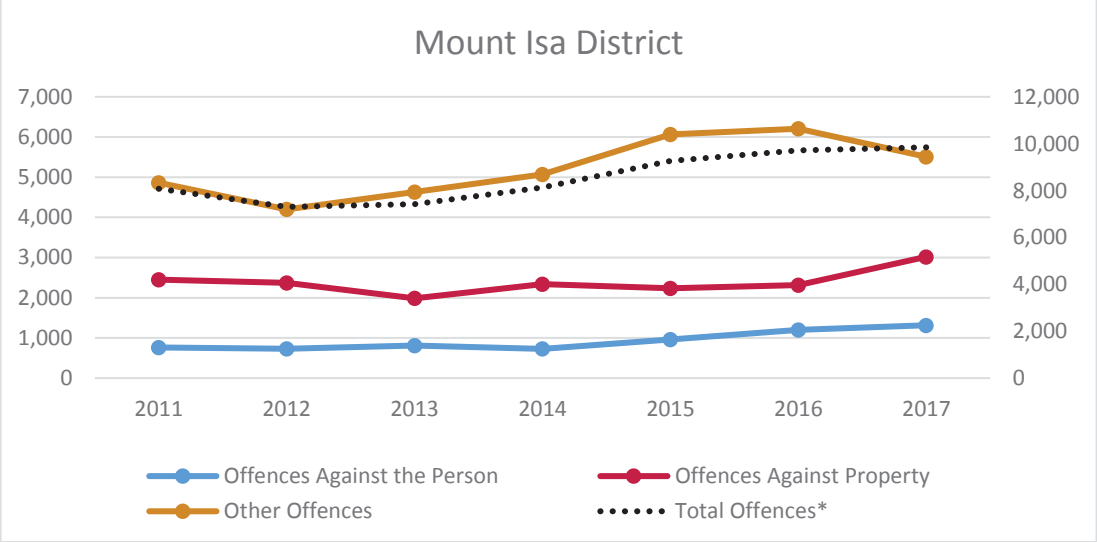
**Please note 'Total Offences' follows the secondary axis on the right of the chart.*



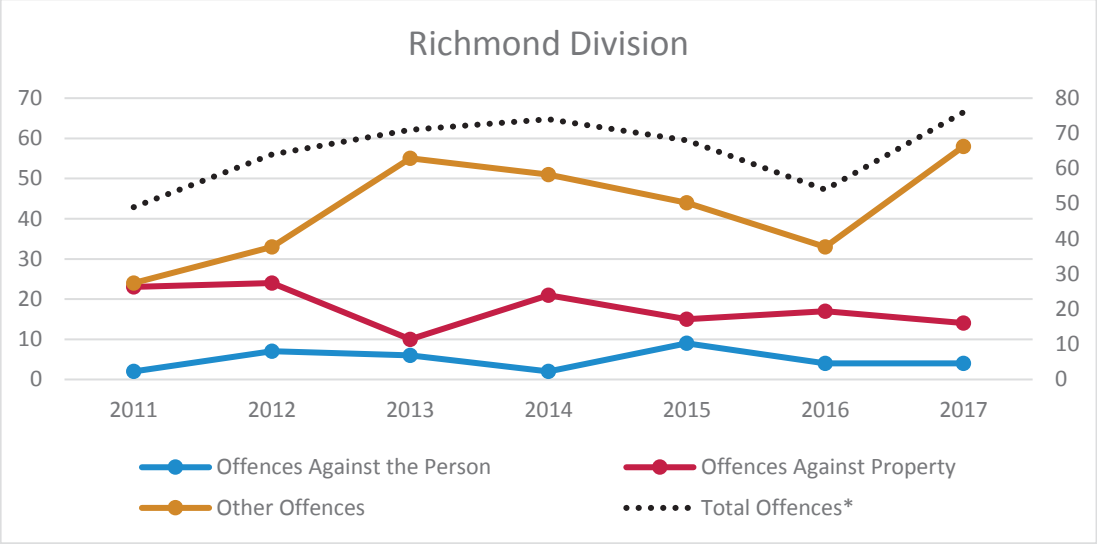
**Please note 'Total Offences' follows the secondary axis on the right of the chart.*



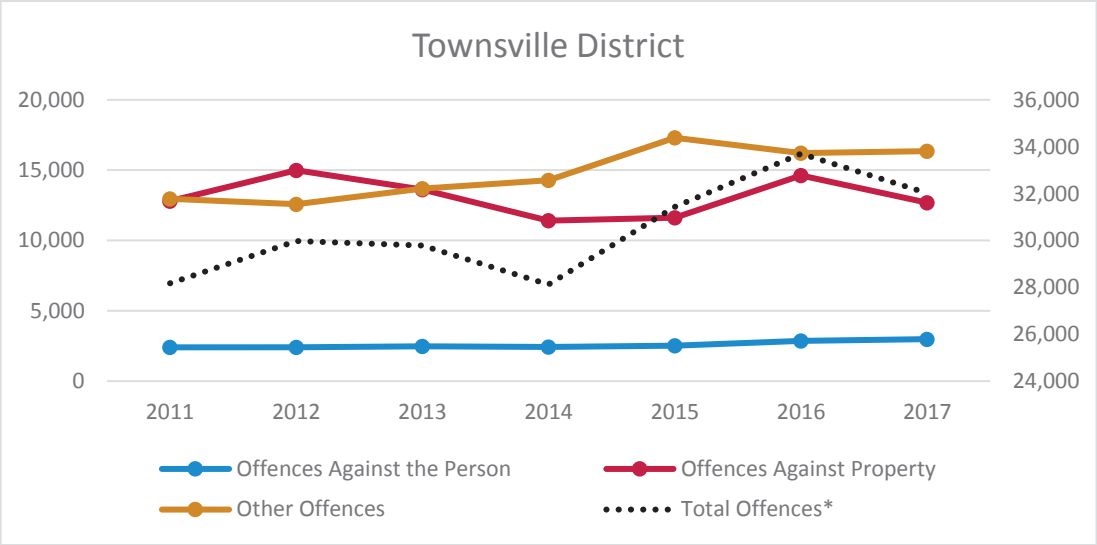
Please note 'Total Offences' follows the secondary axis on the right of the chart.



Please note 'Total Offences' follows the secondary axis on the right of the chart.



Please note 'Total Offences' follows the secondary axis on the right of the chart.



Please note 'Total Offences' follows the secondary axis on the right of the chart.

Types of Offences

Category	Sub-Category
Offences against the Person	
Homicide (Murder)	-
Other Homicide	Attempted Murder
	Conspiracy to Murder
	Manslaughter (excl. by driving)
	Driving Causing Death
	Manslaughter Unlawful Striking Causing Death
Assault	Grievous Assault
	Serious Assault
	Serious Assault (Other)
	Common Assault
Sexual Offences	Rape and Attempted Rape
	Other Sexual
Robbery	Armed Robbery
	Unarmed Robbery
Other Against the Person	Kidnapping & Abduction etc.
	Extortion
	Stalking
	Life Endangering Acts
Offences against Property	
Unlawful Entry	Unlawful Entry With Intent - Dwelling
	Unlawful Entry Without Violence - Dwelling
	Unlawful Entry With Violence - Dwelling
	Unlawful Entry With Intent - Shop
	Unlawful Entry With Intent - Other
Arson	-
Other Property Damage	-
Unlawful Use of Motor Vehicle	-
Other Theft (excl. Unlawful Entry)	Stealing from Dwellings
	Shop Stealing
	Vehicles (Steal from/enter with intent)

Category	Sub-Category
	Other Stealing
Fraud	Fraud by Computer
	Fraud by Cheque
	Fraud by Credit Card
	Identity Fraud
	Other Fraud
Handling Stolen Goods	Possess Property Suspected Stolen
	Receiving Stolen Property
	Possess etc. Tainted Property
	Other Handling Stolen Goods
Other Offences	
Drug Offences	Trafficking Drugs
	Possess Drugs
	Produce Drugs
	Sell Supply Drugs
	Other Drug
Prostitution	Found in Places Used for Purpose of Prostitution
	Have Interest in Premises Used for Prostitution Offences
	Knowingly Participate in Provision Prostitution
	Public Soliciting
	Procuring Prostitution
	Permit Minor to be at a Place Used for Prostitution
	Advertising Prostitution
	Other Prostitution
Liquor (excl. Drunkenness)	-
Gaming, Racing & Betting Offences	-
Breach Domestic Violence Protection Order	-
Trespassing and Vagrancy	-
Weapons Act	Unlawful Possess Concealable Firearm

Category	Sub-Category
	Unlawful Possess Firearm - Other
	Bomb Possess and/or use of
	Possess and/or use other weapons, restricted items
	Weapons Act - Other
Good Order	Disobey Move-on Direction
	Resist Incite Hinder Obstruct Police
	Fare Evasion
	Public Nuisance
Stock Related Offences	-
Traffic and Related Offences	Dangerous Operation of a Vehicle
	Drink Driving
	Disqualified Driving
	Interfere with Mechanism of Motor Vehicle
Miscellaneous	

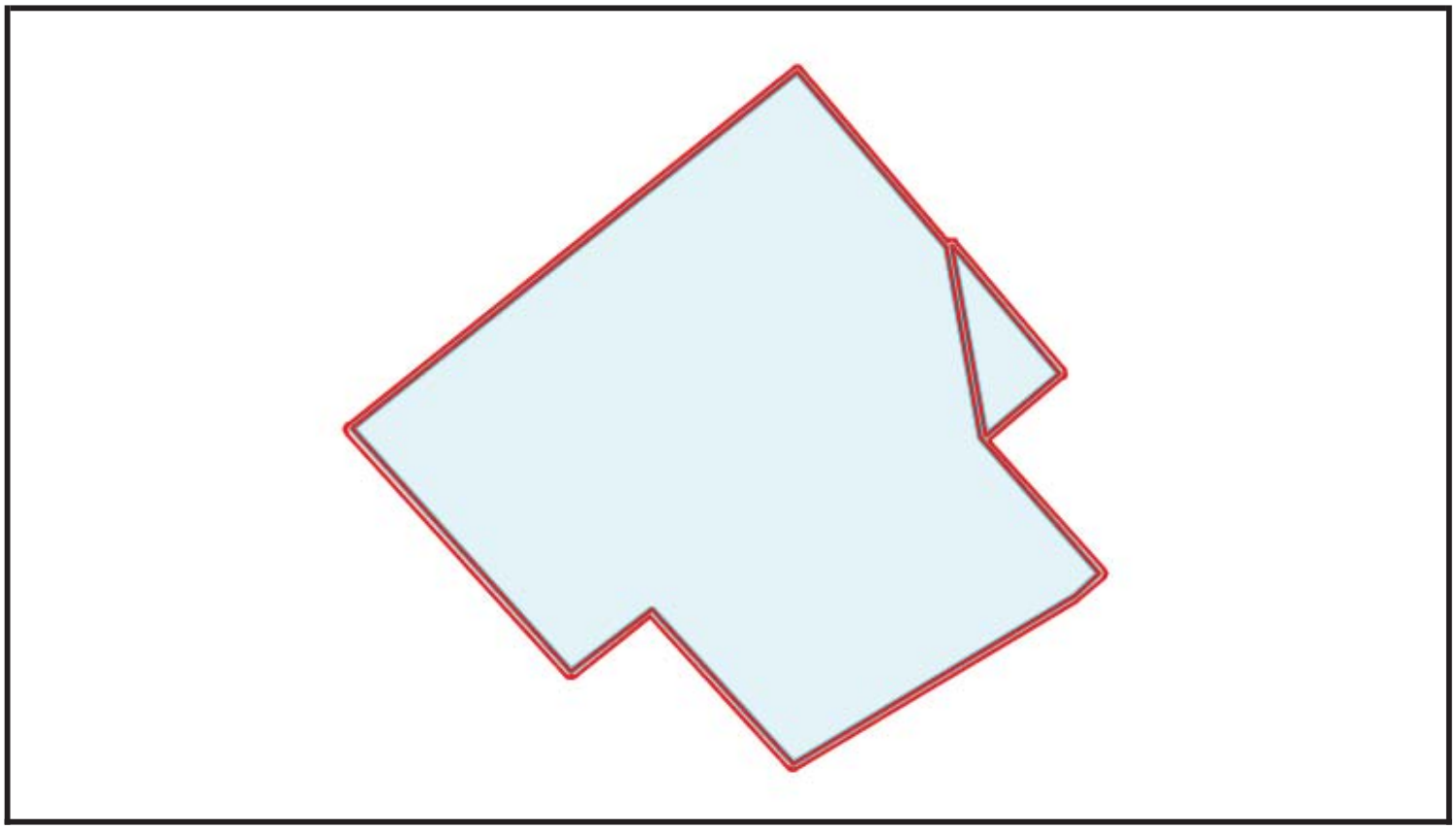
ANNEX F

DATSIP Search Results

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	1
Plan:	EN15
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There is no cultural heritage party recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:26 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:26 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:26 PM

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

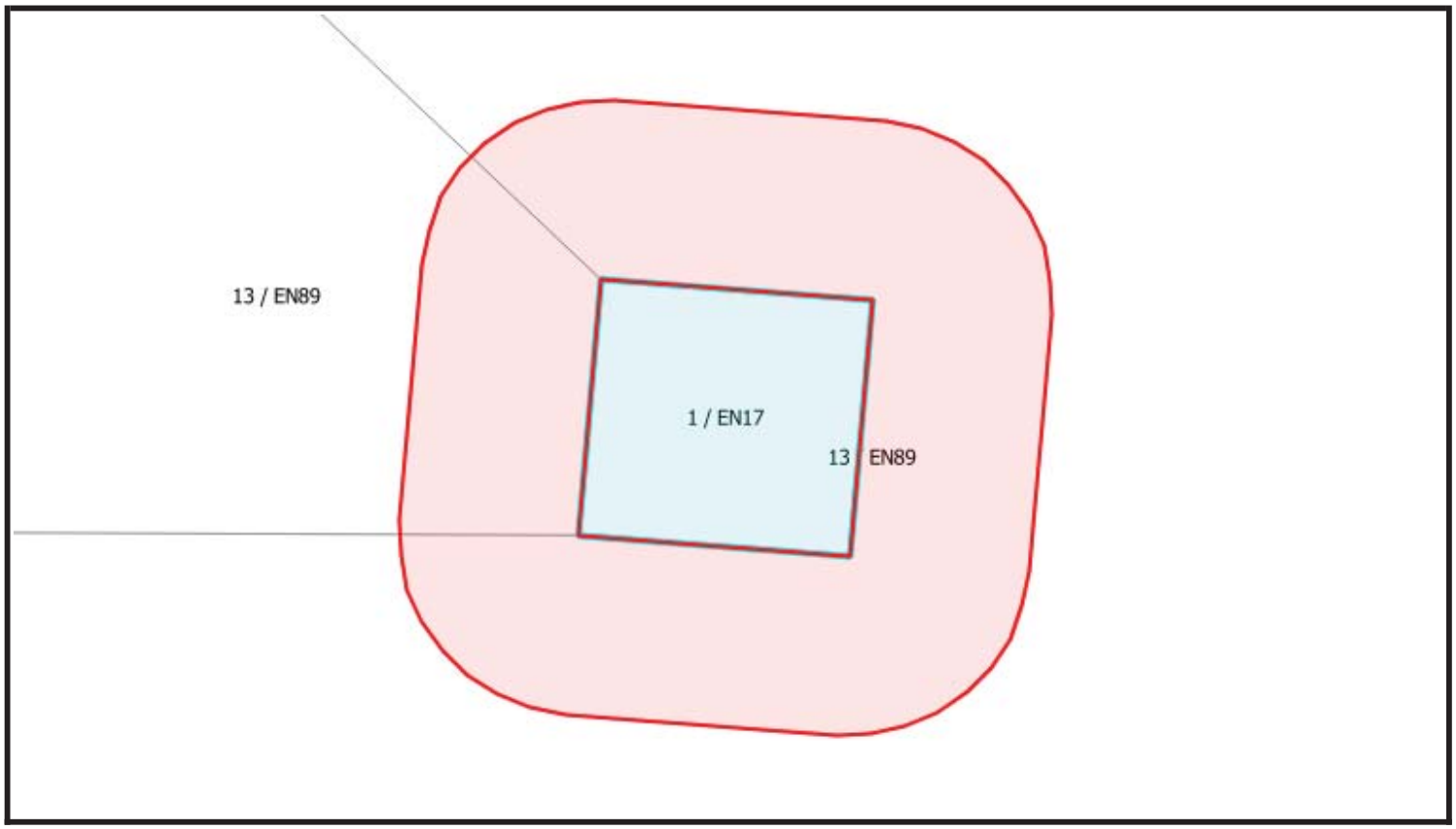
The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

May 15, 2018, 3:26 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	1
Plan:	EN17
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There are no cultural heritage parties recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:25 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:25 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:25 PM

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

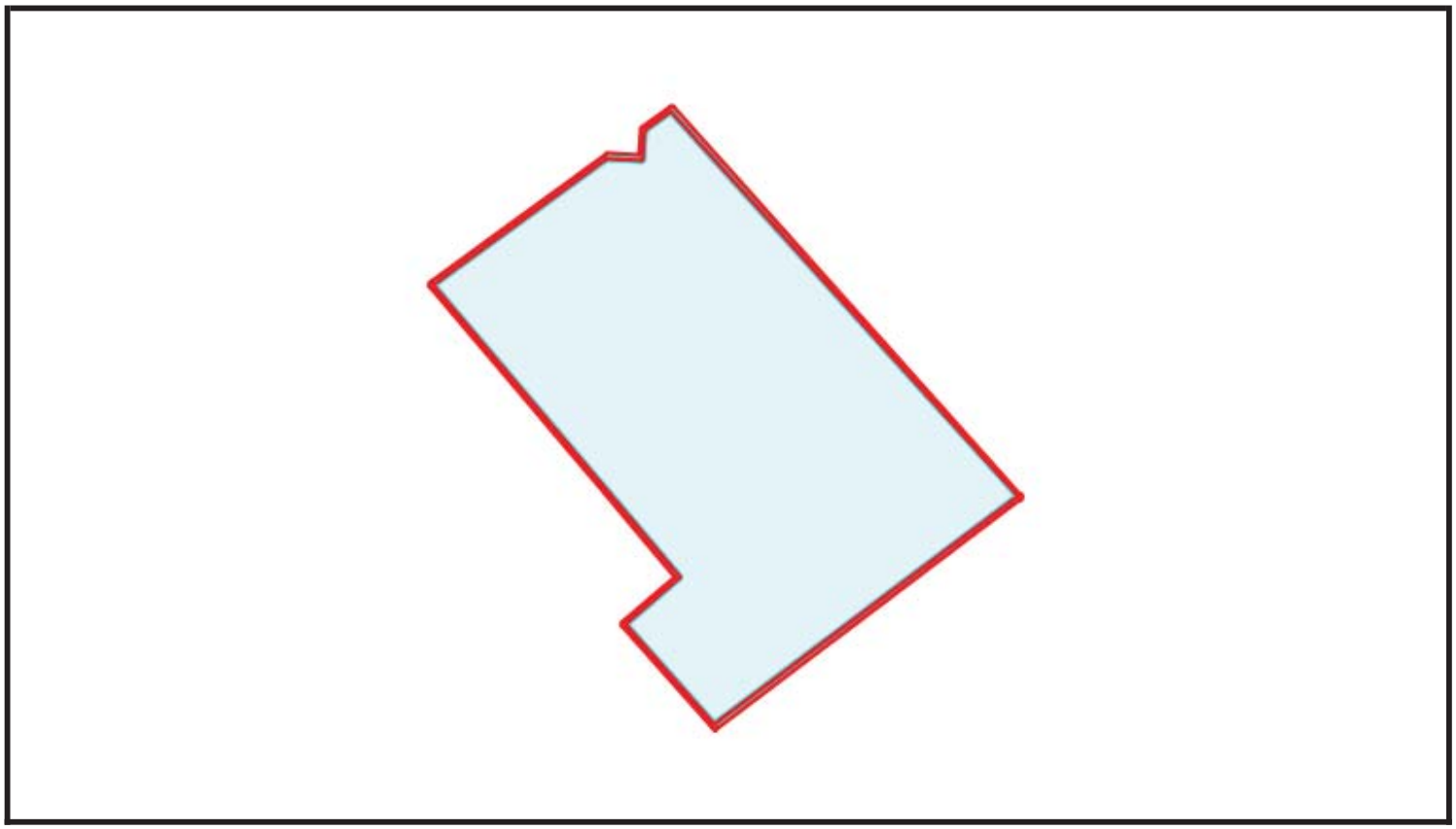
May 15, 2018, 3:25 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	1
Plan:	MF3
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There are no cultural heritage parties recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:24 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

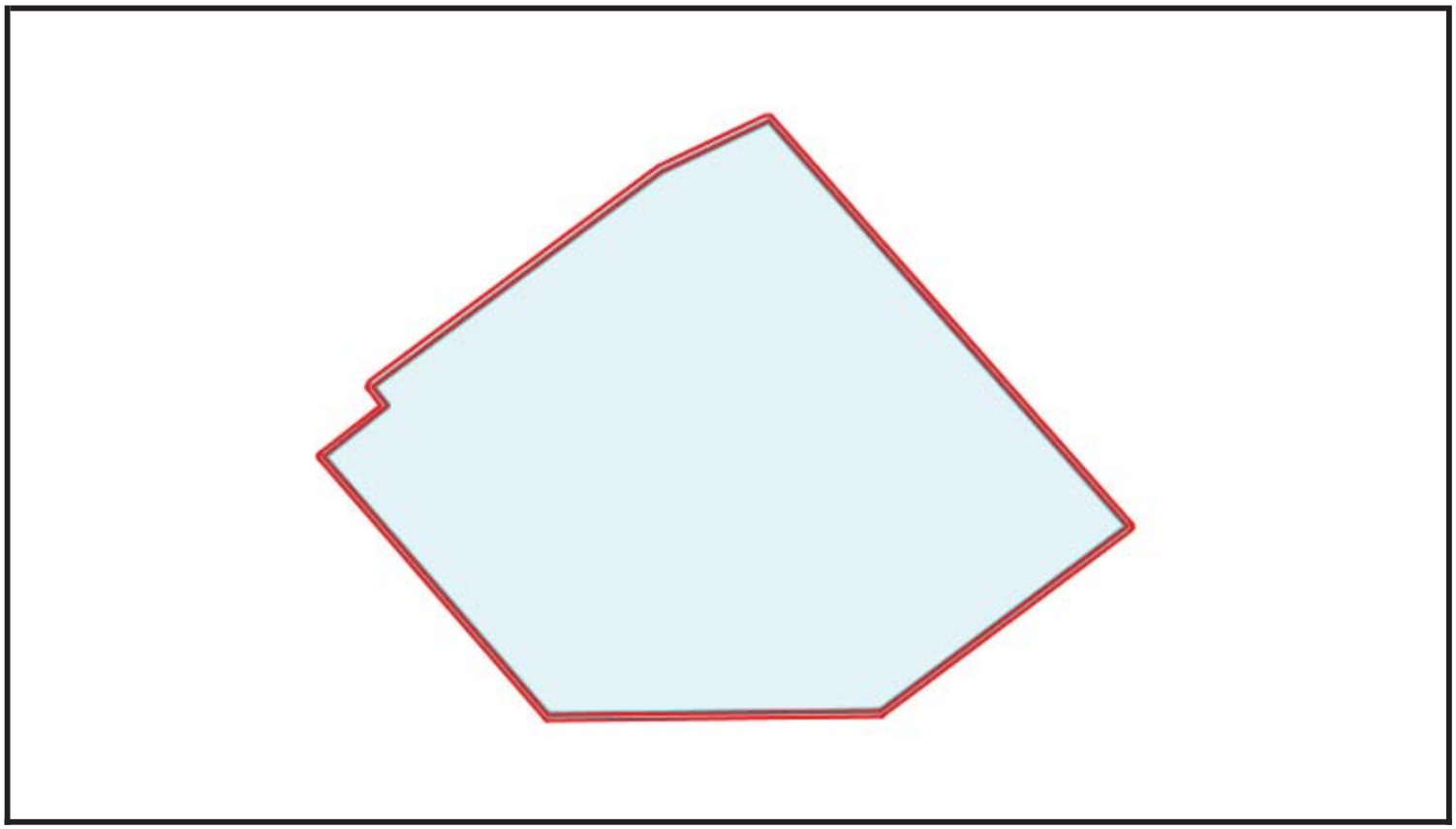
The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	3
Plan:	EN147
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There are no cultural heritage parties recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:25 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:25 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:25 PM

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

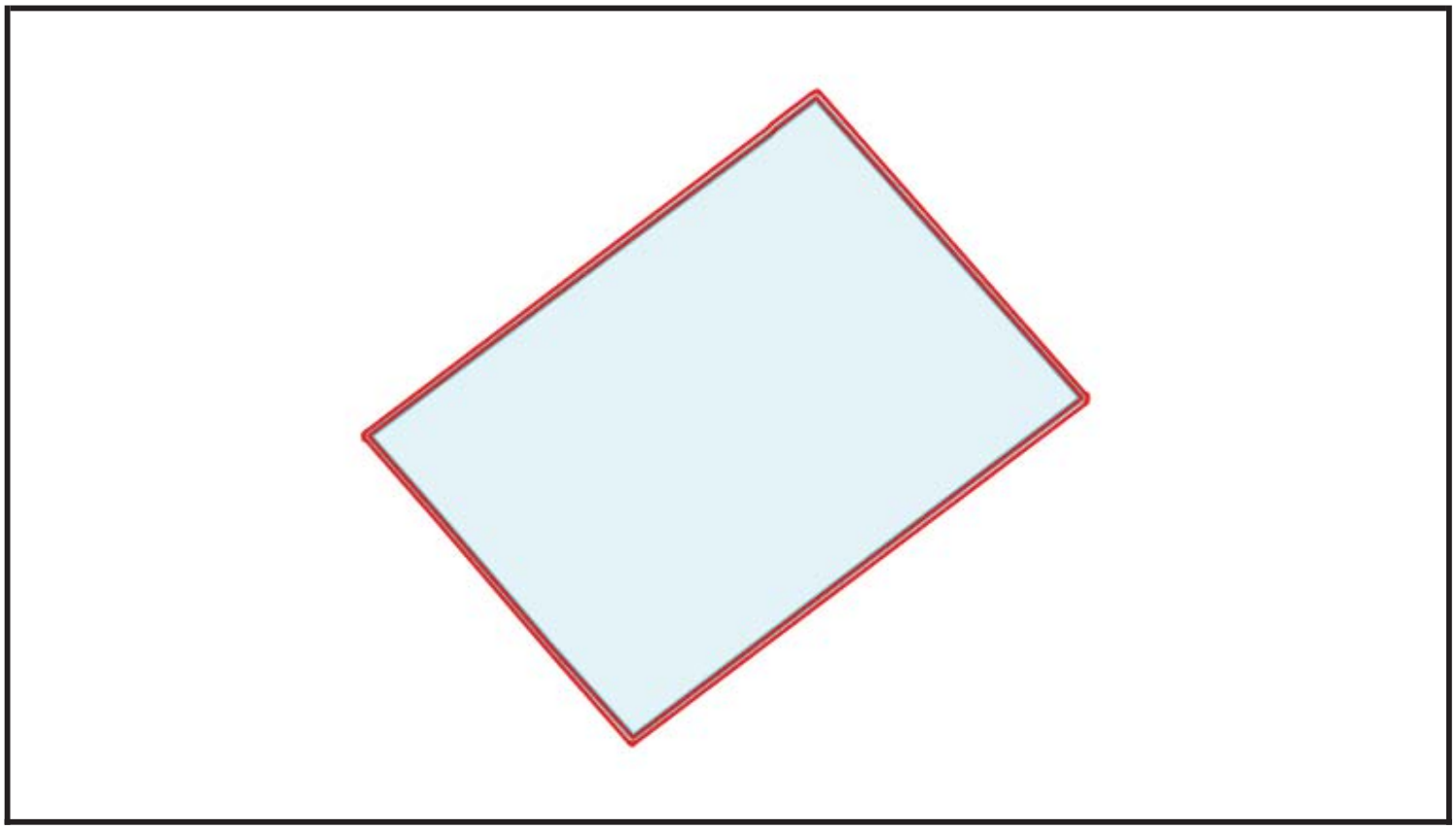
The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

May 15, 2018, 3:25 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	4
Plan:	B157126
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There are no cultural heritage parties recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:24 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

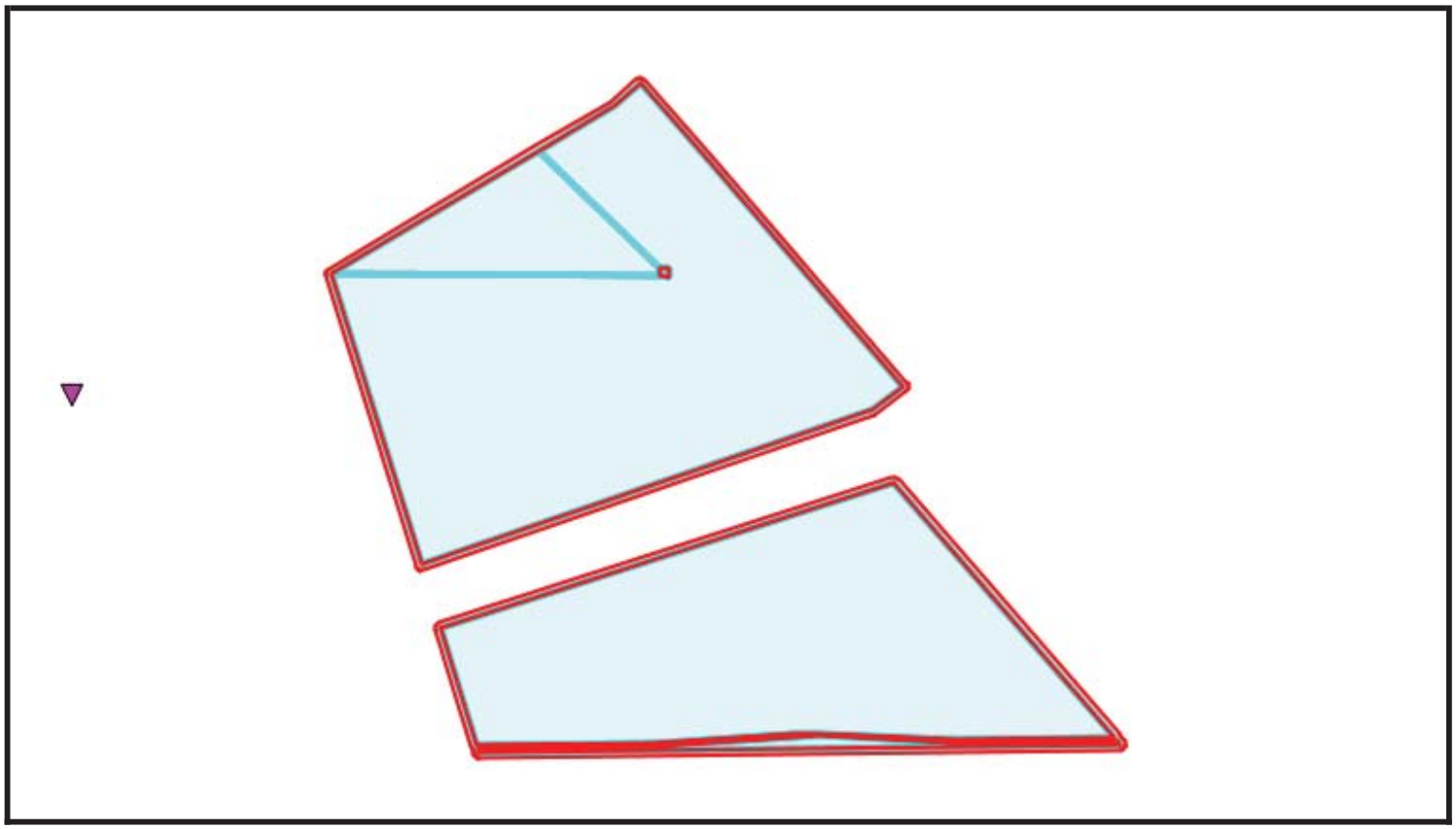
The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

May 15, 2018, 3:24 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

Reference Number:	36593
Lot:	13
Plan:	EN89
LGA:	Mckinlay Shire
Buffer Distance:	100 metres



There are no Aboriginal cultural heritage site points recorded in your specific search area.

There are no Aboriginal cultural heritage site polygons recorded in your specific search area.

There is no cultural heritage party recorded in your specific search area.

There is no cultural heritage body recorded in your specific search area.

May 15, 2018, 3:25 PM

Queensland Government

Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

There are no cultural heritage management plans recorded in your specific search area.

There are no Designated Landscape Areas (DLA) recorded in your specific search area.

There are no Registered Study Cultural Heritage Areas recorded in your specific search area.

Regional Coordinator:

Name	Position	Phone	Mobile	Email
Leigh Preston	Cultural Heritage Coordinator North Region	07 4799 7562	0427 142 782	Leigh.Preston@datsip.qld.gov.au

May 15, 2018, 3:25 PM

Queensland Government
Department of Aboriginal and Torres Strait Islander Partnerships

Lot on Plan Search

I refer to your submission in which you requested advice regarding Aboriginal or Torres Strait Islander cultural heritage recorded at your nominated location.

The Cultural Heritage Database and Register have been searched in accordance with the location description provided, and the results are set out in the above report.

Aboriginal or Torres Strait Islander cultural heritage which may exist within the search area is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* and the *Torres Strait Islander Cultural Heritage Act 2003*, even if the Department of Aboriginal and Torres Strait Islander Partnerships has no records relating to it.

Under the legislation a person carrying out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal or Torres Strait Islander cultural heritage. This applies whether or not such places are recorded in an official register and whether or not they are located on private land.

Please refer to our website https://www.datsip.qld.gov.au/people-communities/aboriginal-torres-strait-islander-cultural-heritage for a copy of the gazetted Cultural Heritage Duty of Care Guidelines, which set out reasonable and practicable measure for meeting the cultural heritage duty of care.

In order to meet your duty of care, any land-use activity within the vicinity of recorded cultural heritage should not proceed without the agreement of the Aboriginal or Torres Strait Islander Party for the area, or by developing a Cultural Heritage Management Plan under Part 7 of the legislation.

If your proposed activity is deemed a Category 5 activity pursuant to the Duty of Care Guidelines, there is generally a high risk that it may harm cultural heritage. In these circumstances, the activity should not proceed without cultural heritage assessment.

Where a category 5 activity is proposed, it is necessary to notify the Aboriginal or Torres Strait Islander Party and seek:

a. Advice as to whether the area is culturally significant;
b. If it is, agreement on how best the activity may be managed to avoid or minimise harm to any cultural heritage values.

The extent to which the person has complied with Cultural Heritage Duty of Care Guidelines and the extent the person consulted Aboriginal or Torres Strait Islander Parties about carrying out the activity – and the results of the consultation – are factors a court may consider when determining if a land user has complied with the cultural heritage duty of care.

May 15, 2018, 3:25 PM

Lot on Plan Search

Should you have any further queries, please do not hesitate to contact the Search Approval Officer on 1300 378 401.

Kind regards

The Director
Cultural Heritage | Community Participation | Department of Aboriginal and Torres Strait Islander Partnerships

May 15, 2018, 3:25 PM

ANNEX G

Surrounding Development

Annex G – Surrounding Development

McKinlay and Richmond Shire Councils and Mount Isa City Council do not have online planning and development libraries. As such, a review of the respective Council meeting minutes between January 2017 – May 2018 was conducted to determine if there were any town planning or development matters of interest.

McKinlay Shire Council

In the McKinlay Shire, it was found that (McKinlay Shire Council 2018b):

- January 2017
    - Proposed road closure of approximately 5,200 m^2 (and increases land size to Lot 34 on EN92.
- February 2017
    - Offer by the Department of Natural Resources and Mines to purchase Part of Lot 57 on SP284275 and adjacent Road opening.
- November 2017
    - An application to purchase of part of Lot 57 SP284275 – Council supports purchase, subject to conditions, including amalgamation of lots and rezoning of land to facilitate development.
- December 2017
    - Grant Housing – Council was successful in application for grant funding to build 4 new dwellings to assist with Council housing shortages.
- January 2018
    - Grant Housing – Council to amend resolution 128/1718 as there was a more suitable lot.
- May 2018
    - Grant Housing T1718003 Julia Creek Housing Project Tender – Council deferred this item to the next meeting.

It is noted that grant housing was first discussed in the December 2017 meeting minutes. Further research relating to the grant housing found that McKinlay Shire Council was approved for grant funding of $797,985 from the State Government Department of Infrastructure, Local Government and Planning on 18 October 2017 (McKinlay Shire Council 2017). The funding will contribute to 60 percent of the total cost to construct additional Council staff housing, taking the form of two four-bedroom houses and two two-bedroom units in Julia Creek. As of a media release by McKinlay Shire Council on 20 October 2017, it is expected that the additional housing will be completed by April 2019.

Council staff housing is provided to select staff in order to *"assist in the retention of suitably qualified and experienced staff"*, as detailed in the McKinlay Shire Employment Information Booklet (McKinlay Shire Council n.d.).

Cloncurry Shire Council

A review of Cloncurry Shire Council's recently approved and currently advertised planning applications, and Council meeting minutes has not found any noteworthy applications (Cloncurry Shire Council 2018c & 2018d).

Richmond Shire Council

No noteworthy town planning matters or development (Richmond Shire Council 2018).

Mount Isa City Council

In Mount Isa City, it was found that (Mount Isa City Council 2016b):

- 14 September 2017
    - MCU for Intensification of Existing Hard Rock Quarry (up to 1,000.000t) and Material Change of Use for Mobile Asphalt Plant over part of Lot 90 on Plan SP237661.
    - Council approved.