NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS

PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN : 671 139 843
M N/R
E : N/R @nigelfletcherassociates.com.au

Our Ref: 210173LET-03
Enquiries to: N/R

30th September 2025

Department Transport & Main Roads
South Coast Region,
Corridor and Land Management Team

Email: SouthCoast@tmr.qld.gov.au

Attention Mr Ken Jensen

Dear Ken

Re: ROSEWOOD WARRIL VIEW ROAD – CHRISTENSEN ROAD INTERSECTION UPGRADE WORKS
COUNCIL DA REF MCU 24/033
MT WALKER QUARRY COLEYVILLE HAULAGE ROAD
REF TMR24-042833

We are pleased to provide this submission is in response to Conditional Approval TMR24-042833 dated 2nd September 2025 The following responses are provided to condition2 relating Deign Amendments/Comments

Condition 2. 1) Width of shouklder at BAR treatment

GCE Contractors Pty Ltd prefer not to adopt the to the shoulder width reduction for the BAR treatment as suggested. This will provide additional runoff area and as you have suggested exceeds the AGRD requirements.

Condition 2. 2) Pavement at Bus Stop Bays

Pavement Type 4 has been removed from drawings C875_0 and C876_0 and Pavement Types 3 and 1 have been extended respectively to include the Bus Bay. This negates the requirement for additional subsoil drainage due to the pavement boxing and will simplify the earthworks and pavement construction.

Condition 2. 3) Roadside Hazard Risk Assessment

A Roadside Hazard Risk Assessment has been undertaken using the Risk Score Calculator tool Version 2.21 DTMR. The assessment was set up for the Southbound Through lane and the Channelised Left Turn lane based on a background hazard of trees with a trunk of 150-250 mm diameter and the proposed 1:4 batter V Swale modelled as an Isolated Hazard was assessed for Chainage 190m on a 250 m bend. No allowance was made for the culvert headwall as this will not protrude more than 100 mm above the batter surface.

Released under RTI - DTMR

The attached copy of the Risk Score Calculator output demonstrates the following Combined Risk Score for the submitted design.

Location	Road Chainage (m)	Combined Risk Score
Southbound Through Lane	190	0.445
Channelised Left Turn Lane	190	0.555

The assessment concludes that the combined risk score for the submitted road design is below the TMR threshold of 0.6.

We trust that this is satisfactory, should you require any additional information please do not hesitate to contact the undersigned on N/R

Yours faithfully

N/R

Nigel Fletcher & Associates

N/R

Director – Principal Engineer

Released under RTI - DTMR

Project:	**Mt Walker Quarry Haul Rd**
Road Name:	**Rosewood-Warrill Valley Rd**
Road ID:	**South 250-110 CHR**
Network Roadside Risk Intervention Threshold:	**0.6**

Group	Item	Measure	Input
General Road Characteristics	A	Terrain	Flat
	B	Environment	Rural
	C	Operating speed (km/h)	110
	D	Carriageway type	Undivided
	E	Number of the traffic lanes in the direction of travel	1
	F	Lane width	3.5 m and wider
	G	Design AADT (veh/day)	540
	H	Length of road section (m)	130
Particular Road Characteristics	I	Chainage where the roadside is assessed	190
	J	Side of travelled way	Left
	K	Grade	0.6%
	L	Curve radius (m)	250
	M	Curve direction	Right
	TA	Lateral width of the flat area (≤1:6) beside the traffic lane (m)	1

Group	Item	Measure	Hazard 1
Background Hazard Characteristics	N	Description (Leave blank if none)	Tree with a trunk of 150 to 250mm diameter
	AH	Trauma Index for background hazards at the operating speed of 110 km/h	3.10 3.1, similar to Trauma Index of Tree with a trunk of 150 to 250mm diameter
	O	Lateral distance to background hazards from the edge of the traffic lane (m)	15
Isolated Hazard Characteristics	P	Description (Leave blank if none)	V Drain 1:4 Foreslope 1:4 Backslope
	AK	Trauma Index for isolated hazards at the operating speed of 110 km/h	0.68 0.68, similar to Trauma Index of V Drain 1:4 Foreslope 1:4 Backslope
	TB	Do the isolated hazards shield the background hazard?	Yes
	Q	Length of the isolated hazards (m)	70
	R	Average distance between the isolated hazards (m)	130
	S	Lateral distance to isolated hazards from the edge of the traffic lane (m)	1
Exposure	T	Base exposure (encr/km/yr)	0.23
	U	Number of lanes factor	1.00
	V	Lane width factor	1.00
	W	Terrain factor	1.00
	X	Grade factor	1.00
	Y	Curve correction factor	4.00
	Z	Exposure (encr/km/yr)	0.91
Likelihood	AA	Likelihood for background hazards	0.193
	AB	Likelihood modification factor	0.323
	AC	Modified likelihood for background hazards	0.062
	AD	Likelihood of impacts with continuous isolated hazards	0.896
	AE	Likelihood of impacts with isolated hazards	0.607
	AF	Likelihood of a rollover	0.006
Severity (Trauma Index)	AJ	Trauma index for background hazards at the appropriate operating speed	3.100
	AL	Trauma Index for isolated hazards at the appropriate operating speed	0.680
	AM	Trauma Index for a rollover	0.63
Risk Score	AP	Risk Score for background hazards	0.176
	AQ	Risk Score for isolated hazards	0.375
	AR	Risk Score for rollover events	0.003
	AS	Combined Risk Score	0.555

RELEASED under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 3 of 300

Project:	**Mt Walker Quarry Haul Rd**
Road Name:	**Rosewood-Warrill Valley Rd**
Road ID:	**South 250-110 Through**
Network Roadside Risk Intervention Threshold:	**0.6**

Group	Item	Measure	Input
General Road Characteristics	A	Terrain	Flat
	B	Environment	Rural
	C	Operating speed (km/h)	110
	D	Carriageway type	Undivided
	E	Number of the traffic lanes in the direction of travel	1
	F	Lane width	3.5 m and wider
	G	Design AADT (veh/day)	540
	H	Length of road section (m)	130
Particular Road Characteristics	I	Chainage where the roadside is assessed	190
	J	Side of travelled way	Left
	K	Grade	0.6%
	L	Curve radius (m)	250
	M	Curve direction	Right
	TA	Lateral width of the flat area (≤1:6) beside the traffic lane (m)	4

Group	Item	Measure	Hazard 1
Background Hazard Characteristics	N	Description (Leave blank if none)	Tree with a trunk of 150 to 250mm diameter
	AH	Trauma Index for background hazards at the operating speed of 110 km/h	3.10 3.1, similar to Trauma Index of Tree with a trunk of 150 to 250mm diameter
	O	Lateral distance to background hazards from the edge of the traffic lane (m)	15
Isolated Hazard Characteristics	P	Description (Leave blank if none)	V Drain 1:4 Foreslope 1:4 Backslope
	AK	Trauma Index for isolated hazards at the operating speed of 110 km/h	0.68 0.68, similar to Trauma Index of V Drain 1:4 Foreslope 1:4 Backslope
	TB	Do the isolated hazards shield the background hazard?	Yes
	Q	Length of the isolated hazards (m)	70
	R	Average distance between the isolated hazards (m)	130
	S	Lateral distance to isolated hazards from the edge of the traffic lane (m)	4.5
Exposure	T	Base exposure (encr/km/yr)	0.23
	U	Number of lanes factor	1.00
	V	Lane width factor	1.00
	W	Terrain factor	1.00
	X	Grade factor	1.00
	Y	Curve correction factor	4.00
	Z	Exposure (encr/km/yr)	0.91
Likelihood	AA	Likelihood for background hazards	0.193
	AB	Likelihood modification factor	0.323
	AC	Modified likelihood for background hazards	0.062
	AD	Likelihood of impacts with continuous isolated hazards	0.611
	AE	Likelihood of impacts with isolated hazards	0.413
	AF	Likelihood of a rollover	0.024
Severity (Trauma Index)	AJ	Trauma Index for background hazards at the appropriate operating speed	3.100
	AL	Trauma Index for isolated hazards at the appropriate operating speed	0.680
	AM	Trauma Index for a rollover	0.63
Risk Score	AP	Risk Score for background hazards	0.176
	AQ	Risk Score for isolated hazards	0.256
	AR	Risk Score for rollover events	0.014
	AS	Combined Risk Score	0.445

RELEASED under RTI - DTMR

Bill of Quantaties (BOQ)

PROJECT: Rosewood Warrill View Rd - Christensen Road Rd intersection road upgrade.

CONTRACT NO:
VERSION: 1
DATE: 12/09/2025

CLIENT: Mt Walker Quarries Pty Ltd

A. SCHEDULE A: SITE ESTABLISHMENT & DEMOLITION	$	N/R
B. SCHEDULE B: BULK EARTH WORKS	$	
C. SCHEDULE C: STORMWATER DRAINAGE	$	
D. SCHEDULE D: ROAD WORKS & LINE MARKING	$	
Sub Total	$	
G.S.T. (10%)	$	
TOTAL	$	

COMPLETION TIME

SIGNATURE OF TENDERER

DATE

ITEM	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
A.	**SCHEDULE A: SITE ESTABLISHMENT & DEMOLITION**				
1	Prelimanaries including all incidentaks necessary to undertake works	Item	1 $	N/R	$ N/R
2	Provision of traffic including preperation of trafic management plans, trafic guidance schemes and construction management plans (TMP's, TGS's, CMP's) where required and implementation durring constructiom. Includingto allow for construction staging on Rosewood Warill View Road and working undernearth live overhead powerlines	Item	1 $		$
3	Council/ Quensland Polic Fees for Road closure application to the Scenic Rim Regional Council	Item	1 $		$
4	Temperary fencing as per TGS's	Item	1 $		$
5	Design, construction and certification of sediment and erosion management	Item	1 $		$
6	QA Compliance Testing	Item	1 $		$

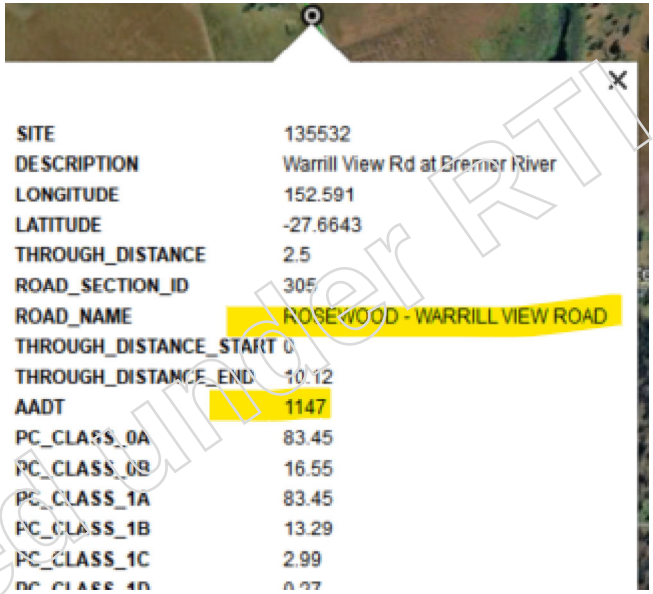
Released under RTI - DTMR

ITEM	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
B.	**SCHEDULE B: BULK EARTH WORKS**				
1	Cutting down trees, removing stumps and roots, backfilling voids and disposing of all arising off site	Item			
2	Clearing and grubbing of site				
3	Cut	m^3	N/R	$ N/R	$ N/R
4	Fill	m^3		$	$

ITEM	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
C.	**SCHEDULE C: STORMWATER DRAINAGE**				
1	RCBC 1200x600x2400	Item		$	$
2	375mm RCP '4' CULVERT (2.4m)	Item		$	$
3	450mm RCP '4' CULVERT (2.4m)	Item		$	$
4	450mm RCP '2' CULVERT (2.4m)	Item		$	$
5	375mm RCP '2' CULVERT (2.4m)	Item		$	$
6	RCBC 1200x600x1200	Item		$	$
7	375mm RCP '4' CULVERT (1.2m)	Item		$	$
8	450mm RCP '4' CULVERT (1.2m)	Item	N/R	$ N/R	$
9	450mm RCP '2' CULVERT (1.2m)	Item		$	$ N/R
10	375mm RCP '2' CULVERT (1.2m)	Item		$	$
11	Headwall RCBC 1200x600 Single Cell	Item		$	$
12	Headwall 375mm RCP x Single Cell	Item		$	$
13	Headwall 375mm RCP x Twin Cell	Item		$	$
14	Headwall 450mm RCP x Single Cell	Item		$	$
15	Rock Scour protection	m^2		$	$

ITEM	DESCRIPTION	UNIT	QTY	UNIT RATE	AMOUNT
D.	**SCHEDULE D: ROAD WORKS & LINE MARKING**				
1	Kerb and Channel	m		$	$
	Material beneath road surface				
	Pavement Section 1				
2	TYPE 2.1	m^3		$	$
3	TYPE 2.3	m^3		$	$
4	Class A1 embankment material min CBR 15 to MRT 504	m^3		$	$
	Pavement Section 2				
5	TYPE 2.1	m^3		$	$
6	TYPE 2.3	m^3		$	$
7	Class A1 embankment material min CBR 15 to MRT 504	m^3		$	$
	Pavement Section 3				
8	TYPE 2.1	m^3		$	$
9	TYPE 2.3	m^3		$	$
10	Class A1 embankment material min CBR 15 to MRT 504	m^3		$	$
	Pavement Section 4				
11	TYPE 2.1	m^3		$	$
12	Class A1 embankment material min CBR 15 to MRT 504	m^3	N/R	$ N/R	$ N/R
	Asphalt				
1	**Pavement Section 1**				
13	Primer	m^2		$	$
14	7/14mm Two coat spray seal	m^2		$	$
2	**Pavement Section 2**				
15	Primer	m^2		$	$
16	7/14mm Two coat spray seal	m^2		$	$
3	**Pavement Section 3**				
17	Primer	m^2		$	$
18	7/14mm Two coat spray seal	m^2		$	$
4	**Pavement Section 4**				
19	Primer	m^2		$	$
20	7/14mm Two coat spray seal	m^2		$	$
21	Line Marking	Ls		$	$
22	Signage	Ls		$	$

Released under RTI - DTMR



Released under RTI - DTMR

TRAFFIC MANAGEMENT PLAN (ROAD UPGRADE WORKS)

CHRISTENSEN AND ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER

Released under RTI - DTMR

Prepared By (Name): N/R
Position: TMD (Open) 963
Approved By (Name): N/R
Position: TMD (Open) 200
Date:14.04.2025

Signature:

Signature:

N/R

Table of Contents

AMENDMENT REGISTER 2
1. INTRODUCTION 3
2. GLOSSARY OF TERMS 3
3. KEY OBJECTIVES OF TRAFFIC MANAGEMENT PLAN 4
4. REFERENCED DOCUMENTS AND DATA 4
5. PROJECT BACKGROUND 4
5.1 EXISTING ROAD USERS 5
5.2 LOCATON OF PROJECT LOCATIONS 6
5.3 SCOPE OF WORKS 7
5.4 PROPOSED TRAFFIC CONTROL SETUPS 7
5.5 PROPOSED SCHEDULE OF WORKS 11
6. PROJECT CONTRACTOR'S DETAILS 12
7. TRAFFIC MANAGEMENT COMPANY DETAILS 13
8. PROJECT TRAFFIC TEAM 13
8.1 PRINCIPAL CONTRACTOR - GCE CONTRACTORS 13
8.2 PROJECT TRAFFIC TEAM STRUCTURE 14
8.3 PROJECT MANAGER N/R 14
8.4 SITE SUPERINTENDENT / SUPERVISOR 14
8.5 TRAFFIC MANAGEMENT DESIGNER (N/R 15
8.6 NOMINATED TRAFFIC OFFICER N/R 15
8.7 OPERATIONS MANAGER N/R 15
8.8 TRAFFIC CONTROLLERS 16
8.9 OUT OF HOURS REPRESENTATIVE 16
8.10 ALL SITE PERSONNEL 16
9. CONSULTATION AND COMMUNICATION PROCESS 16
9.1 KEY PARTIES 17
9.2 COMMUNICATION PROCESS 17
10. EMERGENCY SERVICES 17
11. CONTINGENCY PLAN 18
12. SPEED MANAGEMENT PLAN 19
12.1 SPEED SELECTION 19
12.2 RISK ASSESSEMENT 19
12.3 REMEDIAL ACTION 19
13. PLANNING CONSIDERATIONS 19
13.1 WORK AREA 20
13.2 WORK DURATION 20
13.3 AFTERCARE ACTIVITIES 20
13.4 SHIFT TIMING 20
13.5 PEDESTRIANS 20
13.6 TRAFFIC LANES RESTRICTION 20
13.7 PUBLIC TRANSPORT 20
13.8 PRIVATE DRIVEWAYS 20
13.9 DETOURING OF TRAFFIC 20

Released under RTI - DTMR

13.10 Queues, Delays and Monitoring 20
14. CONDITION OF LONG-TERM SIGNS 20
14.1 Mechanical condition 20
14.2 Cleanliness 21
14.3 Colour of fluorescent signs 21
15. POSITIONING OF SIGNS 21
16. TRAFFIC CONTROL DEVICES 21
17. ADVANCE WARNING SIGNAGE AND APPROACH TO WORK SITE 22
18. LIST OF TRAFFIC GUIDANCE SCHEMES 22
19. OPTION ANALYSIS - TRAFFIC TECHNIQUES TO BE CONSIDERED 22
19.1 VEHICULAR TRAFFIC 22
19.2 PEDESTRIANS 23
19.3 CYCLISTS (ON ROAD) 24
19.4 PUBLIC TRANSPORT 24
20. COMPLIANCE MANAGEMENT AND MONITORING PROCEDURES 25
20.1 RECORD KEEPING 25
20.2 INSPECTION PROGRAMME 25
20.3 COMPLAINTS REGISTER 25
20.4 INCIDENT MANAGEMENT 25
MOTOR VEHICLE ACCIDENTS 25

Released under RTI - DTMR

AMENDMENT REGISTER

ISSUE	DATE	SECTION	DETAILS
0	14.04.2025	All	Issue of Traffic Management Plan
1	21.05.2025	All	Amendment
2	03.06.2025	5, 6, 13, 19	Amendment
3	12.09.2025	5.5	Amendment

RTI-5755 Release.pdf - Page Number: 10 of 300

1. INTRODUCTION

The purpose of the Traffic Management Plan (TMP) is to identify and define the requirements, processes and responsibilities of the traffic management during “Road Upgrade Works” on Christensen Road and Rosewood Warrill View Road, Mount Walker in accordance with Austroads AGTTM and Queensland Standards QGTTM.

This TMP formulates the basis of the traffic guidance schemes required for this project which causes interference or obstruction to the normal use of a road by any road user. This TMP also offers guidance for planning, designing, installation and operation of all applicable TGSs together as well as provides all requirement for maintaining safe workplace for workers on project site.

This TMP identifies the detail of how the Road Upgrade Works will be integrated into the operation of the road network as well as how all road users will be accommodated to maintain road user safety and minimize disruption.

2. GLOSSARY OF TERMS

Here is the list provided of acronyms and their definition that is being widely used in this Traffic Management Plan:

AGTTM	Austroads Guide to Temporary Traffic Management
QGTTM	Queensland Guide to Temporary Traffic Management Nov 2024
MUTCD Part 3	Manual of Uniform Traffic Control Devices, Part 3, Issue dated Nov 2024
SRRC	Scenic Rim Regional Council
DTMR	Department of Transport and Main Roads
MRTS	Main Roads Technical Specification
QPS	Queensland Police Service
RPEQ	Registered Professional Engineer of Queensland
TMD	Traffic Management Designer
TGS	Traffic Guidance Scheme
TMP	Traffic Management Plan
TSB	Temporary Safety Barrier
WB	Westbound
NB	Northbound
EB	Eastbound
SB	Southbound
VMS	Variable Message Sign

Released Under RTI - DTMR

3. KEY OBJECTIVES OF TRAFFIC MANAGEMENT PLAN

Fundamental aim of this Traffic Management Plan during Road Upgrade Works on Christensen Road and Rosewood Warrill View Road is to provide a minimum impact on the road users and wider community and maintaining safety of the road workers. This Project involves the closure of Full Road and Half Road at a time for parking of trucks and other work machinery, and site access and egress or all together which has the potential to disrupt the normal traffic flow. Main objectives of this TMP are presented below:

- Minimize the risk of injuries or serious accidents to either the traveling public or Workers
- Safely control and provide for pedestrian access.
- Minimize traffic disruption and delays. A global approach is to be taken for the entire project i.e. some short-term delays may result in less delays at future stages.
- motorists in an attempt to provide a controlled informed approach to the Work Site.
- A target of zero complaints for the project duration.
- Timely and informed communication to all affected parties including local properties.
- Maintenance of traffic controls and equipment to be of a high standard with management strategies to track procedures put in place.
- To conform to Australian and Queensland Standards (AGTTM & QGTTM).

Following Steps and strategies have been implemented to meet TMP Objectives

- Provide desirable width of lanes on Christensen Road and Rosewood Warrill View Road, Mount Walker
- All road users are managed safely.
- The safety and amenity of road users and the public are assured
- Project being carried out in various work stages to reduce adverse impact on traffic.

4. REFERENCED DOCUMENTS AND DATA

The following documents have been utilised in the development of this TMP

- MUTCD Part 3: Works on Road Nov 2024
- Queensland Guide to Temporary Traffic Management (QGTTM) – Nov 2024
- Austroads Guide to Temporary Traffic Management (AGTTM) – Dec 2019
- Main Roads Technical Standards (MRTS02) Nov 2018
- Traffic and Road Use Management Manual (TRUM)
- Traffic Controller Accreditation Scheme Approved Procedure (TCAS/AP)
- Queensland Workplace Health and Safety Act and Regulation 2011
- Hazardous Manual Tasks Code of Practice 2021
- Queensland Transport Operations (Road Use Management) Act 1995
- Work, Health and Safety Act 2011
- TMR provided factsheets

5. PROJECT BACKGROUND

Christensen Road is low volume two-way roads which carries local traffic during the day and nighttime whereas Rosewood Warrill View Road contains both local as well as general traffic. Christensen road is a no-through road at one end and connects to Warrill View Road at another end. Further Warrill View Road connects traffic to Rosevale Road and Ebenzer Road. No footpaths or any other pedestrian facilities are available on either side of the Christensen Road

Released under RTI - DTMR

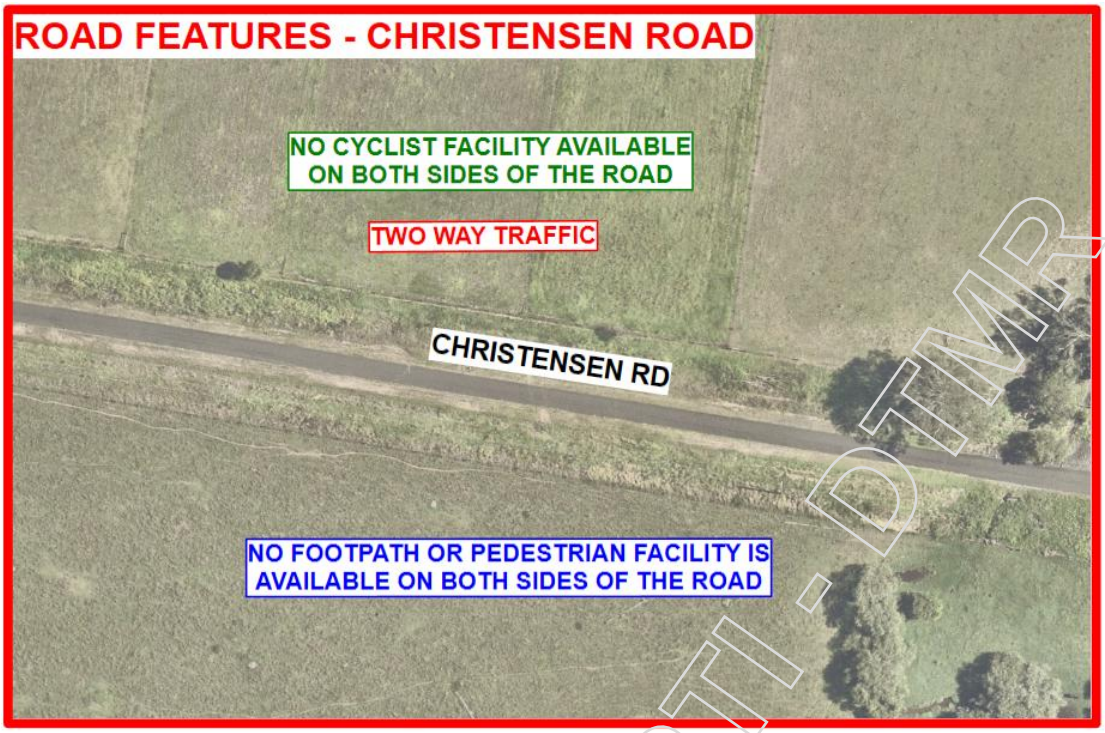
and Warrill View Road which means pedestrian movement will not be taken into consideration and like for like condition to be maintained. There is no designated Cycle Lane available on both sides of the road which means cyclists are expected to be sharing road with vehicles. Moreover, there is no Bus Stop or Public transport within the work zone or the closure that will be impacted during works. Relevant stakeholders and residential people must be notified in advance prior to works.

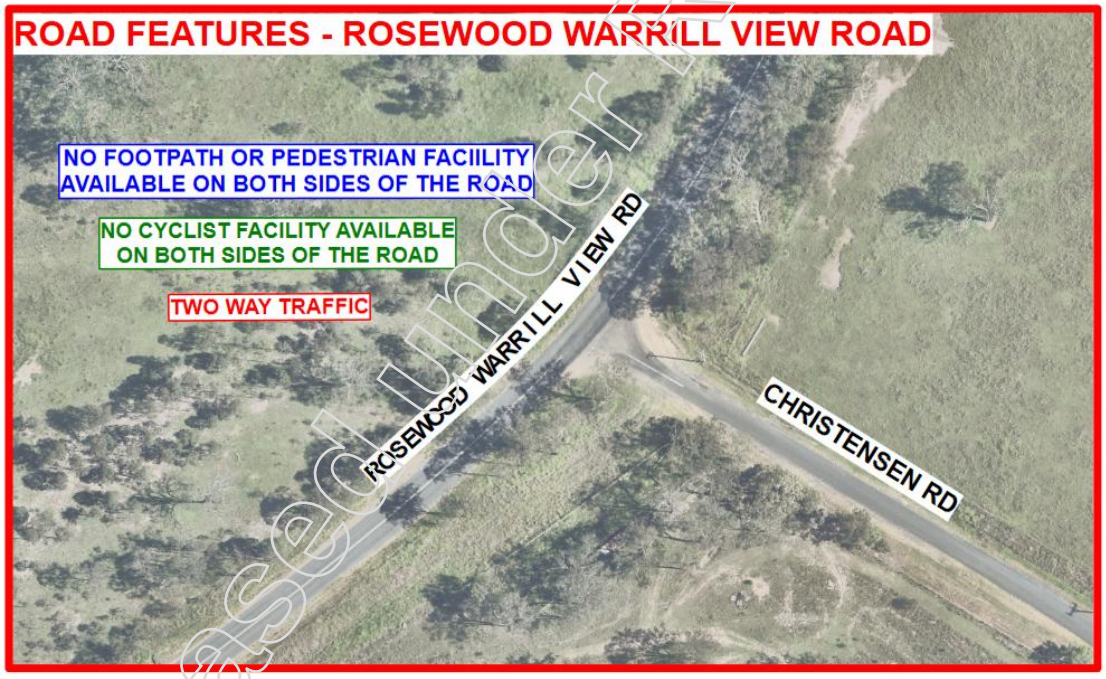
5.1 EXISTING ROAD USERS

- No footpaths or any other pedestrian facilities are available on either side of the Christensen Road or Warrill View Road
- There is no designated Cycle Lane available on both sides of these roads
- There is no Public / Tranlink Bus Stop available within the work zone or the closure that will be impacted during works. An existing school bus stop sign exist on western side of Rosewood Warrill View Road and Christensen Road intersection.

- Local Road Users

Released under RTI - DTMR





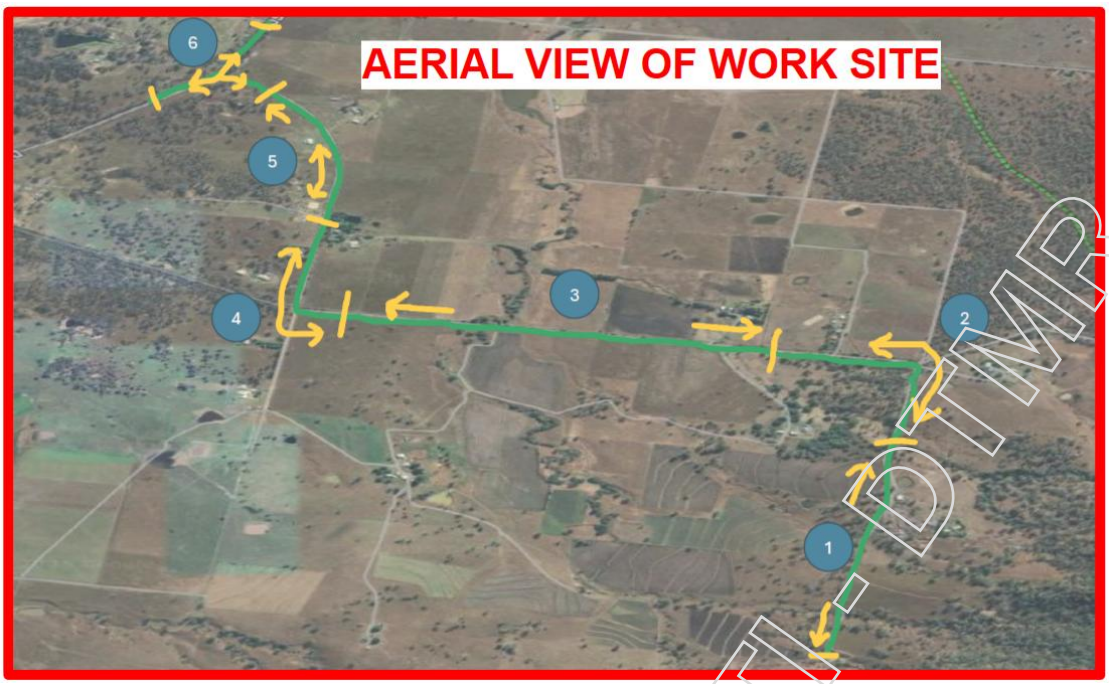
Released under RTI - DTMR

5.2 LOCATON OF PROJECT LOCATIONS

The Project Site is located at Christensen Road & Rosewood Warrill View Road

Cross Streets: P Griffiths Road - Murrays Crossing E Road

Suburb: Mount Walker, 4340



5.3 SCOPE OF WORKS

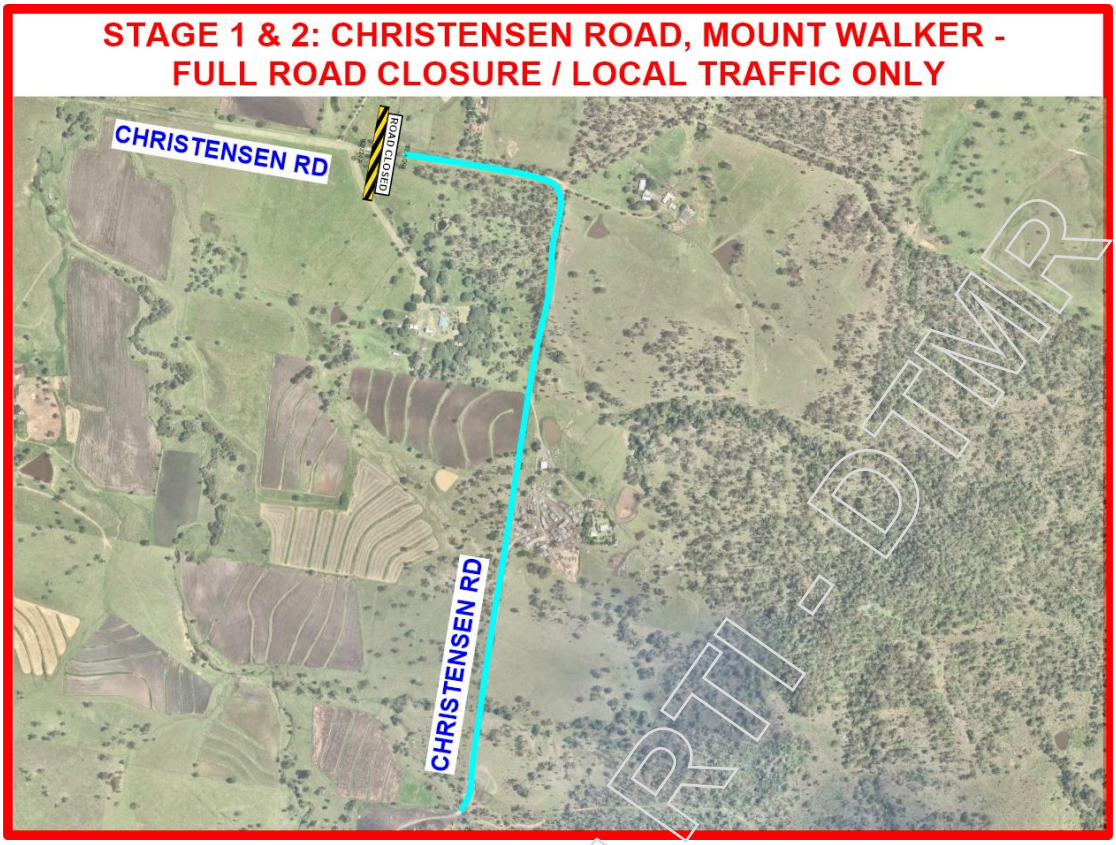
The scope of works includes:

- Excavation works
- Tree Clearing works
- Drainage works
- Breaking up the existing roadway, Reinstating the roadway, property driveways and culvert entries, asphalt and widening it to approximately 8m wide to make compliant for future use for quarry trucks

5.4 PROPOSED TRAFFIC CONTROL SETUPS

1. **STAGE 1 & 2: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)**
   - > Long Term Signs will be installed on permanent post for each of the stage 1 & 2.
   - > Full Road closure will take place.
   - > Works to take place in small sections withing the closure.
   - > Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
   - > Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
   - > Only few local properties. Access to all properties to be maintained at all times.
   - > TC to assist any local pedestrian around work zone
   - > Speed will be reduced to 60Km/Hr.
   - > Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
   - > Access to Emergency Services will be maintained at all times.
   - > Road will be opened up after hours.
   - > Worker (Symbolic) sign to be covered at the end of the shift.

Released under RTI - DTMR



2. STAGE 3: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)

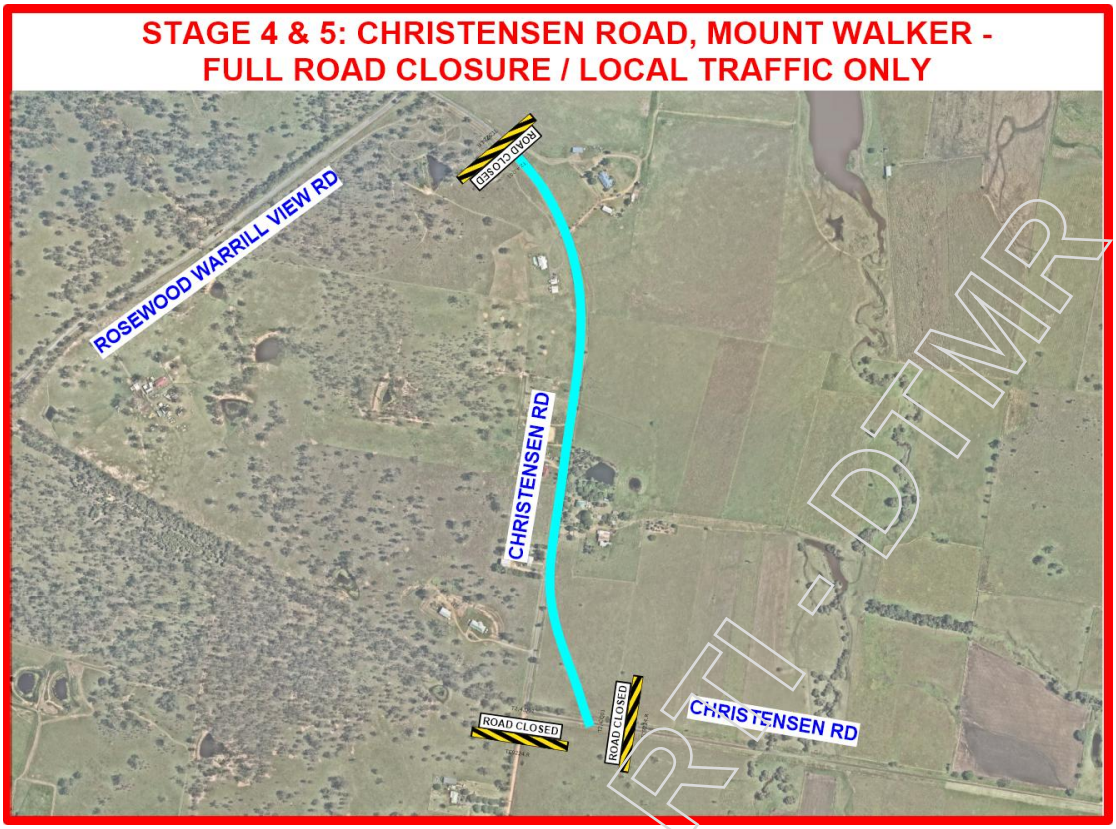
- Long Term Signs will be installed on permanent post for each of the stage 3.
- Full Road closure will take place.
- Works to take place in small sections withing the closure.
- Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
- Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
- Only few local properties. Access to all properties to be maintained at all times.
- TC to assist any local pedestrian around work zone
- Speed will be reduced to 60Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- Worker (Symbolic) sign to be covered at the end of the shift.

Released under RTI - DTMR

3. STAGE 4 & 5: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)

- Long Term Signs will be installed on permanent post for each of the stage 4 & 5.
- Full Road closure will take place.
- Works to take place in small sections withing the closure.
- Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
- Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
- Only few local properties. Access to all properties to be maintained at all times.
- TC to assist any local pedestrian around work zone
- Speed will be reduced to 60Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- Worker (Symbolic) sign to be covered at the end of the shift.

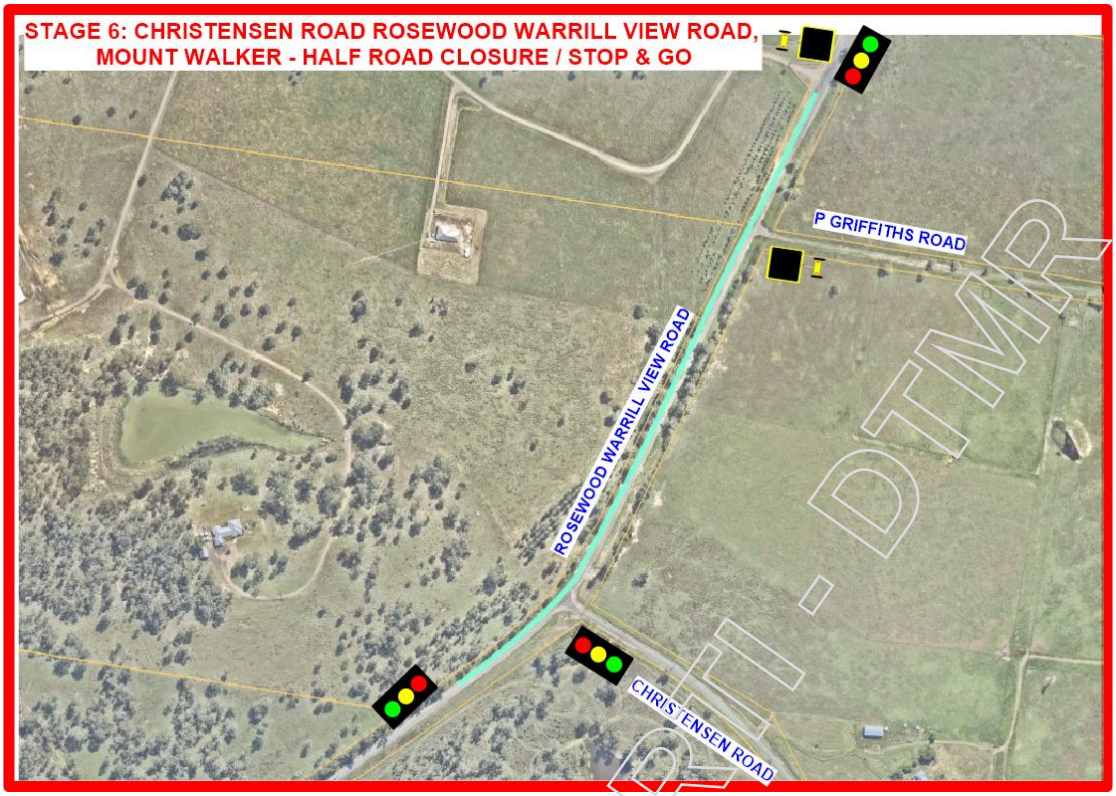
Released under RTI - DTMR

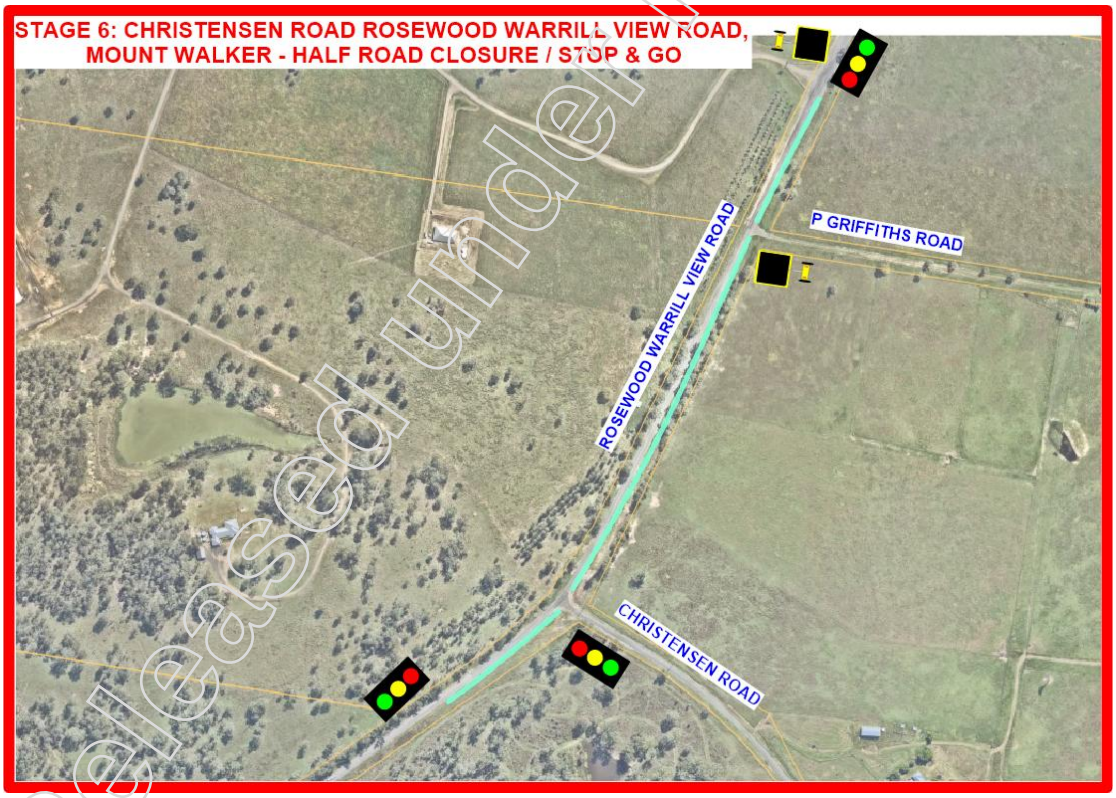


4. STAGE 6: CHRISTENSEN ROAD/ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER (HALF ROAD CLOSURE/STOP AND GO)

- Long Term Closure to take place. Long Term signs will be installed on the post for the duration of the stage 6.
- Lane closure will take place for 24/7.
- One side of the road to remain operational on Rosewood Warrill View Road at all times whereas one lane will be closed to park work vehicles, machineries and to carry out work safely.
- Shuttle flow will be implemented with automated Portable Traffic Lights performing stop and go on each approach.
- Speed will be reduced to 40Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- For managing driveways, smart VMS to be installed to notify residents exiting.
- Worker (Symbolic) sign to be covered at the end of the shift.

Released under RTI - DTMR





Released under RTI - DTMR

5.5 PROPOSED SCHEDULE OF WORKS

The proposed starting date of works has not been announce yet and will be as per the permits granted.

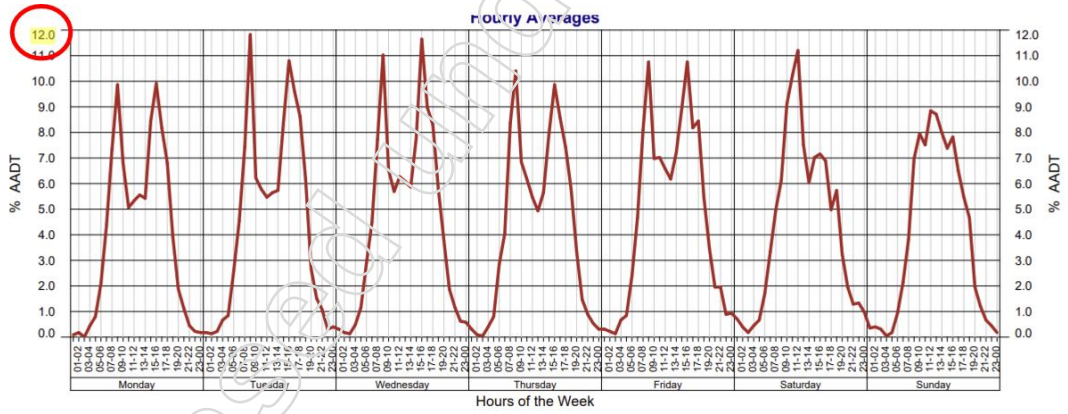
Working days and times will be night shifts from Sunday night through to a Thursday night - 6:00pm to 6:00am shifts. Day shifts from Monday morning through to a Saturday evening - 6:00am to 6:00pm shifts.

For Stage 6 during the implementation of Half Road Closure / stop and go setup, proposed timings are 6am-6pm based on the details below

- Lenth of Shuttle Flow = Approx. 800m
- As per AGTTM Part 3, for length 800m, VPH must be 300 below.
- Current AADT on Rosewood Warrill View Road as per TMR report 1147 (both directions)
- Peak VPH as per TMR report 12% of AADT anytime during the day which is 138 Vehicles per Hour which is less than 300m.
- Based on TMR provided data, that shuttle flow setup can be implemented at any hour of the day

Table 5.4: Maximum length of operation under shuttle flow

Traffic volume in both directions (vph)	Length of single lane section (m)
Residential street	60
701 - 800	70
601 - 700	100
501 - 600	150
401 - 500	250
351 – 400	400
301 – 350	600
≤ 300	800



6. PROJECT CONTRACTOR'S DETAILS

NAME OF PROJECT: **ROAD UPGRADE WORKS**

CONTRACTOR: **GCE CONTRACTORS**

ADDRESS: **55 MCDONALD ROAD, WINDSOR, QLD 4030**

ABN: **- 25 163 406 853**

CONTACT NO.: **(07) 3357 7430**

CONSTRUCTION TYPE: **ROAD CONSTRUCTION**

RTI-5755 Release.pdf - Page Number: 20 of 300

DATE OF COMMENCEMENT: **TBC**

DATE OF COMPLETION: **TBC**

PROJECT MANAGER: N/R

CONTACT NO.: N/R

7. TRAFFIC MANAGEMENT COMPANY DETAILS

TRAFFIC MANAGEMENT COMPANY: **TRAFFEX PTY LTD**

ABN: **57 141 899 952**

BUSINESS ADDRESS: **33 DULWICH STREET, LOGANHOLME**

CONTACT NO.: **07 3821 4522**

OPERATIONS MANAGER: N/R

CONTACT NO.: **07 3821 4522**

TRAFFIC MANAGEMENT DESIGNER: N/R

CONTACT NO: **07 3821 4522**

TRAFFIC MANAGEMENT IMPLEMENTATION OFFICER: **TBC**

CONTACT NO.: **TBC**

8. PROJECT TRAFFIC TEAM

8.1 PRINCIPAL CONTRACTOR - GCE CONTRACTORS

The Principal Contractor responsible for arrangements in accordance with the AGTTM & QGTTM need to be aware of their responsibilities for any injury to road users or damage to property as a result of such operations. In addition, the Principal Contractor also has an obligation to provide a safe event space that minimises the risk of injury to workers. To meet the requirements of WHS legislation the Principal Contractor must ensure they provide:

- Ensure compliance with the contract requirements.
- Safe working environment for workers.
- Safe passage for both pedestrians and road users.
- Works should be arranged to minimise – Disruption to established traffic movements and patterns
- Interference with traffic at peak movement periods,
- The amount of road closed at any one time

The management of the Principal Contractor's is committed to the principles and requirements of this Traffic Management Plan. This commitment will be demonstrated by:

- The usage of only accredited Traffic Controllers, approved signs and devices.
- Ensure all workers (including Traffic Controller) hold the required accreditation/ticket/competency for the tasks they are performing.
- Ensure that monitoring of on-site noise levels occurs so that they are kept at an acceptable level for all workers, residents and local businesses.

Released under RTI - DTMR

- Provide suitable communication between all on-site personnel (eg: Two-way Radio, etc.).
- Provide all means necessary to achieve a safe working environment.
- Continually review work procedures and practices.
- Provide clear directions and support in maintaining the objectives and standards set out in this Traffic Management Plan.
- Ensure all workers have access to and understand the requirements of the Traffic Management Plan.
- Ensure a site-specific induction is completed by all new on-site workers

8.2 PROJECT TRAFFIC TEAM STRUCTURE

8.3 PROJECT MANAGER N/R

The responsibilities of the Project Manager include;

- Project Manager, or delegated personnel when acting in role, will be the primary 24hrs/ 7day contact for all traffic related matters.
- Be familiar with the requirements of the TMP and internal traffic management system.
- Management of the traffic incident and emergency response procedures.
- Management of the communication with operational and community stakeholders.
- Management of the traffic management activities with supervisors.
- Maintenance of the operational and community stakeholder contact details.
- Maintenance of the out of hours contact representative details.
- Attend regular project and traffic meetings for the purpose of updating project team on programming and ensuring the requirements of TMP is met.

8.4 SITE SUPERINTENDENT / SUPERVISOR

The responsibilities of the Superintendent include;

- Reporting to Project Manager.
- Assist in the scoping of TGS's.
- Assist in the programming of TGS implementations.
- Supervision of worksite to ensure compliance and maintenance of TGS's.
- Coordination of immediate maintenance or repairs during working hours.

Released under RTI - DTMR

- Coordination of daily traffic routine tasks and recording keeping.
- Assist in the identification of non-conformances.

8.5 TRAFFIC MANAGEMENT DESIGNER N/R

The responsibilities of the Traffic Management Designer include;

- Providing TGSs of all project stages and a detailed TMP and make changes on TGSs and TMP as required with consultation with Project Manager.
- Obtaining Permits from the relevant authorities'/road asset owners including DTMR, Local Council and QPS.
- Obtain all information regarding project site either by a site visit or getting required information from Traffic Project Manager

For the certification of any innovations, alternatives or departures from standards which result in treatments other than specified in AGTTM/QGTTM, Registered Professional Engineer of QLD (RPEQ) will be engaged as the certifying engineer

The RPEQ will also certify risk assessments developed by Traffic Management Design personnel when preparing the TMP and TGS's for the following scenarios;

- When mandatory (shall) requirements are not adopted.
- When innovative treatments are proposed.
- If using more signs than required by AGTTM/QGTTM optimal treatment.
- Practice outside requirements or scope of AGTTM/QGTTM and/or TRUM manual.
- Changes outside requirements or scope of AGTTM/QGTTM and/or TRUM manual

8.6 NOMINATED TRAFFIC OFFICER N/R

The nominated traffic control officer shall meet the minimum training requirements of MRTS02 Table 5.2 and shall have sufficient experience in developing site specific diagrams.

- Nominated Traffic Officer when acting in role, will be the primary 24hrs/ 7day contact for all traffic related matters.
- Be familiar with the requirements of the TMP and internal traffic management system.
- Management of the traffic recording and reporting procedures.
- Management of the traffic incident and emergency response procedures.
- Management of the communication with operational and community stakeholders.
- Management of the traffic management activities with supervisors.
- Management of traffic non-conformances.

NTO's Email address: N/R @civforce.com.au and mobile number: N/R

8.7 OPERATIONS MANAGER N/R

The responsibilities of the Traffic Operation Manager include;

- Ensure that all personnel that will be working on project site are properly trained, licensed and know their traffic control duties.
- Management of the traffic recording, reporting and auditing procedures.
- Management of traffic non-conformances.
- Ensure that company has enough staff, vehicles and signage available on request.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 23 of 300

- Maintain a communication between Client working on the project and a Traffic Management Company.
- Provide all personnel with PPE.

8.8 TRAFFIC CONTROLLERS

Suitably qualified Traffic Controllers (with TMI qualification) from Traffex Company, an approved traffic management company (TMR Traffic Management Registration Scheme # 0317), will be utilised to implement TGS's including setting out and recovering of traffic control devices.

Traffic controllers will be utilised as necessary to monitor & manage traffic movements during partial and full road closure when required for the movement of plant or other work machinery with all traffic control operations to conform to QLD standards, TRUM and project specifications.

A traffic controller must

- Hold a current Traffic Controller Accreditation and have it all the times on work site
- Attend all pre start meetings
- Conduct daily site-specific risk assessment.
- Never use a mobile phone when actively controlling work site
- Be relieved from their duty after no more than 2 hours in accordance with the TCAS/AP

8.9 OUT OF HOURS REPRESENTATIVE

The responsibilities of the Out of Hours Representative include;

- Coordination of immediate maintenance or repairs during non-working hours.
- Notifications to the entire project team the repair extent, likely cause (where possible) and rectification works carried out

Out of Hours representatives for this project will be N/R with contact details as follows N/R

8.10 ALL SITE PERSONNEL

Continuous observation and reporting of any hazardous issues to their Superior

Note: All traffic management issues should initially be directed to the Traffic Officer Works Supervisor

9. CONSULTATION AND COMMUNICATION PROCESS

The following section outlines the key parties and the process of consultation that needs to be adopted to ensure sound communication and smooth running of the project with regards to the planning and implementation of the TGS's.

Traffic Guidance Schemes and Traffic Management Plan shall be submitted to the Authorising Authority for approval prior to implementation and notification shall be provided to the following stakeholders:

i. Scenic Rim Regional Council shall be advised of all impending changes to traffic conditions.
ii. Queensland Police Service permits must be obtained.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 24 of 300

iii. Emergency services shall be notified of changes to traffic conditions that may affect their route.

Complaints received from the general public will always be stored on a register and made available to the Administrator. If any actions are required because of the complaint, the site shall be tool boxed by GCE Contractors. Actions taken involve receiving clear concise details of the complaint, an analysis of site conditions by comparison to the relevant Traffic Guidance Scheme and rectification of any inadequacies. Actions also include reviewing TGS for suitability given the context of the traffic complaint. Where possible, feedback will be given to the party making the complaint about the nature of rectification.

9.1 KEY PARTIES

- Local Council: Scenic Rim Regional Council
- Principal Contractor – GCE Contractors
- QPS
- School to be communicated regarding the relocation of school bus stop.
- Emergency Services
- Waste Management Services

9.2 COMMUNICATION PROCESS

- Submit Project TMP and obtain approval from Authorising Authority
- Ascertain all key parties contact details.
- Submit Site Specific TGS
- Obtain acceptance of TGS & Permits
- Notify local residents
- Implement TGS
- Monitor TGS and notify Administrator if changes are required. Queue lengths of new traffic arrangement should be monitored and compared to existing queue lengths (prior to implementation of a new traffic arrangement). This should be performed during the first two days of a TGS Implementation.
- Continue with required monitoring for duration of TGS.
- Report any traffic incidents, accidents or complaints to the Administrator immediately. Maintain regular weekly reports on all Traffic Management issues.

10. EMERGENCY SERVICES

Notification of traffic changes, disruptions and lane closure (if required at any time during the project) will be provided to the emergency services 3 days prior to commencement of any works. In this project lane closure requirements have been identified.

IN AN EMERGENCY

- All affected works are to stop on footpath.
- Work Vehicles to stop working to ensure no hazard is proposed while emergency vehicles make it way next to the site. Traffic lanes will remain open.
- No driveway to be blocked by work vehicles at any time.
- Emergency services to be given full access through site.

Released Under RTI - DTMR

- Site Supervisor to implement full ERT plan.
- All workers to be moved to evacuation points.
- Radio communications to be kept to a minimum.
- All site vehicles (if possible, to do safely) to be removed from the site.
- Site Supervisor will authorise when to remove TC setup
- Site Supervisor to liaise with traffic management to ensure traffic can keep flowing if possible.
- Work does not recommence without clearance from emergency service personnel.
- Site Supervisor to report the emergency to the Project Manager as soon as possible.
- Emergency Vehicles are to be given priority through the work site during operations. The Project Manager is to inform emergency services if the project will impede Emergency Vehicle passage.
- Traffic controllers onsite, will facilitate the passage of emergency services through the worksite with minimal delay

11. CONTINGENCY PLAN

The table below demonstrates possible events requiring a contingency plan(s).

EVENT	CONTINGENCY
Traffic Controller on Site not feeling well to operate and implement TGS	Project Manager, Site Supervisor to contact Traffex immediately to replace TC.
Work Vehicle breakdown on an open lane blocking access to vehicles during lane closure	Project Manager to contact Tow Truck company immediately to move the vehicle off the work site and open lane for Vehicles.
TGS Inaccurate resulting in increased queue lengths	Contact TMD (Traffex Pty Ltd). TMI to count number of vehicles stopping on 2-minute holding time, and provide that data to TMD to make changes to the TGS
Lane closure blocked (eg: vehicle/plant breakdown)	Contact Project Manager (GCE Contractors) and TMD (Traffex Pty Ltd) to implement an alternate setup to avoid blockage
Special event day(s) – Christmas Holidays	No works to be carried out. Road must remain open during Christmas holidays
Traffic Accident on Site	Call Emergency Services (Police, Ambulance & Fire) and document the incident details and take pictures of the site
Traffic controller illness/injury during work hours	Project Manager and Supervisor to report it to Traffex Pty Ltd and take a proactive step to

Released under RTI - DTMR

	replace it with another Traffic Controller before any incident happens on Site
Work Overrunning	Project Manager to notify TMR & Scenic Rim Regional Council and provide updated work program. Relevant approvals must be obtained.
Theft and / or failure of traffic management devices	Any complaint will be documented, and a solution will be provided as soon as possible. In case of theft of delineation or traffic management devices, Traffex to be notified. A drive through check to be performed every hour during works to ensure delineation, signs are in proper arrangement as per the approved TGS.

12. SPEED MANAGEMENT PLAN

The objective of the Speed Management Plan is to achieve compliance by road users with the speed limits implemented on Christensen Road and Rosewood Warrill View Road as documented in the TGS. It documents all measures to be taken by the Contractor to achieve this outcome.

Where a temporary road work speed limit is in place for worker safety and traffic do not observe the speed limit, the Contractor's obligations under workplace health and safety regulations will not be met.

12.1 SPEED SELECTION

Road work speed limit selected during the duration of the work.

12.2 RISK ASSESSEMENT

Speed monitoring will be undertaken to check if implemented road work speed limit compliance is achieved or not. If is observed that vehicles do not observe posted speed limit during works and it is greater than 10Km/H above the posted roadwork speed, risk assessment will be undertaken to determine measures to mitigate the risks.

12.3 REMEDIAL ACTION

As a result of non-compliance of roadwork speed limit by traffic, remedial actions must be taken to ensure safety of workers and road users both.

- Additional warning signs will be used to alert drivers about the road working conditions on each approach and the posted speed limit during road works.
- Radar activated speed signs will be introduced to alert drivers going above posted speed limit
- QPS as last resort to ensure traffic observe the implemented work speed limit for the safety of workers especially during implementation of lane closure.

13. PLANNING CONSIDERATIONS

The following aspects need to be considered during the planning stages:

Released under RTI - DTMR

13.1 WORK AREA

Christensen Road and Rosewood Warrill View Road, Mount Walker

13.2 WORK DURATION

The proposed starting date of works has not been announced yet and will be as per the permits granted.

13.3 AFTERCARE ACTIVITIES

Long term signage will be installed which will stay on site during and after hours. Only change for outside of the work hours will be 'Worker (Symbolic)' sign will be covered at the end of every shift

13.4 SHIFT TIMING

Working days and times will be night shifts from Sunday night through to a Thursday night - 6:00pm to 6:00am shifts. Day shifts from Monday morning through to a Saturday evening - 6:00am to 6:00pm shifts

13.5 PEDESTRIANS

No Footpath or any other pedestrian facilities are available on either side of the Christensen Road or Warrill View Road. Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works

13.6 TRAFFIC LANES RESTRICTION

Contractor to meet Council permit requirements.

13.7 PUBLIC TRANSPORT

No public transport is available around the work area.

13.8 PRIVATE DRIVEWAYS

Arrangements must be considered and arranged to allow for garbage collection from properties on the designated days.

Access to local driveways to remain open.

13.9 DETOURING OF TRAFFIC

Currently there are no proposed detours that will be required during any stage of the project.

13.10 Queues, Delays and Monitoring

During periods of traffic stoppage, the time period (commencement to cessation) will be recorded.

Queue lengths have been calculated and adjusted in the TGS. Advance warning signage have been shown in the TGS as per AGTTM/QGTTM Part 3 Section 4.8

14. CONDITION OF LONG-TERM SIGNS

14.1 Mechanical condition

Items that are bent, broken or have surface damage should not be used.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 28 of 300

14.2 Cleanliness

Items should be free from accumulated dirt, road grime or other contamination.

14.3 Colour of fluorescent signs

Fluorescent signs whose colour has faded to a point where they have lost their daylight impact should be replaced.

15. POSITIONING OF SIGNS

Signs and devices should be positioned and erected so that:

(a) They are properly displayed and securely mounted.

(b) They are within the line of sight of the intended road user

(c) They cannot be obscured from view (e.g. by vegetation or parked cars)

(d) They do not obscure other devices from the line of sight of the intended road user

(e) They do not become a possible hazard to workers, pedestrians or vehicles

(f) They do not deflect traffic into an undesirable path.

(g) They do not restrict sight distance for drivers entering from side roads or streets, or private driveways

(h) They are not installed using supports that could be a hazard if struck by a vehicle.

Delineating devices (e.g. traffic cones, bollards, post mounted delineators) should generally be place1 m clear of the travelled path where practicable to define the edge of the travelled path or to separate opposing traffic.

16. TRAFFIC CONTROL DEVICES

The devices used must conform to the requirements of the MUTCD. For this project the following delineation or worker protection devices may be used:

- Temporary regulatory and/or special signage may be required on the project to alert motorists of advance traffic conditions and change driver behavior through the job site. Specific details of the selection of this signage shall be included on the traffic guidance scheme, for approval by the Authorising Authority prior to implementation.
- GCE Contractors shall submit to the Authorising Authority details of all proposed temporary regulatory signs. No temporary regulatory sign shall be erected until approval is received.
- The use of cones and temporary bollards to perform temporary closures within the work area during construction with or without the use of traffic controllers.
- Bunting may be used to delineate safe passages for pedestrians, with appropriate signage.

The method of isolation will be made clear on all Traffic Guidance Schemes. Local access for residents, the local community and business will also be made clear on the TGS, typically with work staged so that at least one access is maintained at all times.

Released Under RTI - DTMR

17. ADVANCE WARNING SIGNAGE AND APPROACH TO WORK SITE

The use of the appropriate signage to give approaching traffic enough time and information on the advancing work site can do much to reduce the chance of incidents within the work site.

This can be done as follows:

- Ensure sight distances to advance warning signage, is as per AGTTM/QGTTM.
- Ensure the appropriate selection of signage to best describe the work site.
- Ensure that the traffic can be encouraged to slow down to the posted speed limit with the use of visual aids. The most effective way is to make the lane width appear to reduce to the road user, without actually reducing the lane width. This can be done by closing up the shoulder width with delineation devices such as cones, bollards or barriers.

18. LIST OF TRAFFIC GUIDANCE SCHEMES

TGS Number	Description of TGS
TX3783-1	Christensen Road, Mount Walker (Stage 1 & 2) - (Full Road Closure/Local Traffic Only)
TX3783-2	Christensen Road, Mount Walker (Stage 3) - (Full Road Closure/Local Traffic Only)
TX3783-3	Christensen Road, Mount Walker (Stage 4 & 5) - (Full Road Closure/Local Traffic Only)
TX3783-4	Christensen Road Rosewood Warrill View Road, Mount Walker (Stage 6) - (Half Road Closure/Stop and Go)
TX3783-5	Christensen Road Rosewood Warrill View Road, Mount Walker (Stage 6) - (Half Road Closure/Stop and Go)
TX3783-6	Christensen Road, Mount Walker - (Short Term Low Impact Works)

19. OPTION ANALYSIS - TRAFFIC TECHNIQUES TO BE CONSIDERED

19.1 VEHICULAR TRAFFIC

Option		Features	Comment
Traffic around the worksite	Side-track	Insufficient road reserves available to build a Side-track so full carriageway closure can	Not Economical

Released under RTI - DTMR

		take place and workers have enough space to carry out works. Expensive for a contractor to build it as there are other economical options available.	Not Suitable
	Full Road Closure	Full Road Closure on Christensen Road to take place. However, because no general traffic will be impacted by the works, so there is no proposed detour required for this setup	**Adopted**
Traffic through the worksite		Not feasible due to the nature of works. Dangerous to allow traffic through work area.	Not Possible
Traffic past the worksite (Lane Closure / Stop and go)		During Lane Closure one lane will be closed to park work vehicles, machineries and to carry out work safely. Portable Traffic Lights will perform stop and go and only one direction of traffic will be allowed past work zone. Speed will be reduced to 40km/hr and advance signs will be installed prior to lane closure	**Adopted**
Contra-flow		Not required during this project	Not adopted

19.2 PEDESTRIANS

Option		**Features**	**Comment**
Around the worksite	Side-track	Insufficient road reserve available to install a side track for pedestrians and close the existing one to allow more space to the contractor. It's not required as part of scope of works and not economical feasible for the contractor.	Not Adopted
	Detour	When works will be carried out on one side of the footpath, pedestrians will be diverted on the other footpath to avoid any contact with construction machinery. TC to hold traffic in all directions to ensure safe crossing of pedestrians.	Not Adopted
Through the worksite		Not feasible due to the nature of works. Dangerous to allow pedestrians through work area.	Not Adopted
Past the worksite		During works, TC will escort pedestrians and assist them to walk past the work zone.	**Adopted**

Released under RTI - DTMR

	Pedestrians to be separated from works through Traffic Cones or Bollards.	

19.3 CYCLISTS (ON ROAD)

Option		Features	Comment
Traffic around the worksite	Side-track	Insufficient road reserve to install a side track, also it is not required as part of scope of works and not economical feasible for the contractor.	Not Adopted
	Detour	Not required as the Bikes will be able to use the same road area as other general vehicles	Not Required
Traffic through the worksite		Not feasible due to the nature of works. Dangerous to allow traffic through work area.	Not Adopted
Traffic past the worksite (Lane Closure/Stop & Go)		During lane closure work area to be delineated in such a way to ensure cyclists do not wander into the work area. Cyclist will merge with traffic as per normal condition to travel past work zone safely.	**Adopted**

19.4 PUBLIC TRANSPORT

BUS STOP CLOSURE	-	Not Required
BUS STOP RELOCATION	-	Not Required
RETAINING BUS STOP	No public transport or bus stop is located within the vicinity of the work zone. No data has been found on Translink Website. There is one school bus stop located west side of the Rosewood Warrill View Road intersection which will be temporarily relocated on southern side of the work zone during stage 6A	**Adopted**

Released under RTI-D EMR

RTI-5755 Release.pdf - Page Number: 32 of 300

20. COMPLIANCE MANAGEMENT AND MONITORING PROCEDURES

20.1 RECORD KEEPING

A set out of all temporary regulatory signage will be submitted with each detailed traffic guidance scheme for the staged Event processes for examination and comment by the project Authorising Authority.

Records of all temporary regulatory signs and changes to traffic control will be recorded and maintained by GCE Contractors.

20.2 INSPECTION PROGRAMME

All traffic control devices on site will be inspected once daily to ensure the adequacy of such devices and arrangements. This includes signage, bollards, cones, and traffic barriers. These inspections will be recorded, and any subsequent actions taken to rectify any inadequacies. To assist the person checking the signs a site plan should also be provided.

Visual daily checks during the construction will be conducted and the information and any subsequent action taken to rectify any inadequacies will be recorded on the daily inspection sheets.

20.3 COMPLAINTS REGISTER

A complaint register containing all complaints received and actions taken to address each complaint will be maintained.

20.4 INCIDENT MANAGEMENT

Emergency Incident Preparedness & Response Plan relates specifically to the event of a motor vehicle accident for on-site or in-queue traffic incidents. The procedure is as follows:

MOTOR VEHICLE ACCIDENTS

Risk assessment and procedure

1. Notify others onsite by two way radio
2. Risk assess the accident for hazards prior to tending patients (i.e. power lines, fuel etc.)
3. If minor risk, proceed with assistance.
4. If risk is high then secure area till services arrive.
5. Quickly assess if emergency services are required

Phone - 000 Service required - Fire Brigade

6. If someone is hurt, render assistance

Phone - 000 Service required – Ambulance

7. DO NOT attempt to move patients unless there is a threat of further danger (vehicle fire etc.)
8. If safe do so render assistance to injured patients
9. Attempt to keep the patient calm, reassuring assistance is on its way

Released under RTI - DTMR

10. On arrival of emergency services notify them of the number of injured patients and prominent dangers

11. Remain on the scene until released by the police

12. Once the incident has been managed and all works have been done to ensure safety to all persons involved, the Traffic Management Centre at Nerang and the Administrator is to be notified of any restrictions to road access, delays and potential detouring of traffic to manoeuver past the incident. The centre is also to be notified of any damage to road works and roadside installations caused by the incident.

13. The site is to be cleared of any disruptions to traffic flow. This may involve techniques including use of tow trucks to move broken down or damaged vehicles and persons. Where traffic flows are disrupted, implementation of emergency traffic control plans may be required with priority given to specific traffic streams as necessary.

14. Incident report to be developed including photographs of all relevant traffic controls near the incident location, to be approved by the Administrator.

NOTE: Where the accident causes a fire or there is the risk of a fire starting, if you have the appropriate extinguisher available (i.e. in plant or vehicle) are competent to operate it and it is safe to do so, attempt to extinguish the fire to prevent further damage.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 34 of 300

Construction

Management Plan

	Site Details
Principal:	GCE Contractors
Site Name:	Christensen Road & Rosewood – Warill View Road Intersection Upgrade
Project Number:	1007
Project Commencement Date:	December 2025
Issue Date:	19/09/2025

Released under RTI - DTMR

Name	Title	Contact Number
N/R	Managing Director Project Manager Project Engineer Contracts Administrator Site Supervisor	N/R

Revision History

Version	Date	Description	Compiled By
1	19/09/2025	Issued to DTMR	N/R
2			
3			

© 2025 GCE Contractors Pty Ltd

Reproduction of this document, in whole or in part, in any format or media is prohibited without express permission from the authorised Quality Representative of GCE Contractors.

This document is produced by GCE Contractors solely for the benefit and use by the client in accordance with the terms of the engagement. GCE Contractors does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by any third party on the content of this document.

This document is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified, and, for the purposes of this document, it is assumed that the information provided to GCE Contractors is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this document is accurate at the date of issue, changes may occur to the site conditions, the site context, or the applicable planning framework. This document should not be used after any such changes without consulting the provider of the document or a suitably qualified person.

Released under RTI - DTMR

Contents

1. Introduction 3
1.1 Background 3
1.2 Timing of the Works 3
1.3 Precedence 3
1.4 Project Contact Details 4
1.5 Responsibilities 4
1.5.1 Managing Director 4
1.5.2 Project Manager 4
1.5.3 Site Manager / Foreman 4
1.6 Relationship Scheme 4
1.7 Location of Site 4
1.8 Scope of works 5
2. Pre-Construction Activities 0
2.1 Preliminary Works 0
2.2 Management Systems 0
2.3 Protection of Persons and Property 0
2.3.1 Workplace Health and Safety 0
2.3.2 First Aid Facilities 1
2.3.3 Traffic Management 1
2.3.4 Quality Management 1
2.3.5 Environmental Management 1
3. Public safety, Amenities and Site Security 5
3.1 Site Plan 5
3.2 Disturbances 5
3.3 Protecting Existing Infrastructure 6
3.4 Site Office, Storage & Amenities 6
4. Construction hours 6
5. Project Specifics 6
5.1 Communication 6
5.2 Community 7
5.3 Stakeholders 7

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 37 of 300

5.3.1 Electricity ..... **Error! Bookmark not defined.**
5.3.2 Telstra ..... **Error! Bookmark not defined.**
5.3.3 Road Authorities ..... **Error! Bookmark not defined.**
5.4 Site Inductions 8
5.5 Supervision and Inspections 8
5.7 Mobilisation 9
5.8 Site Access 9
5.9 Tree Protection 9
6. Miscellaneous Works 5
6.1 Waste Fill 5
6.2 Snag List & Final Sign Off 5
6.3. Demobilisation 5
7. Environmental Risk Management 5
7.1 Stormwater and Sediment Control 5
7.2 Waste Management 5
7.3 Noise, Vibration & Dust Management 6
7.4 Spill Prevention and Hazardous Materials 6
7.5 Complaint Management 6
8. Traffic Management 5
9. Material delivery and storage locations 5
Appendix A – Site Layout Plan 5
Appendix B – Project Program 6
Appendix C – TGS & Permits 7
Appendix D – Stakeholder Consultation Plan 8

Released under RTI - DTMR

1. Introduction

1.1 Background

The purpose of this document is to detail how GCE intend on managing the construction of the Intersection upgrade on the Christensen Road and Rosewood – Warrill View Road as per Approval TMR24-042833.

The CMP integrates site-specific controls for traffic, existing asset protection, environmental management, and stakeholder communication. It also incorporates detailed site layout, and provides separate Traffic Management Plans (TMP) and Stakeholder and Communication Plan in the Appendix.

The works are programmed to commence following possession of site in December 2025, with completion targeted for late January / early February 2026. Activities will be sequenced to reduce concurrent high-impact operations and to maintain safe public movement in the vicinity of the works.

1.2 Timing of the Works

The Work is assumed to be executed as by the indicative table below:

Table 1: Timing of Works

Project	Christensen Road – Rosewood Warrill View Road Intersection		
Project Address:	Christensen Road – Rosewood Warrill View Road Intersection, Colleyville, 4307		
Start Date:	December 2025		
Practical Completion Date:	January / February 2026	Project Duration:	8 weeks

1.3 Precedence

The Specification Documentation contains a number of Standard Specifications and Standard Drawings within it and/or references to Industry Standard Specifications and Standard Drawings. Some of the requirements set out in some of Standard Specifications/Drawings may not be relevant to this contract and/or may be superseded by requirements set out in the Specification Documentation or the Drawings.

GCE will follow the order of precedence, unless the context requires otherwise, as follows:

1. Project Drawings;
2. The Specification Documentation;
3. Principals Standard Specifications or Documents;
4. Australian Standards.

Where materials requirements, workmanship standards, arrangements and the like are not specifically covered by items 1 to 3 above, then any applicable Scenic Rim Regional Council () Standard Drawings shall apply for Christensen Road and Department of Main Roads Standard Drawing for Rosewood – Warrill View Road. Any ambiguity, uncertainty, discrepancy etc., will be discussed with the Superintendent for clarification.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 39 of 300

1.4 Project Contact Details

Key Contact Details	Name	Number	Email
Managing Director	N/R		N/R @gcecontractors.com
Project Manager			N/R @gcecontractors.com
Project Manager			N/R @gcecontractors.com
Site Manager / Foreman			N/R @gcecontractors.com
Commercial Manager			N/R @gcecontractors.com

1.5 Responsibilities

1.5.1 Managing Director

The General Manager is responsible for ensuring all personnel are aware of their responsibilities to ensure that the project is completed safely, to a quality that is acceptable to the asset owners and does not result in damage to the environment. This will be completed by ensuring that adequate resources are made available, adequate training and communication is provided and quality, safety and environmental systems are in situ and implemented.

1.5.2 Project Manager

The Project Manager is responsible for day-to-day management of the project, meeting the expectations set on in the project schedule and budget. The Project Manager is also responsible for ensuring all relevant communication is made to project site personnel and also maintaining communication with relevant stakeholders (public, asset owners, government agencies, general road users, sub-contractors).

1.5.3 Site Manager / Foreman

The Site Manager / Foreman is responsible for ensuring all personnel are aware and understand their obligations under the Safety, Quality and Environmental Management Plans through the implementation of system tools, including but not limited to, SWMS, JHA's, safety observations, ITPs, site inspections, toolbox talks and daily pre-starts.

1.6 Relationship Scheme

This Construction Management Plan has been prepared by GCE Contractors (GCE) to identify construction activities and control measures. This will assist with maintaining high level communication and satisfying all key stakeholders, including impacted tenants. A copy of the CMP will be kept on site at all times during construction.

1.7 Location of Site

The Site location is identified in figure 1 below for reference, the works shall be carried out on (Ch. 0 – Ch. 80) Christensen Road – (Ch.34.56 – Ch. 392.37) Rosewood Warrill View Road Intersection.

Released under RTI - DTMR

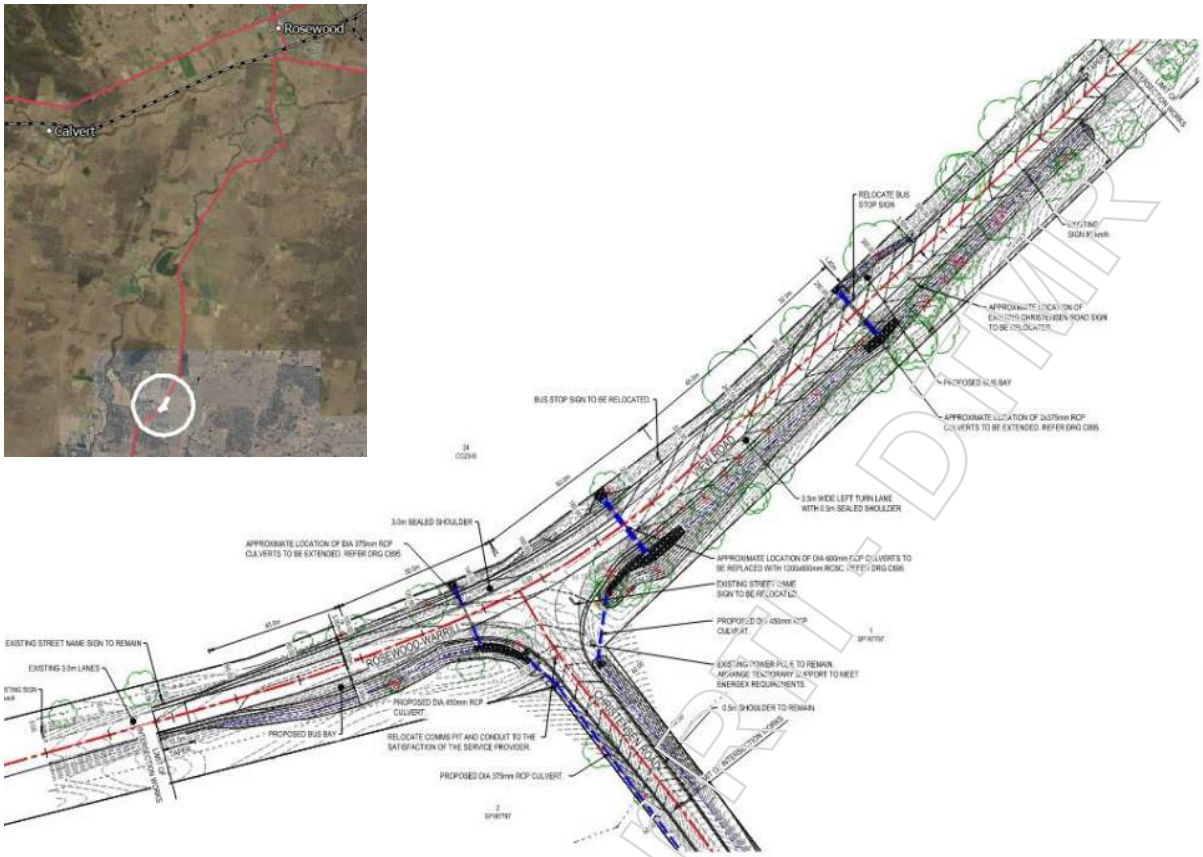


Figure 1 - Site location

1.8 Scope of works

- Service Identification and potholing
- Establishment and ongoing maintenance of erosion and sediment controls;
- Clearing and grubbing;
- Removal of existing sealed surfaces;
- Earthworks formation, including traffic lanes, batters, turn path widening and bus bay;
- Drainage line and stormwater infrastructure;
- Formation and compaction of pavement works;
- Sealing of roads trafficway and shoulder surfaces;
- Road sign installation;
- Line marking and installation of road furniture; and
- Reinstatement and rehabilitation of disturbed non-sealed areas.

Each stage will be planned and sequenced to minimise impact to the public utilising the roads wherever possible. The site layout, access points, and traffic management measures will be adjusted to suit the requirements of each phase, as shown in the relevant Traffic Guidance Schemes.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 41 of 300

2. Pre-Construction Activities

2.1 Preliminary Works

During the project initiation phase the preparation and approval of all site management plans including those outlined in the below table will be conducted:

Table 2: Summary of document submission dates and review periods

Document	Submission	Review period
Quality Management Plan	7 d after acceptance	7 days
Safety Management Plan	7 d after acceptance	7 days
(This) Construction Management Plan	7 d after acceptance	7 days
Traffic Management Plan	7 d after acceptance	7 days
Environmental Management Plan	7 d after acceptance	7 days
SWMS	7 d after acceptance	7 days
JHA	7 d after acceptance	7 days
Works Program (schedule)	7 d after acceptance	7 days

2.2 Management Systems

GCE has established management systems that will achieve compliance with the contract and to document such compliance. The Management System will include OH&S, environment and quality. Management systems or components thereof are:

- AS/NZS 4801: 2001 Occupational Health and Safety Management Systems;
- OHSAS 18001: 2007 Occupational Health and Safety Management Systems;
- ISO 9001:2015 Quality Management Systems;
- ISO 14001:2015 Environmental Management Systems;

The Management System is accredited by a recognised third-party assessor. Subcontractor's Management Plans shall be deemed to form part of the GCE Management Plan. GCE carries out its own audits of the Management System on a regular basis.

GCE shall maintain, readily accessible on site, all documentation and records as are necessary to provide objective information or evidence in support of the Works meeting the various requirements of the Project Specifications and shall make them available for inspection by the Superintendent upon request.

GCE core values are a commitment to achieving the highest possible standards in its health, safety and environment and community obligations. GCE's accredited Health, Safety and Environmental Management Plans and systems pursue a zero-harm policy to personnel, equipment and the environment.

2.3 Protection of Persons and Property

2.3.1 Workplace Health and Safety

GCE shall ensure that all work performed by workers and Sub-Contractors is performed in strict compliance with the most recent Workplace, Health and Safety Act, Workplace Health and Safety Queensland and other current legislative requirements, Construction Safety Rules, accepted Safety Standards and Codes,

Released under RTI DTMR

Principal's Safety Rules and Regulations, any direction of the Superintendent and in compliance with any Government or Local Regulations applicable from time to time.

GCE shall be responsible for and required to have read:

- The Principal's Health and Safety, Quality and Environmental policies; and
- The Workplace Health and Safety Act;
- The Workplace Health and Safety Act Regulations; and
- Relevant Workplace Health and Safety Queensland Codes of Practice.

2.3.2 First Aid Facilities

GCE will have on the site at all times appropriate first aid facilities and a member of staff fully qualified and experienced in occupational health and safety.

The provision of first aid by GCE personnel will not be less than that prescribed in the current Code of Practice for First Aid in the Workplace issued by Workplace Health and Safety Queensland.

GCE will provide notices giving the names and telephone numbers of at least two medical doctors practising in the vicinity of the Site and the telephone number of the local ambulance. These notices will be prominently displayed on the Site throughout the period of the Contract.

2.3.3 Traffic Management

GCE have developed a Traffic Management Plan which is Attached in Appendix C below for reference.

2.3.4 Quality Management

GCE has an established and accredited Quality Assurance System.

The Superintendent will assess the Quality Plan and return it to GCE within 14 days of receipt, together with any comments, requirements or amendments for inclusion in the Quality Plan. The Superintendent will continue to return to GCE within 14 days of receipt of the Quality Plan until such time as the Superintendent approves the Quality Plan in writing.

GCE will not commence the Works until the Superintendent has approved in writing the Quality Plan.

2.3.5 Environmental Management

GCE shall comply with all relevant and current environmental standards and codes of practice.

GCE will be responsible for all environmental management during construction including undertaking specific environmental management activities as required. Implementation of environmental management activities shall comply with the detailed provisions of the environment protection legislation as applicable, along with other relevant regulations/standards. The Superintendent will have a facilitator/auditor role with regard to the implementation of these activities by GCE.

GCE shall submit the Construction Environmental Management Plan/s to the Superintendent for approval. As a minimum this shall include method statements that address, meet or exceed the expectations to issues such as:

- Sediment and Erosion control measures (road cover, geofabric, soil binder, silt traps, coir logs, bunding around spoil locations etc);

Released under RTI - DTMR

- Maintenance of damage to the surrounding area;
- Removal of excess excavated material from the site;
- Vegetation protection and removal (where required as part of the works); and
- Reinstatement.

Released under RTI - DTMR

3. Public safety, Amenities and Site Security

A full-time competent supervisor will be on Site at all times whilst undertaking the works. Detailed Safe Work Method Statements (SWMS) for the High-Risk Construction work will be developed, approved, implemented and reviewed if necessary.

The Site Establishment Checklist will endure security of the Site is suitable. Monitoring of ongoing suitability is the responsibility of all project team members who will visually assess security daily and record inspections on checklists during routine monitoring.

3.1 Site Plan

This CMP includes a detailed site plan in Appendix A showing the arrangement of access points, facilities, and work zones. The plan has been prepared to clearly demonstrate how vehicle and pedestrian movements will be managed, where construction activities will be concentrated, and how public assets will be protected throughout the project. This visual reference ensures all parties, can confirm that site operations are organised to minimise impacts on adjoining properties, road users, and footpath users.

The site plan will identify:

- The secure site boundary.
- All approved construction access points.
- The vehicle shakedown area to prevent mud and debris being tracked onto public roads.
- Loading and unloading zones for deliveries and waste removal.
- Site office and amenities layout.
- Material storage areas located within the site boundaries.
- Designated construction-related parking areas.

The site plan will be updated promptly if there are changes to access points, staging, or site layout during the project.

3.2 Disturbances

Working in and around a live operational environment involving the public and multiple other businesses requires clear communication with stakeholders and detailed planning of construction activities to ensure there is minimum impact on the users of the facility. GCE Contractors will plan in conjunction with the client, superintendent and building/operations manager the public access and transport routes to ensure minimal disturbance to daily operations. Updates and changes to work zones areas will be communicated to and planned with stakeholders.

Notifications will be distributed to immediate neighbours as required, advising them of any works which may cause disruption to usual daily activities. There is not expected to be any noise above standard construction noise to complete the works.

Released under RTI - DTMR

3.3 Protecting Existing Infrastructure

GCE Site Manager will be responsible for the protection of all existing infrastructure bounding the site including underground services, council owned verges and footpaths, and established trees. A comprehensive survey along with dilapidation report will ensure that all services are located and any changes to surrounding infrastructure can be readily identified and remediated.

3.4 Site Office, Storage & Amenities

All amenities provided on site will comply with the Queensland Work Health and Safety Regulations. Site offices and welfare facilities will be positioned within a location that ensures safe pedestrian flow outside the site and optimises space for construction activities.

Material storage will be contained entirely within the approved site footprint or site compound. The GCE Site Manager will oversee the daily management of these areas, ensuring they remain tidy, organised, and compliant with relevant permits, and that no materials are stored outside approved zones.

Where possible, loading and unloading will occur from within the site boundary. If any loading or unloading is required outside the site boundary, a suitable Traffic Guidance Scheme (TGS) will be implemented in accordance with the approved Traffic Management Plan (TMP).

4. Construction hours

The Site hours generally be operational as per below:

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	Public Holidays
Start	7:00am	7:00am	7:00am	7:00am	7:00am	7:00am	No Work	No Work
End	6:00pm	6:00pm	6:00pm	6:00pm	6:00pm	1:00pm	No Work	No Work

Works to be completed within these hours are all general construction works required to complete the project inclusive of clearing, earthworks, pavement sealing, stormwater drainage infrastructure finishes and testing/commissioning works.

No early starts will be permitted unless pre-approved by Scenic Rim Regional Council.

5. Project Specifics

5.1 Communication

GCE will arrange a project pre-start meeting with the Principal to discuss logistics and required deliverables for this project. Verbal and written communication between GCE and the customer will occur regularly through the duration of the project. GCE shall provide a project program for the duration of the project and updates shall be provided accordingly. GCE'S current project program has been attached in Appendix B for reference.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 46 of 300

- A formal weekly site meeting will be held, chaired by the Principal's Representative and attended by Project Manager and or the Forman. Minutes of this meeting will be submitted for record keeping for all meetings.
- A 2 Week Look Ahead (2WLAH) will be provided at the end of every week detailing the upcoming works for the weeks ahead.

5.2 Community

GCE has strong pride in supporting local communities and involving them to support operations where possible. GCE also proposes to use local personnel as employees for the construction of this project where possible.

GCE intends to reduce the impact on local communities and ensure the safety and wellbeing of local residents through:

- Implement a detailed Traffic Management Plan that will include the erection of signage indicating disturbances to road activities due to construction transportation, (Refer to Appendix C)
- Letterbox drop notifications shall be issued to all affected residents a minimum of at least 3 business days prior to commencing works (Refer to Appendix D) for draft copy of the letter of notification.
- Include in the TMP the dangers of construction vehicles approaching the site compound.
- Site security and making safe of open excavations during non-working hours will comply with industry best practice with suitable signage and barriers to prevent the public from entering the works.

5.3 Stakeholders

Authorities with assets in the vicinity of the Works include the following:

Table 3 - Stakeholder Asset Identification

Authority / Asset Owner	Assets	Coordination Requirements
Urban Utilities	Not present	N/A
Energex	Overhead and underground electrical infrastructure	Undertake Dial Before You Dig (DBYD) checks. Maintain exclusion zones around live assets. Coordinate any planned outages or relocations in advance.
Telecommunications Providers	Telstra, Optus, NBN, AARNet, Nextgen, Reef Networks, TPG, Vocus, and BCC fibre optic networks	Confirm location of underground and pit-mounted services before excavation. Maintain access to pits. Notify providers if protection measures or temporary relocation are required.
APA Group	Not present	N/A
Scenic Rim Regional Council	Stormwater drainage infrastructure, road pavements, kerbs, footpaths, street trees, street lighting, traffic control devices, parking control signage, and line marking	Obtain permits for temporary removal of parking or signage. Protect stormwater pits and tree root zones. Reinstate pavements, kerbs, and line marking to SRRC standards after works.

Released under RTI - DTMR

Department of Transport and Main Roads (DTMR)	Traffic signals and regional transport infrastructure	Coordinate with DTMR for works affecting traffic signals or state-controlled roads. Notify of any line marking or intersection works. Obtain required traffic permits before commencement.

5.4 Site Inductions

GCE will complete the Contractor induction. Prior to mobilisation, all GCE and subcontractor staff will receive a site-specific induction, which will detail all safety and environmental hazards, rules and regulations. These regulations will include exclusion zones around specific areas, and procedures to be undertaken if working near or within these areas. Additionally, all guest personnel whom will attend any site on this project will complete a site-specific induction prior to commencing any field activities.

5.5 Supervision and Inspections

GCE shall provide the Superintendent not less than five (5) clear working days' notice of intention to perform works that generally require inspection such as:

- Demolition works;
- Earthworks;
- Pavement and Surface Sealing;
- Installation of stormwater drainage.

GCE acknowledges that the Principal will nominate a Representative who shall be the main point of contact for GCE, undertake regular inspections and is responsible for certification of the works and review and valuing of claims.

GCE will have established Inspection and Test Plans (ITP) consistent with the Quality Assurance Plan, the proposed construction schedule and the nominated Hold points. GCE understands that the Principal or it's Representatives(s) may also undertake other site inspections of the works e.g. for general progress, quality of work and compliance with design, and compliance with work method statements and work permits.

5.6 Procurement

All materials, plant, equipment and resources required to execute this project in a safe and timely manner shall be sourced as locally as possible to support local businesses and to reduce cost, lead times and travel times which minimises the risk of fatigue.

GCE shall provide all warrantees and guarantees of plant and equipment, supplied under the Contract, to the Superintendent prior to Practical Completion. All materials supplied shall be new and conform to the Specification Documentation and relevant Australian Standards.

GCE shall install all plant, equipment and materials in accordance with the manufacturer's recommendations. Material shall be adequately packed for transport and delivery to minimise the risk of damage to persons or property.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 48 of 300

5.7 Mobilisation

Upon mobilisation, all plant and equipment shall be inspected, and risk assessed. All plant operators shall undergo a Verification of Competency (VOC) to ensure safety. Plant and equipment being delivered to site will be coordinated with GCE's safety management team and site access as per approved TMP.

5.8 Site Access

Site compound & layout plans are attached in Appendix A below for reference to accommodate each staging of works.

Access points will be clearly signed, gated, and monitored to prevent unauthorised entry. All site entrances will display appropriate safety and warning signage in accordance with MUTCD requirements. Traffic Control be managed as per TGS and Traffic Control Plan to minimise disruption to the public utilising the road and maintain safety.

All personnel entering the principal-controlled site must hold:

- A valid Principal General Induction.
- A site-specific induction.
- GCE's in-house induction.
- Relevant and current licences or certifications to operate any plant or equipment required for their work.

Only inducted and authorised personnel will be permitted entry to the site.

5.9 Tree Protection

GCE will minimise damage to and removal of existing trees as far as practicable.

GCE shall protect indigenous trees identified for protection if indicated as such on the Drawings.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 49 of 300

6. Miscellaneous Works

6.1 Waste Fill

Waste Fill will be removed from site immediately and transported to a waste facility which has been nominated and approved to accept the fill.

6.2 Snag List & Final Sign Off

A full site clean-up and final reinstatement will ensue the primary construction phase. A final site inspection by the Principal representatives will be carried out and GCE will complete any punch list items still outstanding. GCE will fully demobilise all plant, machinery materials and personnel upon the final sign off by the Principal.

6.3. Demobilisation.

Upon receiving notice from the Superintendent at the completion of the Contract, GCE shall immediately remove the site establishment including sheds, fuel, water reservoirs, surplus materials, rejected or spilled concrete and toilet facilities and restore the surfaces occupied or disturbed, including temporary access tracks, to their original condition and to the satisfaction of the Superintendent. Demobilisation of plant and material shall be coordinated with GCE's safety management team and as per the approved TMP.

Released under RTI - DTMR

7. Environmental Risk Management

GCE Contractors will manage all environmental risks in accordance with statutory requirements, project-specific environmental documentation, and industry best practice. Environmental management will be underpinned by a CPESC-certified Erosion and Sediment Control (ESC) Plan, a Project Risk Assessment, and GCE's internal Environmental Management System.

All works will be planned and executed to:

- Prevent pollution and protect sensitive environmental receptors.
- Avoid contamination of stormwater systems.
- Protect and retain existing trees and vegetation unless removal is formally approved by DTMR and Scenic Rim Regional Council.
- Reduce waste generation through reuse and recycling initiatives.

A Project Risk Assessment has been prepared, identifying key environmental risks including waste control, pollution, noise, vibration, dust generation, and potential acid sulphate soils. Controls detailed in this CMP, the ESC Plan, and the Project Risk Assessment will be implemented and monitored for compliance.

7.1 Stormwater and Sediment Control

Erosion and sediment control measures will be implemented to prevent or minimise sedimentation in waterways external to the work site. These measures will comply with:

- Transport and Main Roads Specifications MRTS52 – Erosion and Sediment Control
- Scenic Rim Regional Council standards.
- International Erosion Control Association Australasia (IECA) Best Practice Guidelines.
- The Environmental Protection Act 1994.

Key controls include:

- Installation of sediment fences, silt traps, and inlet protection devices before ground disturbance.
- Protection of drainage pathways with appropriate ground cover and sediment discharge controls.
- Use of bunding and containment to prevent sediment-laden water leaving the site.
- Prohibition on dewatering directly into Council's stormwater network or overland flow paths unless water quality is treated to acceptable standards.

The ESC Plan will be prepared by a Certified Professional in Erosion and Sediment Control (CPESC). The GCE Site Manager will oversee compliance, and all subcontractors will be inducted on ESC requirements.

7.2 Waste Management

Waste will be managed in accordance with GCE's Waste Management Policy and relevant legislation. Measures include:

Released under RTI - DTMR

- Onsite segregation of waste streams (e.g., metals, timber, concrete, general waste).
- Recycling or reuse of materials where feasible.
- Disposal of residual waste to licensed facilities only.
- Secure storage of waste to prevent windblown litter and unauthorised access.
- Immediate removal and safe disposal of hazardous or contaminated materials in accordance with legislative requirements.

7.3 Noise, Vibration & Dust Management

Noise, vibration, and dust will be controlled to protect the amenity of surrounding properties:

- Noise – Limiting noisy works to approved hours, using acoustic barriers, and maintaining plant and equipment.
- Vibration – Monitoring high-vibration activities to ensure compliance with relevant thresholds, particularly near sensitive structures.
- Dust – Suppressing dust via water misting, minimising exposed soil, and covering loads during transport.

Sensitive receivers (e.g., schools, residences, aged care facilities) will be identified, and controls adjusted to minimise impacts.

7.4 Spill Prevention and Hazardous Materials

Procedures will be in place to prevent and respond to spills of fuel, oil, or chemicals:

- Spill kits located at key points around the site.
- Bunded storage for fuels and hazardous liquids.
- Immediate containment and clean-up of any spill, with disposal of contaminated material via licensed contractors.

7.5 Complaint Management

A Complaints Register is to be maintained, recording the date, name and contact details (where supplied), and nature of the complaint. All complaints are to be acknowledged within 24 hours and reviewed within 3 working days. All complaints recorded are to be closed out, acknowledging whether they were either frivolous, or the corrective action taken to resolve the complaint. Where the complaint is deemed to be factual, an incident report is to be completed and forwarded to the Administrator.

7.6 Environmental Monitoring and Reporting

- Routine Inspections – The Site Manager will carry out daily visual inspections of ESC measures, waste storage areas, and dust/noise controls.

Released under RTI - DTMR

- Formal Audits – Weekly environmental compliance audits will be documented and reported to the Superintendent.
- Corrective Action Tracking – All non-conformances will be recorded, assigned actions, and followed up until closed.
- Monthly Reports - Monthly reports will be completed by the 5th of each month for the previous calendar month and submitted to the Administrator. The template for the report is to be as per Technical Specification Appendix, MRTS51 Environmental Management -- Form A.
- Incident Reports - Incident reports will be completed within 24 hours for high risk incidents and 3 days for medium and low risk incidents and submitted to the Administrator. The template for the report is to be as per Technical Specification Appendix, MRTS51 Environmental Management – Form B
- Waste Tracking - All waste streams and volumes are to be recorded and shall record wastes generated, disposed, recycled and reused and Recycled Materials and Products utilised by the Work under the Contract in the Waste 2 Resource Calculator. All Surplus Materials are to be recorded using the Form C - Contractor's Declaration for Deposition of Surplus Material template (refer Appendix D). All regulated waste must be removed by a licence regulated waste contractor and recording using the DETSI Waste Tracking Certificates.
- Water Quality Monitoring - Water Quality Monitoring shall be recorded using the GCE-EMP-003 [B] Permit to Discharge, with a spreadsheet register also recording the climatic conditions and received rainfall.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 53 of 300

8. Traffic Management

A project-specific Traffic Management Plan has been developed by GCE Contractors in consultation with an accredited Traffic Management Designer. This plan outlines how construction-related traffic will be managed to maintain safe movement for vehicles, cyclists, and pedestrians.

The TMP includes:

- Access and egress arrangements.
- Temporary Traffic Guidance Schemes (TGSs) for each construction stage.
- Controls for road closures, including diversion signage.
- Delivery scheduling to avoid peak traffic periods.

Any loading or unloading activities outside the site boundary will be carried out in accordance with a suitable TGS developed under the approved TMP.

9. Material delivery and storage locations

GCE Contractors will include within Subcontractor and supplier contract scope of works the importance of notifying and coordinating deliveries to Site, and the requirement to use the smallest possible vehicle appropriate for the delivery.

All Materials unloading and loading shall occur from within the Site boundary, where possible, with concrete pumping, crane erection and other oversized deliveries occurring within the street. GCE Contractors will engage a traffic guidance professional to develop, obtain all necessary council permits and approvals and manage the traffic and pedestrian control process to minimise disruption and facilitate the sage movement of pedestrians around the site.

All trucks that are required to back into, or out of, the Site will be escorted under supervision. Larger trucks will be required for reinforcement delivery and during concrete pours. Large concrete pours will require a considerable amount of truck movements within the existing operational carpark. Haulage routes will be coordinated and agreed with the operations manager. GCE Contractors will provide supervision and traffic control during building activities that require increased truck movements. Suitable signage and controls will be in place to ensure public and buildings users safety.

Released under RTI - DTMR

Appendix A – Site Layout Plan

Released under RTI - DTMR

N

LEGEND

- EXISTING CONTOUR
- EXISTING FENCE
- EXISTING TELSTRA
- EXISTING TELSTRA PIT
- PP EXISTING POWER POLE
- EXISTING EDGE OF BITUMEN
- EXISTING TREES
- EXISTING TREES TO BE REMOVED

DEMOLISH AND REMOVE EXISTING HEADWALLS

DEMOLISH EXISTING PAVEMENT AND STOCKPILE SUITABLE GRAVEL AS FILL SUBJECT TO GEOTECHNICAL INSPECTING ENGINEERS ADVICE.

Site Boundary

24
CC2345

VIEW ROAD

DEMOLISH AND REMOVE EXISTING STORMWATER PIPES AND HEADWALLS

Temporary Pipe Storage Area

1
SP187797

DEMOLISH EXISTING PAVEMENT AND STOCKPILE SUITABLE GRAVEL AS FILL SUBJECT TO GEOTECHNICAL INSPECTING ENGINEERS ADVICE.

LIMIT OF INTERSECTION WORKS

ROSEWOOD-WARRILL

CHRISTENSEN ROAD

DEMOLISH AND REMOVE EXISTING HEADWALLS

RELOCATE COMMS PIT AND CONDUIT TO THE SATISFACTION OF THE SERVICE PROVIDER.

2
SP187797

Site Access Point

Plant Shakedown / Rocked Entrance Point

Site Office located at 347 Christensen Road

NOTE: CONTRACTOR SHALL PROVIDE ALTERNATIVE BUS STOPS DURING CONSTRUCTION WORKS.

TMR REVIEW

SCALE 5 0 5 10 15 20 25 (metres)
1 : 500 AT A1 (1 : 1000 AT A3)

FILENAME: N:\371\01 Vol\cad\Vol052 - SUB\SUB025\SUB025004 INF\422023 Mt Walker Quarry Access Rd\03_Civil\05_DA\Rev A\02_Acad\C820 DEMOLISH LAYOUT PLAN.dwg

PLOTTED: 28 Jul 2025

GCE CONTRACTORS

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
C	TMR IR RESPONSE	NF	28.07.25
B	TMR REVIEW	NF	25.03.25
A	DETAIL DESIGN	NF	23.12.24

COPYRIGHT ©
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN: 671 130 843
N/R

PROJECT:
MT WALKER QUARRY ACCESS ROAD INTERSECTION UPGRADE ROSEWOOD-WARRILL VALLEY VIEW ROAD AT CHRISTENSEN ROAD

DRAWING TITLE :
DEMOLITION LAYOUT PLAN

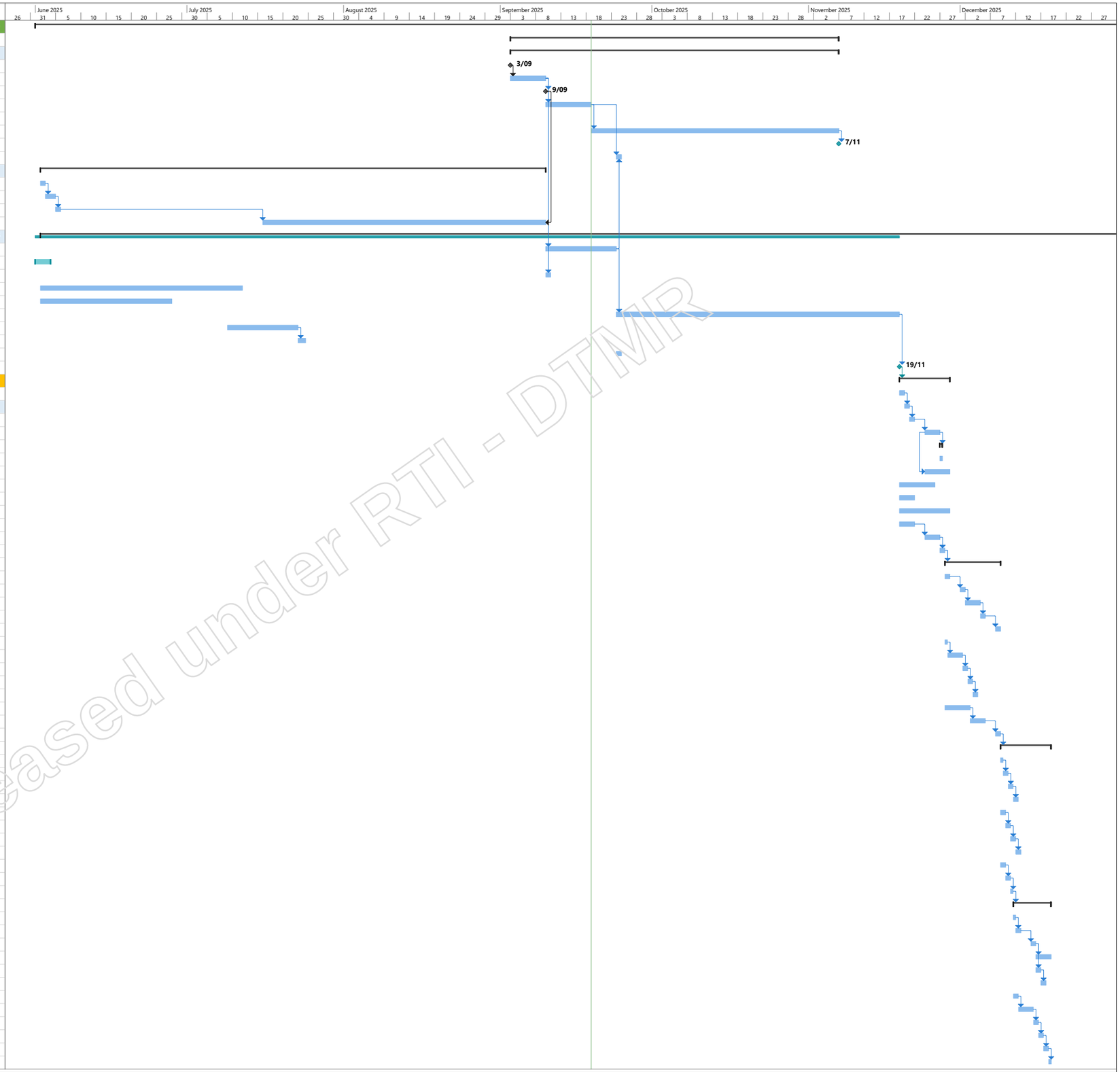
DEVEL. APPLIC. No. :		DATE : JUL 2025
PROJECT LEADER : NIGEL FLETCHER	DESIGNER : TG	
DRAFTSPERSON : TB	CHECKED : NIGEL FLETCHER	
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES. N/R	RPEQ No. : 10888	
SCALE : AS SHOWN	DATUM : AHD	FULL SIZE : A1
PROJECT No.: 210173P	DRAWING No. : C820	VERSION: C

RTI-5755 Release.pdf - Page Number: 56 of 300

Appendix B – Project Program

Released under RTI - DTMR

ID	Task Mode	Task Name	Duration	Predecessors	Start	Finish
1		**Intersection pavement DTMR**	**228 days?**		**Sun 1/06/25**	**Wed 15/04/26**
2		**Pre-Construction**	**47 days**		**Wed 3/09/25**	**Fri 7/11/25**
3		**Roadway design approval**	**47 days**		**Wed 3/09/25**	**Fri 7/11/25**
4		Nigel fletcher design (DTMR)	0 days		Wed 3/09/25	Wed 3/09/25
5		GCE design review (Nigel fletcher)	5 days	4	Wed 3/09/25	Tue 9/09/25
6		Review of design (DTMR)	0 days	5	Tue 9/09/25	Tue 9/09/25
7		Nigel to action design changes	7 days	5	Wed 10/09/25	Thu 18/09/25
8		CBR				
9		DTMR operational works submission	35 days	7	Fri 19/09/25	Thu 6/11/25
10		Receive OPW	0 days	9	Fri 7/11/25	Fri 7/11/25
11		IFC submission for design approval to DTMR	1 day	18,7	Wed 24/09/25	Wed 24/09/25
12		**Permit approval**	**72 days**		**Mon 2/06/25**	**Tue 9/09/25**
13		Staging plan to enable TGS to be drafted	1 day		Mon 2/06/25	Mon 2/06/25
14		Draft TGS	2 days	13	Tue 3/06/25	Wed 4/06/25
15		TGS review (internal GCE)	1 day	14	Thu 5/06/25	Thu 5/06/25
16		TGS permit application (DTMR & Council & Queensland Police)	40 days	15,6FF	Wed 16/07/25	Tue 9/09/25
17		**Preliminary works CH0-75 & ch 0-360**	**228 days?**		**Mon 2/06/25**	**Wed 15/04/26**
18		Documentation preparation (CMP, QMP, EMP, SMP)	10 days	5	Wed 10/09/25	Tue 23/09/25
19		Jarraga darran clerance	3 days		Sun 1/06/25	Tue 3/06/25
20		QA submission (ITP'S)	1 day	5	Wed 10/09/25	Wed 10/09/25
21		Material procurement (RCBC,RCP, Headwalls, signage)	30 days		Mon 2/06/25	Fri 11/07/25
22		Third party engagment - (10MM Chip seal, AC, Linemarking, bus shelter)	20 days		Mon 2/06/25	Fri 27/06/25
23		Document submission (CMP, QMP, EMP, SMP)	40 days	18	Wed 24/09/25	Tue 18/11/25
24		DBYD, Service location & pothole investigation works	10 days		Wed 9/07/25	Tue 22/07/25
25		Permit to excavate (GCE)	1.5 days	24	Wed 23/07/25	Thu 24/07/25
26		Construction methodology	1 day		Wed 24/09/25	Wed 24/09/25
27		OPW Received	0 days	23	Wed 19/11/25	Wed 19/11/25
28		**Construction Rosewood Warril View Rd Northbound CH34.65-360 (With Traffic)**	**8 days**	**27**	**Wed 19/11/25**	**Fri 28/11/25**
29		Traffic set up	1 day		Wed 19/11/25	Wed 19/11/25
30		Stump Removal	**1 day**	**29**	**Thu 20/11/25**	**Thu 20/11/25**
31		Topsoil strip	1 day	30	Fri 21/11/25	Fri 21/11/25
32		Cut to fill	3 days	31	Mon 24/11/25	Wed 26/11/25
33		**Install culvert pipes**	**0.5 days**	**32**	**Thu 27/11/25**	**Thu 27/11/25**
34		Backfill trafficable area	0.5 days		Thu 27/11/25	Thu 27/11/25
35		Swale drain installation	5 days	32SS	Mon 24/11/25	Fri 28/11/25
36		Batter final trim	5 days		Wed 19/11/25	Tue 25/11/25
37		Topsoil installation	3 days		Wed 19/11/25	Fri 21/11/25
38		Sub- base pavement layer (depth TBC)	8 days		Wed 19/11/25	Fri 28/11/25
39		Surface course (10mm chip seal) stage 1 prime seal (48hr curing)	3 days		Wed 19/11/25	Fri 21/11/25
40		Surface course (10mm chip seal) stage 1 10mm chip	3 days	39	Mon 24/11/25	Wed 26/11/25
41		Traffic switch	1 day	40	Thu 27/11/25	Thu 27/11/25
42		**Construction of South bound CH34.65 - CH 370 (Against Traffic)**	**7 days**	**41**	**Fri 28/11/25**	**Mon 8/12/25**
43		**Stump Removal**	1 day		Fri 28/11/25	Fri 28/11/25
44		Topsoil strip	1 day	43	Mon 1/12/25	Mon 1/12/25
45		Cut to fill	3 days	44	Tue 2/12/25	Thu 4/12/25
46		Stormwater drainage installation	1 day	45	Fri 5/12/25	Fri 5/12/25
47		Headwall construction	1 day	46	Mon 8/12/25	Mon 8/12/25
48		Install Riprap upstream & downstream	0.5 days		Fri 28/11/25	Fri 28/11/25
49		Swale drain installation	1 day	48	Fri 28/11/25	Mon 1/12/25
50		Batter final trim	1 day	49	Mon 1/12/25	Tue 2/12/25
51		Topsoil installation	1 day	50	Tue 2/12/25	Wed 3/12/25
52		Sub- base pavement layer (depth TBC)	1 day	51	Wed 3/12/25	Thu 4/12/25
53		Surface course (10mm chip seal) stage 1 prime seal (48hr curing)	3 days		Fri 28/11/25	Tue 2/12/25
54		Surface course (10mm chip seal) stage 1 10mm chip	3 days	53	Wed 3/12/25	Fri 5/12/25
55		Traffic Switch; Christensen Rd	1 day	54	Mon 8/12/25	Mon 8/12/25
56		**Christensend Rd Intersecting Rosewood Warril View (West Bound)**	**8 days**	**55**	**Tue 9/12/25**	**Thu 18/12/25**
57		**Stump Removal**	0.5 days		Tue 9/12/25	Tue 9/12/25
58		Topsoil strip	1 day	57	Tue 9/12/25	Wed 10/12/25
59		Cut to fill	1 day	58	Wed 10/12/25	Thu 11/12/25
60		Pipe laying	1 day	59	Thu 11/12/25	Fri 12/12/25
61		Swale drain installation	1 day		Tue 9/12/25	Tue 9/12/25
62		Batter final trim	1 day	61	Wed 10/12/25	Wed 10/12/25
63		Topsoil installation	1 day	62	Thu 11/12/25	Thu 11/12/25
64		Sub- base pavement layer (depth TBC)	1 day	63	Fri 12/12/25	Fri 12/12/25
65		Surface course (10mm chip seal) stage 1 prime seal (48hr curing)	1 day		Tue 9/12/25	Tue 9/12/25
66		Surface course (10mm chip seal) stage 1 10mm chip	1 day	65	Wed 10/12/25	Wed 10/12/25
67		Traffic Switch	0.5 days	66	Thu 11/12/25	Thu 11/12/25
68		**Christensend Rd Intersecting Rosewood Warril View (South Bound)**	**5.5 days**	**67**	**Thu 11/12/25**	**Thu 18/12/25**
69		**Stump Removal**	0.5 days		Thu 11/12/25	Thu 11/12/25
70		Topsoil strip	1 day	69	Fri 12/12/25	Fri 12/12/25
71		Cut to fill	1 day	70	Mon 15/12/25	Mon 15/12/25
72		Pipe laying	3 days	71	Tue 16/12/25	Thu 18/12/25
73		Swale drain installation	1 day	71	Tue 16/12/25	Tue 16/12/25
74		Batter final trim	1 day	73	Wed 17/12/25	Wed 17/12/25
75		Topsoil installation	1 day		Thu 11/12/25	Fri 12/12/25
76		Sub- base pavement layer (depth TBC)	1 day	75	Fri 12/12/25	Mon 15/12/25
77		Surface course (10mm chip seal) stage 1 prime seal (48hr curing)	1 day	76	Mon 15/12/25	Tue 16/12/25
78		Surface course (10mm chip seal) stage 1 10mm chip	1 day	77	Tue 16/12/25	Wed 17/12/25
79		Line Marking All Areas	1 day	78	Wed 17/12/25	Thu 18/12/25
80		Traffic Removal	0.5 days	79	Thu 18/12/25	Thu 18/12/25



Released under RTI - DTMR

Project: Grealish Quarry

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Critical | Critical Split | Progress | Manual Progress

Appendix C – TGS & Permits

Released under RTI - DTMR

TRAFFIC MANAGEMENT PLAN (ROAD UPGRADE WORKS)

CHRISTENSEN AND ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER

Released under RTI - DTMR

Prepared By (Name): N/R
Position: TMD (Open) 963
Approved By (Name): N/R
Position: TMD (Open) 200
Date:14.04.2025

Signature:

Signature:

N/R

Table of Contents

AMENDMENT REGISTER 2
1. INTRODUCTION 3
2. GLOSSARY OF TERMS 3
3. KEY OBJECTIVES OF TRAFFIC MANAGEMENT PLAN 4
4. REFERENCED DOCUMENTS AND DATA 4
5. PROJECT BACKGROUND 4
5.1 EXISTING ROAD USERS 5
5.2 LOCATON OF PROJECT LOCATIONS 6
5.3 SCOPE OF WORKS 7
5.4 PROPOSED TRAFFIC CONTROL SETUPS 7
5.5 PROPOSED SCHEDULE OF WORKS 11
6. PROJECT CONTRACTOR'S DETAILS 12
7. TRAFFIC MANAGEMENT COMPANY DETAILS 12
8. PROJECT TRAFFIC TEAM 12
8.1 PRINCIPAL CONTRACTOR - GCE CONTRACTORS 12
8.2 PROJECT TRAFFIC TEAM STRUCTURE 13
8.3 PROJECT MANAGER (N/R 13
8.4 SITE SUPERINTENDENT / SUPERVISOR 14
8.5 TRAFFIC MANAGEMENT DESIGNER N/R 14
8.6 NOMINATED TRAFFIC OFFICER N/R 14
8.7 OPERATIONS MANAGER N/R 15
8.8 TRAFFIC CONTROLLERS 15
8.9 OUT OF HOURS REPRESENTATIVE 15
8.10 ALL SITE PERSONNEL 15
9. CONSULTATION AND COMMUNICATION PROCESS 16
9.1 KEY PARTIES 16
9.2 COMMUNICATION PROCESS 16
10. EMERGENCY SERVICES 17
11. CONTINGENCY PLAN 17
12. SPEED MANAGEMENT PLAN 18
12.1 SPEED SELECTION 18
12.2 RISK ASSESSEMENT 18
12.3 REMEDIAL ACTION 19
13. PLANNING CONSIDERATIONS 19
13.1 WORK AREA 19
13.2 WORK DURATION 19
13.3 AFTERCARE ACTIVITIES 19
13.4 SHIFT TIMING 19
13.5 PEDESTRIANS 19
13.6 TRAFFIC LANES RESTRICTION 19
13.7 PUBLIC TRANSPORT 19
13.8 PRIVATE DRIVEWAYS 19
13.9 DETOURING OF TRAFFIC 20

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 61 of 300

13.10 Queues, Delays and Monitoring 20
14. CONDITION OF LONG-TERM SIGNS 20
14.1 Mechanical condition 20
14.2 Cleanliness 20
14.3 Colour of fluorescent signs 20
15. POSITIONING OF SIGNS 20
16. TRAFFIC CONTROL DEVICES 20
17. ADVANCE WARNING SIGNAGE AND APPROACH TO WORK SITE 21
18. LIST OF TRAFFIC GUIDANCE SCHEMES 21
19. OPTION ANALYSIS - TRAFFIC TECHNIQUES TO BE CONSIDERED 22
19.1 VEHICULAR TRAFFIC 22
19.2 PEDESTRIANS 22
19.3 CYCLISTS (ON ROAD) 23
19.4 PUBLIC TRANSPORT 23
20. COMPLIANCE MANAGEMENT AND MONITORING PROCEDURES 24
20.1 RECORD KEEPING 24
20.2 INSPECTION PROGRAMME 24
20.3 COMPLAINTS REGISTER 24
20.4 INCIDENT MANAGEMENT 24
MOTOR VEHICLE ACCIDENTS 24

Released under RTI - DTMR

AMENDMENT REGISTER

ISSUE	DATE	SECTION	DETAILS
0	14.04.2025	All	Issue of Traffic Management Plan
1	21.05.2025	All	Amendment
2	03.06.2025	5, 6, 13, 19	Amendment

RTI-5755 Release.pdf - Page Number: 62 of 300

1. INTRODUCTION

The purpose of the Traffic Management Plan (TMP) is to identify and define the requirements, processes and responsibilities of the traffic management during “Road Upgrade Works” on Christensen Road and Rosewood Warrill View Road, Mount Walker in accordance with Austroads AGTTM and Queensland Standards QGTTM.

This TMP formulates the basis of the traffic guidance schemes required for this project which causes interference or obstruction to the normal use of a road by any road user. This TMP also offers guidance for planning, designing, installation and operation of all applicable TGSs together as well as provides all requirement for maintaining safe workplace for workers on project site.

This TMP identifies the detail of how the Road Upgrade Works will be integrated into the operation of the road network as well as how all road users will be accommodated to maintain road user safety and minimize disruption.

2. GLOSSARY OF TERMS

Here is the list provided of acronyms and their definition that is being widely used in this Traffic Management Plan:

AGTTM	Austroads Guide to Temporary Traffic Management
QGTTM	Queensland Guide to Temporary Traffic Management Nov 2024
MUTCD Part 3	Manual of Uniform Traffic Control Devices, Part 3, Issue dated Nov 2024
SRRC	Scenic Rim Regional Council
DTMR	Department of Transport and Main Roads
MRTS	Main Roads Technical Specification
QPS	Queensland Police Service
RPEQ	Registered Professional Engineer of Queensland
TMD	Traffic Management Designer
TGS	Traffic Guidance Scheme
TMP	Traffic Management Plan
TSB	Temporary Safety Barrier
WB	Westbound
NB	Northbound
EB	Eastbound
SB	Southbound
VMS	Variable Message Sign

Released Under RTI - DTMR

3. KEY OBJECTIVES OF TRAFFIC MANAGEMENT PLAN

Fundamental aim of this Traffic Management Plan during Road Upgrade Works on Christensen Road and Rosewood Warrill View Road is to provide a minimum impact on the road users and wider community and maintaining safety of the road workers. This Project involves the closure of Full Road and Half Road at a time for parking of trucks and other work machinery, and site access and egress or all together which has the potential to disrupt the normal traffic flow. Main objectives of this TMP are presented below:

- Minimize the risk of injuries or serious accidents to either the traveling public or Workers
- Safely control and provide for pedestrian access.
- Minimize traffic disruption and delays. A global approach is to be taken for the entire project i.e. some short-term delays may result in less delays at future stages.
- motorists in an attempt to provide a controlled informed approach to the Work Site.
- A target of zero complaints for the project duration.
- Timely and informed communication to all affected parties including local properties.
- Maintenance of traffic controls and equipment to be of a high standard with management strategies to track procedures put in place.
- To conform to Australian and Queensland Standards (AGTTM & QGTTM).

Following Steps and strategies have been implemented to meet TMP Objectives

- Provide desirable width of lanes on Christensen Road and Rosewood Warrill View Road, Mount Walker
- All road users are managed safely.
- The safety and amenity of road users and the public are assured
- Project being carried out in various work stages to reduce adverse impact on traffic.

4. REFERENCED DOCUMENTS AND DATA

The following documents have been utilised in the development of this TMP

- MUTCD Part 3: Works on Road Nov 2024
- Queensland Guide to Temporary Traffic Management (QGTTM) – Nov 2024
- Austroads Guide to Temporary Traffic Management (AGTTM) – Dec 2019
- Main Roads Technical Standards (MRTS02) Nov 2018
- Traffic and Road Use Management Manual (TRUM)
- Traffic Controller Accreditation Scheme Approved Procedure (TCAS/AP)
- Queensland Workplace Health and Safety Act and Regulation 2011
- Hazardous Manual Tasks Code of Practice 2021
- Queensland Transport Operations (Road Use Management) Act 1995
- Work, Health and Safety Act 2011
- TMR provided factsheets

5. PROJECT BACKGROUND

Christensen Road is low volume two-way roads which carries local traffic during the day and nighttime whereas Rosewood Warrill View Road contains both local as well as general traffic. Christensen road is a no-through road at one end and connects to Warrill View Road at another end. Further Warrill View Road connects traffic to Rosevale Road and Ebenzer Road. No footpaths or any other pedestrian facilities are available on either side of the Christensen Road

Released Under RTI - DTMR

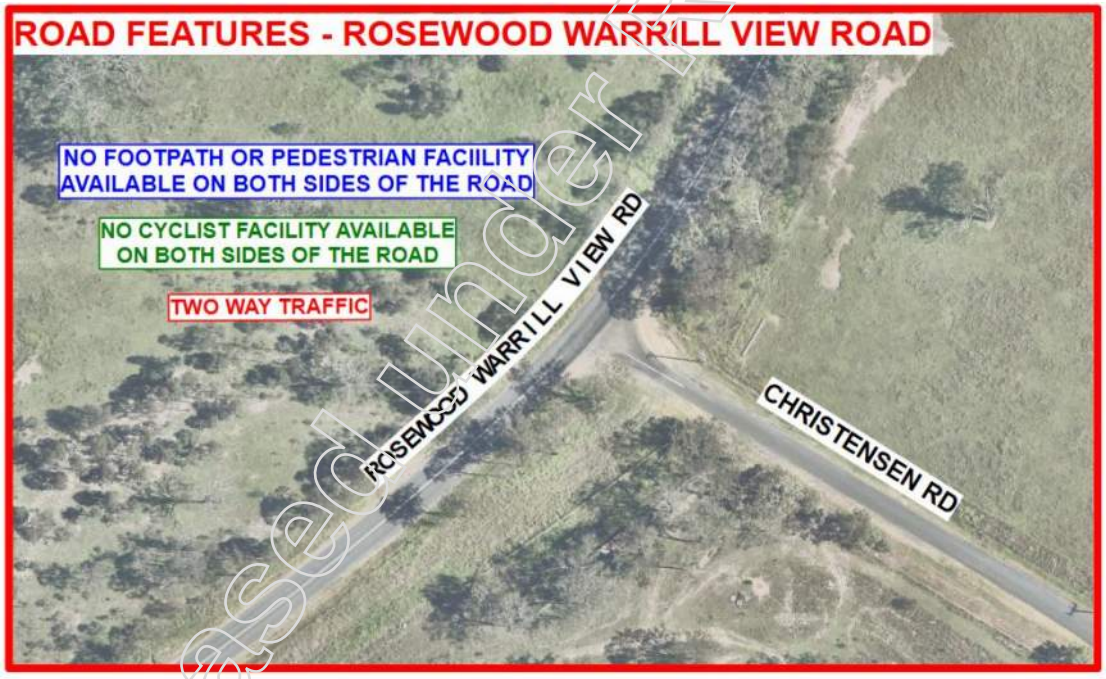
and Warrill View Road which means pedestrian movement will not be taken into consideration and like for like condition to be maintained. There is no designated Cycle Lane available on both sides of the road which means cyclists are expected to be sharing road with vehicles. Moreover, there is no Bus Stop or Public transport within the work zone or the closure that will be impacted during works. Relevant stakeholders and residential people must be notified in advance prior to works.

5.1 EXISTING ROAD USERS

- No footpaths or any other pedestrian facilities are available on either side of the Christensen Road or Warrill View Road
- There is no designated Cycle Lane available on both sides of these roads
- There is no Public / Tranlink Bus Stop available within the work zone or the closure that will be impacted during works. An existing school bus stop sign exist on western side of Rosewood Warrill View Road and Christensen Road intersection.

- Local Road Users

Released under RTI - DTMR



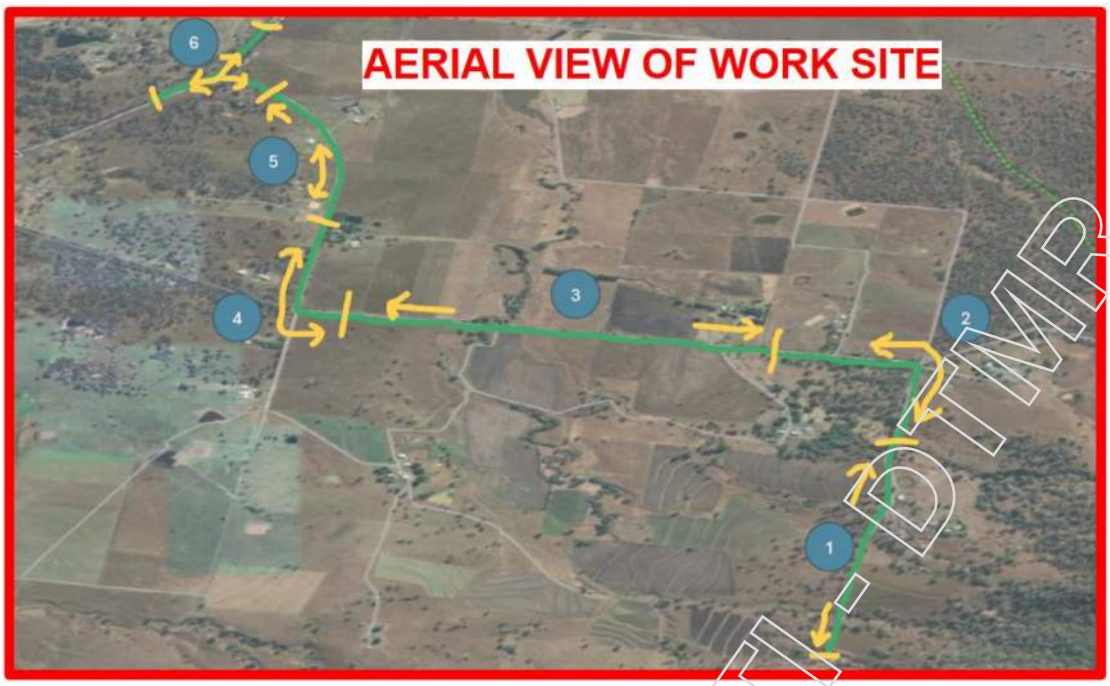
5.2 LOCATON OF PROJECT LOCATIONS

The Project Site is located at Christensen Road & Rosewood Warrill View Road

Cross Streets: P Griffiths Road - Murrays Crossing E Road

Suburb: Mount Walker, 4340

Released under RTI - DTMR



5.3 SCOPE OF WORKS

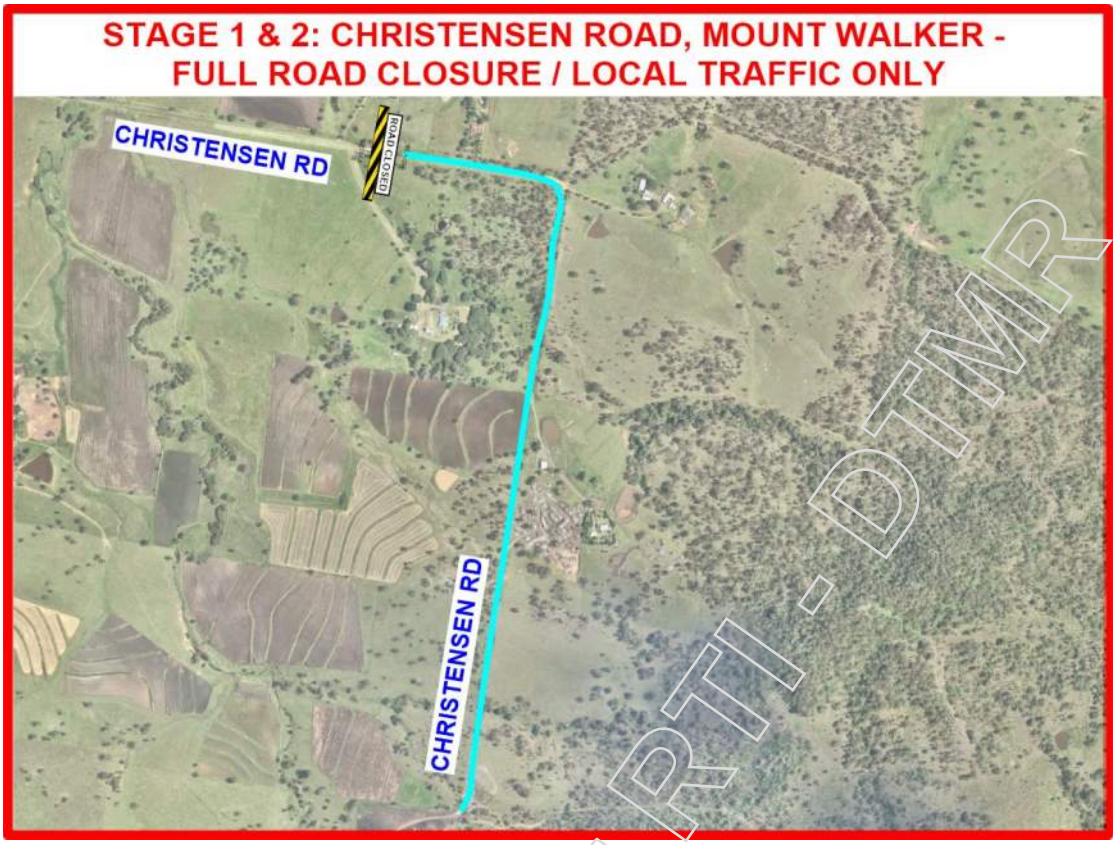
The scope of works includes:

- Excavation works
- Tree Clearing works
- Drainage works
- Breaking up the existing roadway, Reinstating the roadway, property driveways and culvert entries, asphalt and widening it to approximately 8m wide to make compliant for future use for quarry trucks

5.4 PROPOSED TRAFFIC CONTROL SETUPS

1. **STAGE 1 & 2: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)**
   - > Long Term Signs will be installed on permanent post for each of the stage 1 & 2.
   - > Full Road closure will take place.
   - > Works to take place in small sections withing the closure.
   - > Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
   - > Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
   - > Only few local properties. Access to all properties to be maintained at all times.
   - > TC to assist any local pedestrian around work zone
   - > Speed will be reduced to 60Km/Hr.
   - > Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
   - > Access to Emergency Services will be maintained at all times.
   - > Road will be opened up after hours.
   - > Worker (Symbolic) sign to be covered at the end of the shift.

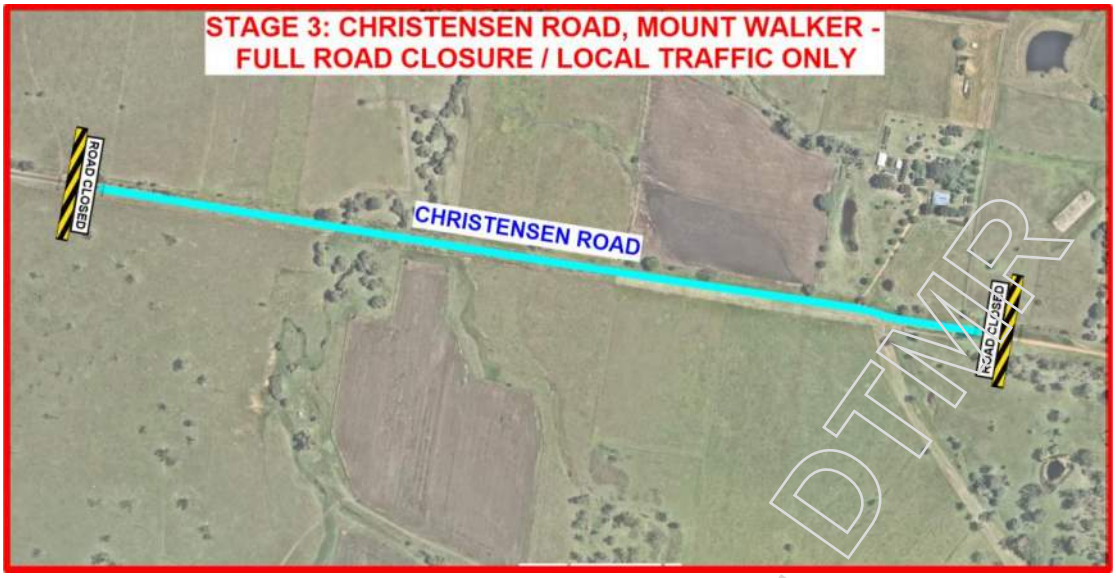
Released under RTI - DTMR



2. STAGE 3: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)

- Long Term Signs will be installed on permanent post for each of the stage 3.
- Full Road closure will take place.
- Works to take place in small sections withing the closure.
- Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
- Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
- Only few local properties. Access to all properties to be maintained at all times.
- TC to assist any local pedestrian around work zone
- Speed will be reduced to 60Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- Worker (Symbolic) sign to be covered at the end of the shift.

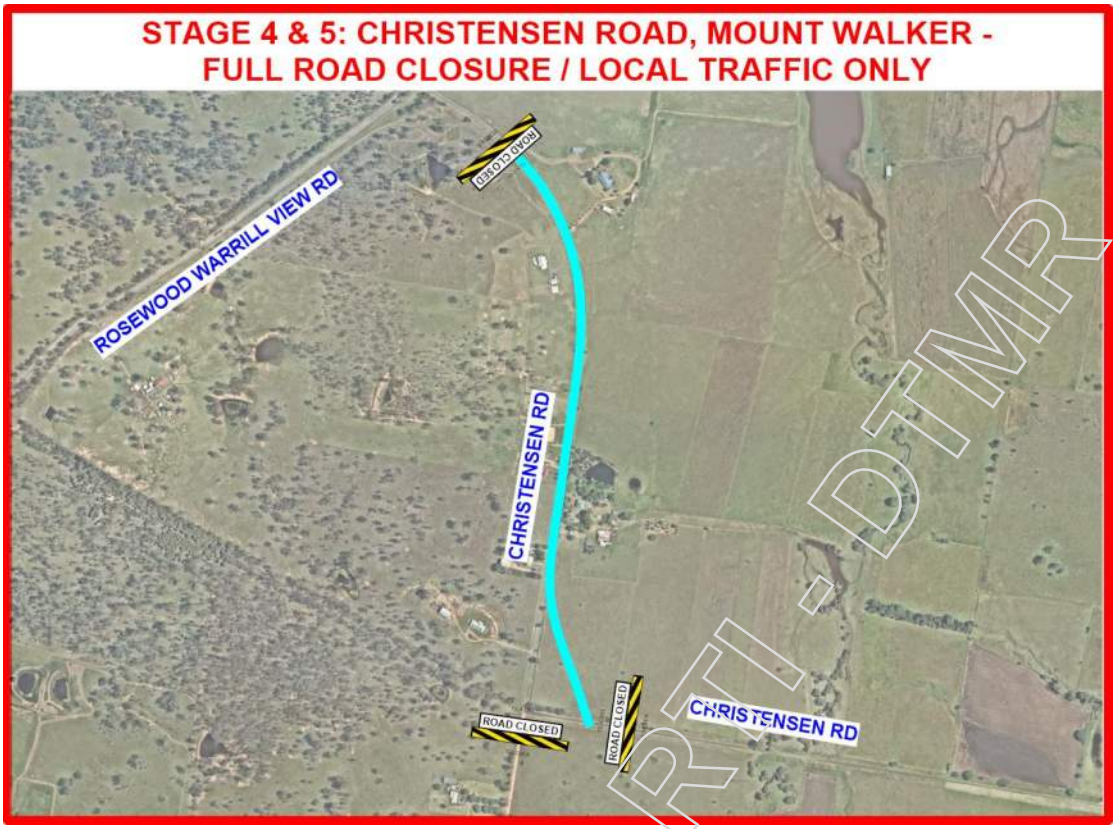
Released under RTI - DTMR



3. STAGE 4 & 5: CHRISTENSEN ROAD, MOUNT WALKER (FULL ROAD CLOSURE/LOCAL TRAFFIC ONLY)

- Long Term Signs will be installed on permanent post for each of the stage 4 & 5.
- Full Road closure will take place.
- Works to take place in small sections withing the closure.
- Hard Closure to take place around the work area whereas soft closure to take place for whole section as per the TGS.
- Local residents will be able to enter & exit through soft closure, Hard closure to be managed by TCs.
- Only few local properties. Access to all properties to be maintained at all times.
- TC to assist any local pedestrian around work zone
- Speed will be reduced to 60Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- Worker (Symbolic) sign to be covered at the end of the shift.

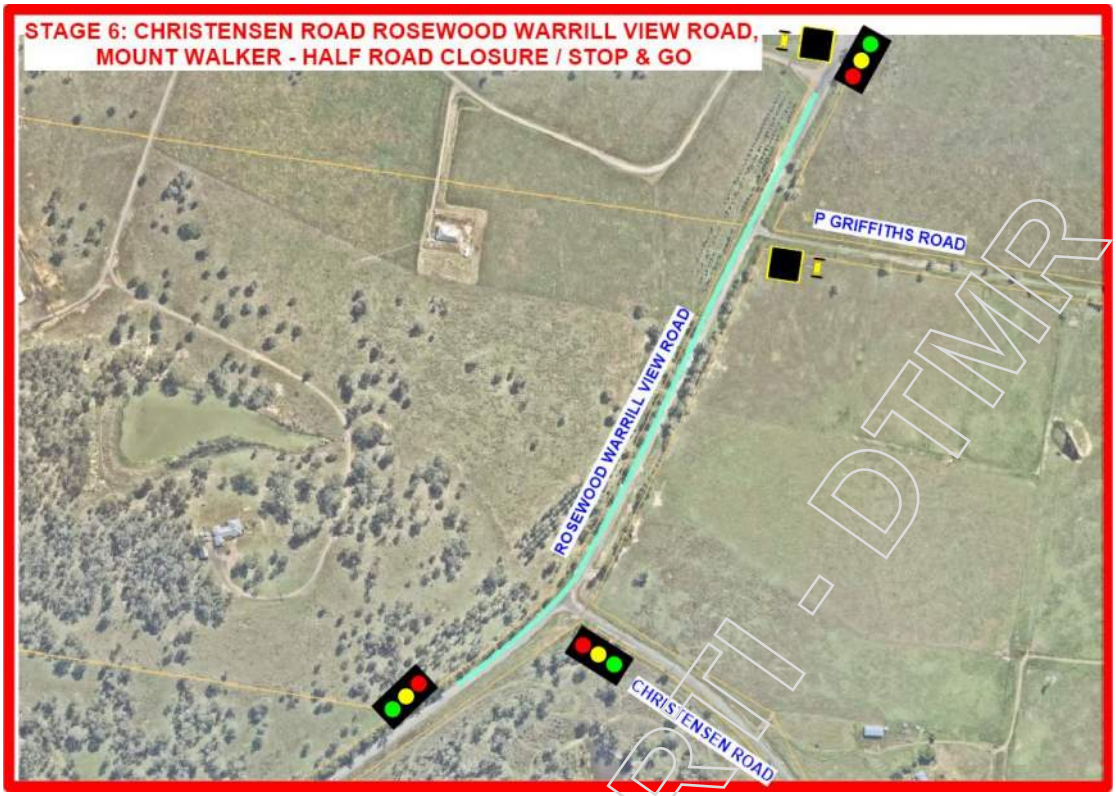
Released under RTI - DTMR

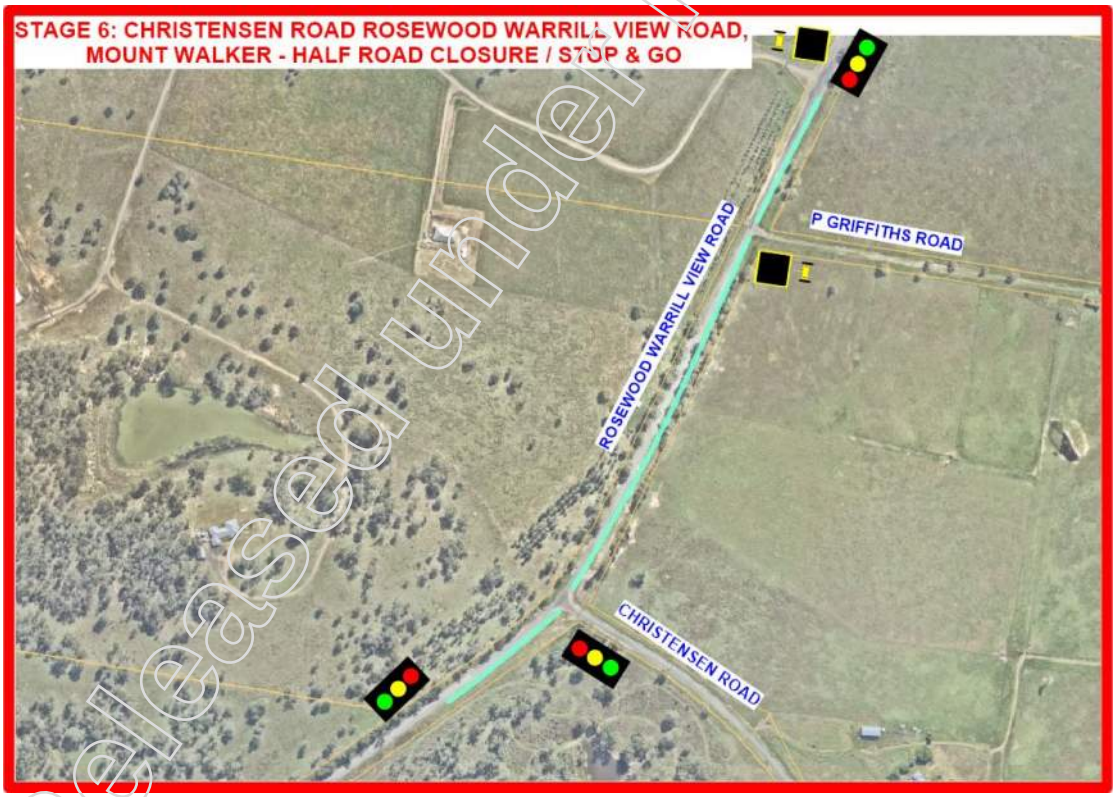


4. STAGE 6: CHRISTENSEN ROAD/ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER (HALF ROAD CLOSURE/STOP AND GO)

- Long Term Closure to take place. Long Term signs will be installed on the post for the duration of the stage 6.
- Lane closure will take place for 24/7.
- One side of the road to remain operational on Rosewood Warrill View Road at all times whereas one lane will be closed to park work vehicles, machineries and to carry out work safely.
- Shuttle flow will be implemented with automated Portable Traffic Lights performing stop and go on each approach.
- Speed will be reduced to 40Km/Hr.
- Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works
- Access to Emergency Services will be maintained at all times.
- For managing driveways, smart VMS to be installed to notify residents exiting.
- Worker (Symbolic) sign to be covered at the end of the shift.

Released under RTI - DTMR





Released under RTI - DTMR

5.5 PROPOSED SCHEDULE OF WORKS

The proposed starting date of works has not been announce yet and will be as per the permits granted.

RTI-5755 Release.pdf - Page Number: 71 of 300

Working days and times will be night shifts from Sunday night through to a Thursday night - 6:00pm to 6:00am shifts. Day shifts from Monday morning through to a Saturday evening - 6:00am to 6:00pm shifts.

6. PROJECT CONTRACTOR'S DETAILS

NAME OF PROJECT: **ROAD UPGRADE WORKS**

CONTRACTOR: **GCE CONTRACTORS**

ADDRESS: **55 MCDONALD ROAD, WINDSOR, QLD 4030**

ABN: **- 25 163 406 853**

CONTACT NO.: **(07) 3357 7430**

CONSTRUCTION TYPE: **ROAD CONSTRUCTION**

DATE OF COMMENCEMENT: **TBC**

DATE OF COMPLETION: **TBC**

PROJECT MANAGER: N/R

CONTACT NO.: N/R

7. TRAFFIC MANAGEMENT COMPANY DETAILS

TRAFFIC MANAGEMENT COMPANY: **TRAFFEX PTY LTD**

ABN: **57 141 899 952**

BUSINESS ADDRESS: **33 DULWICH STREET, LOGANHOLME**

CONTACT NO.: **07 3821 4522**

OPERATIONS MANAGER: N/R

CONTACT NO.: **07 3821 4522**

TRAFFIC MANAGEMENT DESIGNER: N/R

CONTACT NO: **07 3821 4522**

TRAFFIC MANAGEMENT IMPLEMENTATION OFFICER: **TBC**

CONTACT NO.: **TBC**

8. PROJECT TRAFFIC TEAM

8.1 PRINCIPAL CONTRACTOR - GCE CONTRACTORS

The Principal Contractor responsible for arrangements in accordance with the AGTTM & QGTTM need to be aware of their responsibilities for any injury to road users or damage to property as a result of such operations. In addition, the Principal Contractor also has an obligation to provide a safe event space that minimises the risk of injury to workers. To meet the requirements of WHS legislation the Principal Contractor must ensure they provide:

- Ensure compliance with the contract requirements.

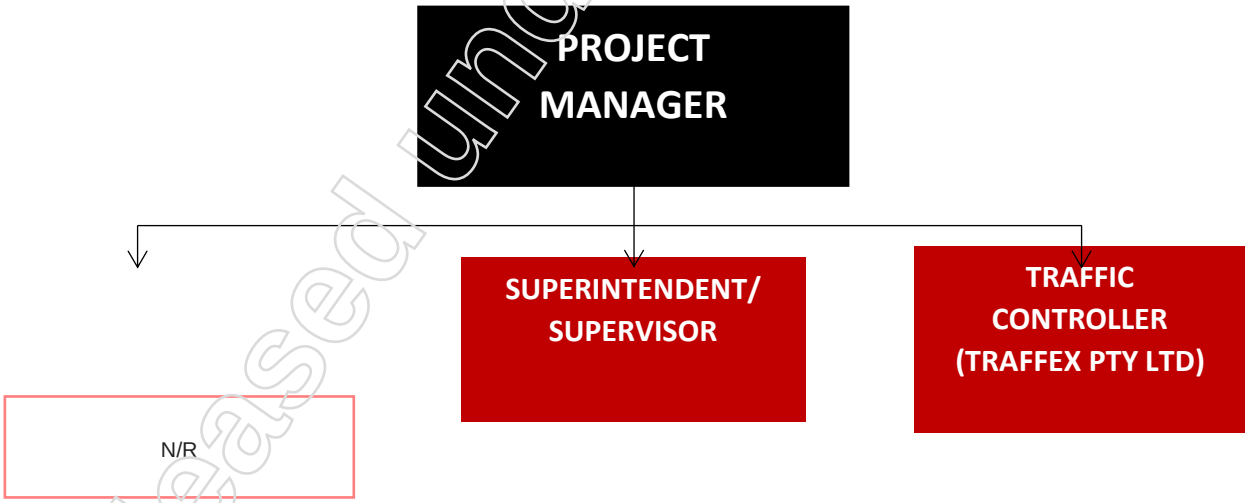
Released Under RTI - DTMR

- Safe working environment for workers.
- Safe passage for both pedestrians and road users.
- Works should be arranged to minimise – Disruption to established traffic movements and patterns
- Interference with traffic at peak movement periods,
- The amount of road closed at any one time

The management of the Principal Contractor's is committed to the principles and requirements of this Traffic Management Plan. This commitment will be demonstrated by:

- The usage of only accredited Traffic Controllers, approved signs and devices.
- Ensure all workers (including Traffic Controller) hold the required accreditation/ticket/competency for the tasks they are performing.
- Ensure that monitoring of on-site noise levels occurs so that they are kept at an acceptable level for all workers, residents and local businesses.
- Provide suitable communication between all on-site personnel (eg: Two-way Radio, etc.).
- Provide all means necessary to achieve a safe working environment.
- Continually review work procedures and practices.
- Provide clear directions and support in maintaining the objectives and standards set out in this Traffic Management Plan.
- Ensure all workers have access to and understand the requirements of the Traffic Management Plan.
- Ensure a site-specific induction is completed by all new on-site workers

8.2 PROJECT TRAFFIC TEAM STRUCTURE



8.3 PROJECT MANAGER

N/R

The responsibilities of the Project Manager include;

- Project Manager, or delegated personnel when acting in role, will be the primary 24hrs/ 7day contact for all traffic related matters.
- Be familiar with the requirements of the TMP and internal traffic management system.
- Management of the traffic incident and emergency response procedures.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 73 of 300

- Management of the communication with operational and community stakeholders.
- Management of the traffic management activities with supervisors.
- Maintenance of the operational and community stakeholder contact details.
- Maintenance of the out of hours contact representative details.
- Attend regular project and traffic meetings for the purpose of updating project team on programming and ensuring the requirements of TMP is met.

8.4 SITE SUPERINTENDENT / SUPERVISOR

The responsibilities of the Superintendent include;

- Reporting to Project Manager.
- Assist in the scoping of TGS's.
- Assist in the programming of TGS implementations.
- Supervision of worksite to ensure compliance and maintenance of TGS's.
- Coordination of immediate maintenance or repairs during working hours.
- Coordination of daily traffic routine tasks and recording keeping.
- Assist in the identification of non-conformances.

8.5 TRAFFIC MANAGEMENT DESIGNER N/R

The responsibilities of the Traffic Management Designer include;

- Providing TGSs of all project stages and a detailed TMP and make changes on TGSs and TMP as required with consultation with Project Manager.
- Obtaining Permits from the relevant authorities'/road asset owners including DTMR, Local Council and QPS.
- Obtain all information regarding project site either by a site visit or getting required information from Traffic Project Manager

For the certification of any innovations, alternatives or departures from standards which result in treatments other than specified in AGTTM/QGTTM, Registered Professional Engineer of QLD (RPEQ) will be engaged as the certifying engineer

The RPEQ will also certify risk assessments developed by Traffic Management Design personnel when preparing the TMP and TGS's for the following scenarios;

- When mandatory (shall) requirements are not adopted.
- When innovative treatments are proposed.
- If using more signs than required by AGTTM/QGTTM optimal treatment.
- Practice outside requirements or scope of AGTTM/QGTTM and/or TRUM manual.
- Changes outside requirements or scope of AGTTM/QGTTM and/or TRUM manual

8.6 NOMINATED TRAFFIC OFFICER N/R

The nominated traffic control officer shall meet the minimum training requirements of MRTS02 Table 5.2 and shall have sufficient experience in developing site specific diagrams.

- Nominated Traffic Officer when acting in role, will be the primary 24hrs/ 7day contact for all traffic related matters.
- Be familiar with the requirements of the TMP and internal traffic management system.
- Management of the traffic recording and reporting procedures.

Released under RTI - DTMR

- Management of the traffic incident and emergency response procedures.
- Management of the communication with operational and community stakeholders.
- Management of the traffic management activities with supervisors.
- Management of traffic non-conformances.

NTO's Email address N/R @civforce.com.au and mobile numbe N/R

8.7 OPERATIONS MANAGER N/R

The responsibilities of the Traffic Operation Manager include;

- Ensure that all personnel that will be working on project site are properly trained, licensed and know their traffic control duties.
- Management of the traffic recording, reporting and auditing procedures.
- Management of traffic non-conformances.
- Ensure that company has enough staff, vehicles and signage available on request.
- Maintain a communication between Client working on the project and a Traffic Management Company.
- Provide all personnel with PPE.

8.8 TRAFFIC CONTROLLERS

Suitably qualified Traffic Controllers (with TMI qualification) from Traffex Company, an approved traffic management company (TMR Traffic Management Registration Scheme # 0317), will be utilised to implement TGS's including setting out and recovering of traffic control devices.

Traffic controllers will be utilised as necessary to monitor & manage traffic movements during partial and full road closure when required for the movement of plant or other work machinery with all traffic control operations to conform to QLD standards, TRUM and project specifications.

A traffic controller must

- Hold a current Traffic Controller Accreditation and have it all the times on work site
- Attend all pre start meetings
- Conduct daily site-specific risk assessment.
- Never use a mobile phone when actively controlling work site
- Be relieved from their duty after no more than 2 hours in accordance with the TCAS/AP

8.9 OUT OF HOURS REPRESENTATIVE

The responsibilities of the Out of Hours Representative include;

- Coordination of immediate maintenance or repairs during non-working hours.
- Notifications to the entire project team the repair extent, likely cause (where possible) and rectification works carried out

Out of Hours representatives for this project will be Daniel Cronin with contact details as follows

N/R

8.10 ALL SITE PERSONNEL

Continuous observation and reporting of any hazardous issues to their Superior

Released under RTI - DTMR

Note: All traffic management issues should initially be directed to the Traffic Officer Works Supervisor

9. CONSULTATION AND COMMUNICATION PROCESS

The following section outlines the key parties and the process of consultation that needs to be adopted to ensure sound communication and smooth running of the project with regards to the planning and implementation of the TGS's.

Traffic Guidance Schemes and Traffic Management Plan shall be submitted to the Authorising Authority for approval prior to implementation and notification shall be provided to the following stakeholders:

i. Scenic Rim Regional Council shall be advised of all impending changes to traffic conditions.
ii. Queensland Police Service permits must be obtained.
iii. Emergency services shall be notified of changes to traffic conditions that may affect their route.

Complaints received from the general public will always be stored on a register and made available to the Administrator. If any actions are required because of the complaint, the site shall be tool boxed by GCE Contractors. Actions taken involve receiving clear concise details of the complaint, an analysis of site conditions by comparison to the relevant Traffic Guidance Scheme and rectification of any inadequacies. Actions also include reviewing TGS for suitability given the context of the traffic complaint. Where possible, feedback will be given to the party making the complaint about the nature of rectification.

9.1 KEY PARTIES

- Local Council: Scenic Rim Regional Council
- Principal Contractor – GCE Contractors
- QPS
- School to be communicated regarding the relocation of school bus stop.
- Emergency Services
- Waste Management Services

9.2 COMMUNICATION PROCESS

- Submit Project TMP and obtain approval from Authorising Authority
- Ascertain all key parties contact details.
- Submit Site Specific TGS
- Obtain acceptance of TGS & Permits
- Notify local residents
- Implement TGS
- Monitor TGS and notify Administrator if changes are required. Queue lengths of new traffic arrangement should be monitored and compared to existing queue lengths (prior to implementation of a new traffic arrangement). This should be performed during the first two days of a TGS Implementation.
- Continue with required monitoring for duration of TGS.
- Report any traffic incidents, accidents or complaints to the Administrator immediately. Maintain regular weekly reports on all Traffic Management issues.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 76 of 300

10. EMERGENCY SERVICES

Notification of traffic changes, disruptions and lane closure (if required at any time during the project) will be provided to the emergency services 3 days prior to commencement of any works. In this project lane closure requirements have been identified.

IN AN EMERGENCY

- All affected works are to stop on footpath.
- Work Vehicles to stop working to ensure no hazard is proposed while emergency vehicles make it way next to the site. Traffic lanes will remain open.
- No driveway to be blocked by work vehicles at any time.
- Emergency services to be given full access through site.
- Site Supervisor to implement full ERT plan.
- All workers to be moved to evacuation points.
- Radio communications to be kept to a minimum.
- All site vehicles (if possible, to do safely) to be removed from the site.
- Site Supervisor will authorise when to remove TC setup
- Site Supervisor to liaise with traffic management to ensure traffic can keep flowing if possible.
- Work does not recommence without clearance from emergency service personnel.
- Site Supervisor to report the emergency to the Project Manager as soon as possible.
- Emergency Vehicles are to be given priority through the work site during operations. The Project Manager is to inform emergency services if the project will impede Emergency Vehicle passage.
- Traffic controllers onsite, will facilitate the passage of emergency services through the worksite with minimal delay

11. CONTINGENCY PLAN

The table below demonstrates possible events requiring a contingency plan(s).

EVENT	CONTINGENCY
Traffic Controller on Site not feeling well to operate and implement TGS	Project Manager, Site Supervisor to contact Traffex immediately to replace TC.
Work Vehicle breakdown on an open lane blocking access to vehicles during lane closure	Project Manager to contact Tow Truck company immediately to move the vehicle off the work site and open lane for Vehicles.
TGS Inaccurate resulting in increased queue lengths	Contact TMD (Traffex Pty Ltd). TMI to count number of vehicles stopping on 2-minute holding time, and provide that data to TMD to make changes to the TGS

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 77 of 300

Lane closure blocked (eg: vehicle/plant breakdown)	Contact Project Manager (GCE Contractors) and TMD (Traffex Pty Ltd) to implement an alternate setup to avoid blockage
Special event day(s) – Christmas Holidays	No works to be carried out. Road must remain open during Christmas holidays
Traffic Accident on Site	Call Emergency Services (Police, Ambulance & Fire) and document the incident details and take pictures of the site
Traffic controller illness/injury during work hours	Project Manager and Supervisor to report it to Traffex Pty Ltd and take a proactive step to replace it with another Traffic Controller before any incident happens on Site
Work Overrunning	Project Manager to notify TMR & Scenic Rim Regional Council and provide updated work program. Relevant approvals must be obtained.
Theft and / or failure of traffic management devices	Any complaint will be documented, and a solution will be provided as soon as possible. In case of theft of delineation or traffic management devices, Traffex to be notified. A drive through check to be performed every hour during works to ensure delineation, signs are in proper arrangement as per the approved TGS.

12. SPEED MANAGEMENT PLAN

The objective of the Speed Management Plan is to achieve compliance by road users with the speed limits implemented on Christensen Road and Rosewood Warrill View Road as documented in the TGS. It documents all measures to be taken by the Contractor to achieve this outcome.

Where a temporary road work speed limit is in place for worker safety and traffic do not observe the speed limit, the Contractor's obligations under workplace health and safety regulations will not be met.

12.1 SPEED SELECTION

Road work speed limit selected during the duration of the work.

12.2 RISK ASSESSEMENT

Speed monitoring will be undertaken to check if implemented road work speed limit compliance is achieved or not. If is observed that vehicles do not observe posted speed limit during works and it is greater than 10Km/H above the posted roadwork speed, risk assessment will be undertaken to determine measures to mitigate the risks.

Released under RTI by DTMR

RTI-5755 Release.pdf - Page Number: 78 of 300

12.3 REMEDIAL ACTION

As a result of non-compliance of roadwork speed limit by traffic, remedial actions must be taken to ensure safety of workers and road users both.

- Additional warning signs will be used to alert drivers about the road working conditions on each approach and the posted speed limit during road works.
- Radar activated speed signs will be introduced to alert drivers going above posted speed limit
- QPS as last resort to ensure traffic observe the implemented work speed limit for the safety of workers especially during implementation of lane closure.

13. PLANNING CONSIDERATIONS

The following aspects need to be considered during the planning stages:

13.1 WORK AREA

Christensen Road and Rosewood Warrill View Road, Mount Walker

13.2 WORK DURATION

The proposed starting date of works has not been announced yet and will be as per the permits granted.

13.3 AFTERCARE ACTIVITIES

Long term signage will be installed which will stay on site during and after hours. Only change for outside of the work hours will be 'Worker (Symbolic)' sign will be covered at the end of every shift

13.4 SHIFT TIMING

Working days and times will be night shifts from Sunday night through to a Thursday night - 6:00pm to 6:00am shifts. Day shifts from Monday morning through to a Saturday evening - 6:00am to 6:00pm shifts

13.5 PEDESTRIANS

No Footpath or any other pedestrian facilities are available on either side of the Christensen Road or Warrill View Road. Pedestrians will be safely directed past work zone, or on the opposite side of the road if verge is required to be closed during works

13.6 TRAFFIC LANES RESTRICTION

Contractor to meet Council permit requirements.

13.7 PUBLIC TRANSPORT

No public transport is available around the work area.

13.8 PRIVATE DRIVEWAYS

Arrangements must be considered and arranged to allow for garbage collection from properties on the designated days.

Access to local driveways to remain open.

Released under RTI - DTMR

13.9 DETOURING OF TRAFFIC

Currently there are no proposed detours that will be required during any stage of the project.

13.10 Queues, Delays and Monitoring

During periods of traffic stoppage, the time period (commencement to cessation) will be recorded.

Queue lengths have been calculated and adjusted in the TGS. Advance warning signage have been shown in the TGS as per AGTTM/QGTTM Part 3 Section 4.8

14. CONDITION OF LONG-TERM SIGNS

14.1 Mechanical condition

Items that are bent, broken or have surface damage should not be used.

14.2 Cleanliness

Items should be free from accumulated dirt, road grime or other contamination.

14.3 Colour of fluorescent signs

Fluorescent signs whose colour has faded to a point where they have lost their daylight impact should be replaced.

15. POSITIONING OF SIGNS

Signs and devices should be positioned and erected so that:

(a) They are properly displayed and securely mounted.

(b) They are within the line of sight of the intended road user

(c) They cannot be obscured from view (e.g. by vegetation or parked cars)

(d) They do not obscure other devices from the line of sight of the intended road user

(e) They do not become a possible hazard to workers, pedestrians or vehicles

(f) They do not deflect traffic into an undesirable path.

(g) They do not restrict sight distance for drivers entering from side roads or streets, or private driveways

(h) They are not installed using supports that could be a hazard if struck by a vehicle.

Delineating devices (e.g. traffic cones, bollards, post mounted delineators) should generally be place1 m clear of the travelled path where practicable to define the edge of the travelled path or to separate opposing traffic.

16. TRAFFIC CONTROL DEVICES

The devices used must conform to the requirements of the MUTCD. For this project the following delineation or worker protection devices may be used:

Released under RTI - DTMR

- Temporary regulatory and/or special signage may be required on the project to alert motorists of advance traffic conditions and change driver behavior through the job site. Specific details of the selection of this signage shall be included on the traffic guidance scheme, for approval by the Authorising Authority prior to implementation.
- GCE Contractors shall submit to the Authorising Authority details of all proposed temporary regulatory signs. No temporary regulatory sign shall be erected until approval is received.
- The use of cones and temporary bollards to perform temporary closures within the work area during construction with or without the use of traffic controllers.
- Bunting may be used to delineate safe passages for pedestrians, with appropriate signage.

The method of isolation will be made clear on all Traffic Guidance Schemes. Local access for residents, the local community and business will also be made clear on the TGS, typically with work staged so that at least one access is maintained at all times.

17. ADVANCE WARNING SIGNAGE AND APPROACH TO WORK SITE

The use of the appropriate signage to give approaching traffic enough time and information on the advancing work site can do much to reduce the chance of incidents within the work site.

This can be done as follows:

- Ensure sight distances to advance warning signage, is as per AGTTM/QGTTM.
- Ensure the appropriate selection of signage to best describe the work site.
- Ensure that the traffic can be encouraged to slow down to the posted speed limit with the use of visual aids. The most effective way is to make the lane width appear to reduce to the road user, without actually reducing the lane width. This can be done by closing up the shoulder width with delineation devices such as cones, bollards or barriers.

18. LIST OF TRAFFIC GUIDANCE SCHEMES

TGS Number	Description of TGS
TX3783-1	Christensen Road, Mount Walker (Stage 1 & 2) - (Full Road Closure/Local Traffic Only)
TX3783-2	Christensen Road, Mount Walker (Stage 3) - (Full Road Closure/Local Traffic Only)
TX3783-3	Christensen Road, Mount Walker (Stage 4 & 5) - (Full Road Closure/Local Traffic Only)
TX3783-4	Christensen Road Rosewood Warrill View Road, Mount Walker (Stage 6) - (Half Road Closure/Stop and Go)

Released under RTI - DTMR

TX3783-5	Christensen Road Rosewood Warrill View Road, Mount Walker (Stage 6) - (Half Road Closure/Stop and Go)
TX3783-6	Christensen Road, Mount Walker - (Short Term Low Impact Works)

19. OPTION ANALYSIS - TRAFFIC TECHNIQUES TO BE CONSIDERED

19.1 VEHICULAR TRAFFIC

Option		**Features**	**Comment**
Traffic around the worksite	Side-track	Insufficient road reserves available to build a Side-track so full carriageway closure can take place and workers have enough space to carry out works. Expensive for a contractor to build it as there are other economical options available.	Not Economical Not Suitable
	Full Road Closure	Full Road Closure on Christensen Road to take place. However, because no general traffic will be impacted by the works, so there is no proposed detour required for this setup	**Adopted**
Traffic through the worksite		Not feasible due to the nature of works. Dangerous to allow traffic through work area.	Not Possible
Traffic past the worksite (Lane Closure / Stop and go)		During Lane Closure one lane will be closed to park work vehicles, machineries and to carry out work safely. Portable Traffic Lights will perform stop and go and only one direction of traffic will be allowed past work zone. Speed will be reduced to 40km/hr and advance signs will be installed prior to lane closure	**Adopted**
Contra-flow		Not required during this project	Not adopted

19.2 PEDESTRIANS

Option		**Features**	**Comment**
Around the worksite	Side-track	Insufficient road reserve available to install a side track for pedestrians and close the existing one to allow more space to the contractor. It's not required as part of scope	Not Adopted

Released under RTI - DTMR

		of works and not economical feasible for the contractor.	
	Detour	When works will be carried out on one side of the footpath, pedestrians will be diverted on the other footpath to avoid any contact with construction machinery. TC to hold traffic in all directions to ensure safe crossing of pedestrians.	Not Adopted
Through the worksite		Not feasible due to the nature of works. Dangerous to allow pedestrians through work area.	Not Adopted
Past the worksite		During works, TC will escort pedestrians and assist them to walk past the work zone. Pedestrians to be separated from works through Traffic Cones or Bollards.	**Adopted**

19.3 CYCLISTS (ON ROAD)

Option		**Features**	**Comment**
Traffic around the worksite	Side-track	Insufficient road reserve to install a side track, also it is not required as part of scope of works and not economical feasible for the contractor.	Not Adopted
	Detour	Not required as the Bikes will be able to use the same road area as other general vehicles	Not Required
Traffic through the worksite		Not feasible due to the nature of works. Dangerous to allow traffic through work area.	Not Adopted
Traffic past the worksite (Lane Closure/Stop & Go)		During lane closure work area to be delineated in such a way to ensure cyclists do not wander into the work area. Cyclist will merge with traffic as per normal condition to travel past work zone safely.	**Adopted**

19.4 PUBLIC TRANSPORT

BUS STOP CLOSURE	-	Not Required
BUS STOP RELOCATION	-	Not Required

Released under RTI by DTMR

RTI-5755 Release.pdf - Page Number: 83 of 300

RETAINING BUS STOP	No public transport or bus stop is located within the vicinity of the work zone. No data has been found on Translink Website. There is one school bus stop located west side of the Rosewood Warrill View Road intersection which will be temporarily relocated on southern side of the work zone during stage 6A	**Adopted**

20. COMPLIANCE MANAGEMENT AND MONITORING PROCEDURES

20.1 RECORD KEEPING

A set out of all temporary regulatory signage will be submitted with each detailed traffic guidance scheme for the staged Event processes for examination and comment by the project Authorising Authority.

Records of all temporary regulatory signs and changes to traffic control will be recorded and maintained by GCE Contractors.

20.2 INSPECTION PROGRAMME

All traffic control devices on site will be inspected once daily to ensure the adequacy of such devices and arrangements. This includes signage, bollards, cones, and traffic barriers. These inspections will be recorded, and any subsequent actions taken to rectify any inadequacies. To assist the person checking the signs a site plan should also be provided.

Visual daily checks during the construction will be conducted and the information and any subsequent action taken to rectify any inadequacies will be recorded on the daily inspection sheets.

20.3 COMPLAINTS REGISTER

A complaint register containing all complaints received and actions taken to address each complaint will be maintained.

20.4 INCIDENT MANAGEMENT

Emergency Incident Preparedness & Response Plan relates specifically to the event of a motor vehicle accident for on-site or in-queue traffic incidents. The procedure is as follows:

MOTOR VEHICLE ACCIDENTS

Risk assessment and procedure

1. Notify others onsite by two way radio
2. Risk assess the accident for hazards prior to tending patients (i.e. power lines, fuel etc.)
3. If minor risk, proceed with assistance.
4. If risk is high then secure area till services arrive.
5. Quickly assess if emergency services are required

Released under RTI - DTMR

Phone - 000 Service required - Fire Brigade

6. If someone is hurt, render assistance

Phone - 000 Service required – Ambulance

7. DO NOT attempt to move patients unless there is a threat of further danger (vehicle fire etc.)

8. If safe do so render assistance to injured patients

9. Attempt to keep the patient calm, reassuring assistance is on its way

10. On arrival of emergency services notify them of the number of injured patients and prominent dangers

11. Remain on the scene until released by the police

12. Once the incident has been managed and all works have been done to ensure safety to all persons involved, the Traffic Management Centre at Nerang and the Administrator is to be notified of any restrictions to road access, delays and potential detouring of traffic to manoeuver past the incident. The centre is also to be notified of any damage to road works and roadside installations caused by the incident.

13. The site is to be cleared of any disruptions to traffic flow. This may involve techniques including use of tow trucks to move broken down or damaged vehicles and persons. Where traffic flows are disrupted, implementation of emergency traffic control plans may be required with priority given to specific traffic streams as necessary.

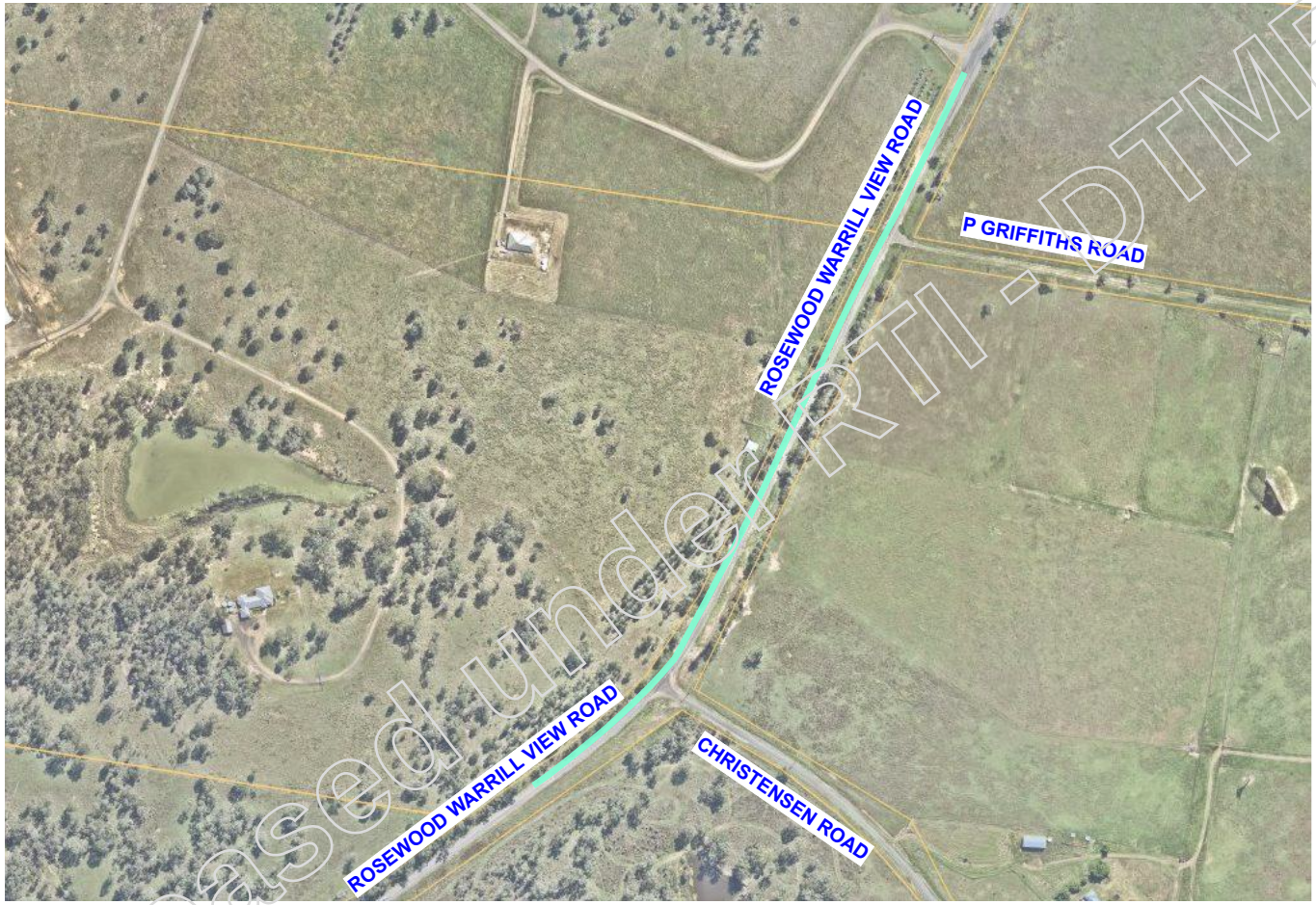
14. Incident report to be developed including photographs of all relevant traffic controls near the incident location, to be approved by the Administrator.

NOTE: Where the accident causes a fire or there is the risk of a fire starting, if you have the appropriate extinguisher available (i.e. in plant or vehicle) are competent to operate it and it is safe to do so, attempt to extinguish the fire to prevent further damage.

Released under RTI - DTMR

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

CROSS STREETS: P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD



Released under RTI - DTMR

TC RESOURCES (Installation of Long Term Signs - Unsealed Not Posted (100Km/Hr)

TRAFFIC CONTROLLER	TC UTE	VMS UTE	SUPER UTE	POD / CONE TRUCK	TMA	LIGHT TMA	PTSS TYPE 2	VMS BOARDS	SMART VMS
4	-	1	-	1	-	-	3	-	2

TC RESOURCES (During Work Hours - Unsealed Not Posted (100Km/Hr)

TRAFFIC CONTROLLER	TC UTE	VMS UTE	SUPER UTE	POD / CONE TRUCK	TMA	LIGHT TMA	E-STOP	VMS BOARDS	QPS OFFICER
2-3	1	-	-	-	-	-	-	-	-

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-4 (COVER PAGE) **(SHEET 1 OF 11)**

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

SITE SUITABLE NOTES

Table 2.2 - VALUE OF DIMENSTION 'D'

SPEED LIMIT (km/h)	DIMENSON D (m)
≤55	15
56 - 65	45
≥ 66	Equal to the speed (km/h)

Figure 2.2: Speed to be used for advance warning sign spacing

Value of 'D' chosen against the higher speed limit in the first 200m of the start of the new speed zone to ensure greater distance is provided to more accurately reflect potential travel speeds in these zones.

Section 2.5.3 - TOLERANCE IN DISTANCE (m)

Measurement	-10%	+25%
15	13	18
45	41	56
70	63	87
80	72	100
90	81	112
100	90	125
110	99	137

Table 2.5 - MINIMUM LANE WIDTHS

CRITERIA	LANE WIDTH (m)
≤60	3
> 60 km/h	3.5
Curve with radius 100-250 m	Curve widening 0.5 per lane
Curve with radius < 100 m	Consider swept path of long vehicles (e.g. buses, trams)
Approach lane is < 3 m wide	Equal to approach lane*
Two-way residential street	5.5 (sum both ways)
Residential street with shuttle flow	3.5

Table 2.3 - RECOMMENDED SIGHT DISTANCES TO A TRAFFIC CONTROL DEVICE

SPEED LIMIT (km/h)	DISTANCE (m)
≤45	50
46 - 55	70
56 - 65	90
≥ 66	Two times the speed (km/h)

Table 5.1 & 5.2 - EDGE CLEARANCE

SPEED LIMIT (km/h)	DISTANCE (m)
For traffic cones, bollards, longitudinal channelising barricades or any other delineation device	
≤ 65	0.3*
≥ 66	0.5
For post-mounted reflectors, temporary hazard markers	
All Speed	1m
For kerbed edges of traffic lanes	
All Speed	1m
Road Safety Barrier System Clearance to Traffic Lane	
≤ 40	0.3
41 - 80	0.5
> 80	1m

REQUIRED QUALIFCATION OF PERSONNEL

- TC: Traffic Controller who is responsible for manual control of traffic within the TTM worksite through use of a Portable Traffic Control Device or a Stop/Slow bat.
- TMI: Traffic Management Implementer who is responsible for the traffic management within a TTM worksite and TTM workers under their direction
- TMD: Traffic Management Designer who is responsible for the planning and initial risk assessment of a TTM worksite and who develops the TMPs and TGSs to mitigate the risks for implementation by the TMI.
- RPEQ Certified: Person Who can practice outside requirements or scope of QGTTM & MUTCD after preparing a risk assessment.

NOTE: TO THE IMPLEMENTATION OFFICER / TRAFFIC CONTROLLER

- Ensure TGS has been approved.
- Plan your emergency escape route & document on the pre-start. An accredited traffic controller must not contravene the Traffic Controller Accreditation Scheme Approved Procedure (TCASAP) & must direct traffic in a way stated in both the Approved Procedure & the Manual of Uniform Traffic Control Devices.
- Breaks shall be taken as specified in TCASAP. (See Section 2.4) Additional Controllers may need to be rostered for this purpose.
- Ensure a site specific risk assessment is undertaken prior to ALL traffic control setups or when required due to changes in conditions on site.
- Ensure you maintain a safe working distance from traffic.
- Remain aware of traffic conditions and maintain line of sight.
- All traffic control devices on site will be inspected once daily to ensure the adequacy of such devices and arrangements. Records to include times and any actions that were required during each check.
- All signs to be clean, undamaged & legible.
- Existing signs & traffic control devices which are inappropriate to, or conflict with, the temporary work site situation shall be fully covered or removed.
- Where the TGS includes changes to regulatory signs or devices, this is to be documented; Signs covered or removed must be recorded on a signage usage checklist sheet including time covered / removed and time uncovered / replaced. A copy is to be signed and a copy retained by the client.
- All signs that are removed shall be delivered to a storage site designated by the client.
- DUPLICATE SIGNAGE: MAY BE OMITTED IF INSUFFICIENT ROOM, Leg Extensions may be used to mount Guardrail/Median.

PEDESTRIAN AND CYCLIST MANAGEMENT

Pedestrians and Cyclists for the duration of the works will be monitored as required. Appropriate pedestrian warning and directional signage will be erected and monitored throughout the duration of the works as required

INCIDENT MANAGEMENT

The contractor is to determine the appropriate procedure for incident management but should not be limited to:

- Call for assistance if required by incident
- Notify the worksite supervisor immediately of any incident
- Maintain effective traffic control (i.e. possible relocation of TC Station clear of any danger)
- Record sufficient notes of the incident, including obsercations in order to be able to complete an incident report form

RECORD KEEPING

Supervisory personnel shall keep daily records at a regular time period throughout the shift of the signage arrangement or Construction Traffic Control Plan (CTCP) and should be kept in a diary or in a worksheet. Special attention should be given to recording the installation, alteration and removal of all regulatory signs and devices and weather.

GENERAL CONSIDERATIONS FOR PUBLIC TRANSPORT

1. Where possible it is preferable to work outside of the service hours as not to disrupt the service
2. Where works will interfere with public transport routes the contractor shall in the first instance liaise with the relevant authority to inform them of and seek approval for the temporary relocation of pick up/drop off points
3. The contractor shall supply additional traffic controllers to effective and efficiently manage the affected service to ensure minimal inconvenience.

INSTRUCTIONS FOR USAGE OF PORTABLE TRAFFIC SIGNAL SYSTEM

Use, Operation & Monitoring of Portable Traffic Signals as per Guideline Traffic Management at Works on Roads Clause 2.5.3.3

Portable Traffic Signal System (PTSS) to be Fixed Time or Vehicle Actuated - Type 2 that can be used after hours also

PTSS shall only be operated when all safety, operation, and service instructions contained in the manufacutruer's manual are understood by the operator. Operators shall understand and comply with the manufacturers instruction accompanying each PTSS

A Type-2 PTSS can operate unattended. When operating unattended, a Type-2 PTSS shall be inspected at least once every 24 hours to confirm its correct operation, or shall have remote error monitoring and reporting functionality.

NOTES:

1. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Signs and devices are to be positioned in accordance with tolerances shown in section 4.1.6 of the MUTCD part 3: Works on Road
2. This TGS is suitable for Long Term Works.
3. If not already noted, the exiting posted speed limit is to be noted on this TGS.
4. The value of speed limits displayed shall match the speed zone approval.
5. Ensure all project and road authority approval requirements are met prior to commencing set up.
6. Cover all conflicting road signage where required.
7. The site MUST comply with the Queensland Manual of Uniform Traffic Control Devices Part 3: Works on Roads Nov 2019

Amendments:
All amendments to the TGS must be clearly documented on this plan. Amendments can only be made by the Traffic Control Supervisor holding a current TMD card in consultation with the project works supervisor.

Name: _____

TMD: _____

Reason for Modification: _____

Date: _____ Sign: _____

SITE SPECIFIC RISK ASSESSMENT

VERY HIGH	: Urgent - Stop work immediately, the risk requires immediate attention
HIGH	: Continue with supervision & control measures in SWMS or Site RA
MEDIUM	: Use control measures to ensure risk is low as reasonably possible
LOW	: Manage by routine procedures and safe practices

Potential Risk or Hazard	Current Risk	Action Taken to Reduce Risk to Safe Level	RISK AFTER CONTROL	Proposed Further Action
Workers exposed to passing Traffic on Rosewood Warrill View Rd		1. Advance signage to be implemented to advise traffic about changing conditions 2. Speed reduction to 40Km/h if workers are within 1.2m close to traffic. 3. Proper Delineation guiding traffic actual travelling path.		Routine Traffic Control Audits shall be completed
Failure in observing a lane closure on Rosewood Warrill View Rd		1. All or most of the works will be carried out during the low to medium volume traffic hours 2. Value of TC Taper will be 30m on posted speed 100Km/h giving ample amount of time to the traffic to be diverted into opposite lane. 3. Advance signs will be installed prior to lane closure & Pts position		Routine Traffic Control Audits shall be completed
Lane width not compliant with AGTTM part 3 table 3.5		1. One traffic lane will remain open at all times for shuttle flow 2. Minimum Temporary Lane Width for Traffic shall be maintained as 3m 3. Edge Clearance 0.3m shall be provided too.		Routine Traffic Control Audits shall be completed
Mental and physical exhaustion of traffic controllers stopping them working normally.		1. Minimum 10 hrs. between shifts. Complete Daily Health and Safety Record - Fatigue Management section. 2. Trailer Mounted portable traffic signals to be used to hold traffic temporarily		Allocation & Operations Team to confirm TCs getting sufficient breaks b/w shifts
Orientation of Signs / Displaced traffic cones and signage		1. Signs should face towards approaching traffic approximately at right angles to the line of sight from the driver to the sign 2. Drive through checks will be performed by TCs after regular intervals to confirm signs and cones are in their original position as shown on TGS.		Routine Traffic Control Audits shall be completed
On Road Cyclists in the Restricted Flow Arrangement		- No existing provision for Cyclists or pedestrians - Advance Roadworks warning signs will notify cyclists in about the road condition prior to works - Like for like conditions to be maintained		T/Cs Monitoring road users around the work site
END OF QUEUE COLLISION		- Estimated queue length based on the traffic volume data - Advance sign Queue Ahead to be installed at a sight distance to approx. end of Queue		T/Cs Monitoring road users around the work site

Released under RTI - DTMR

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

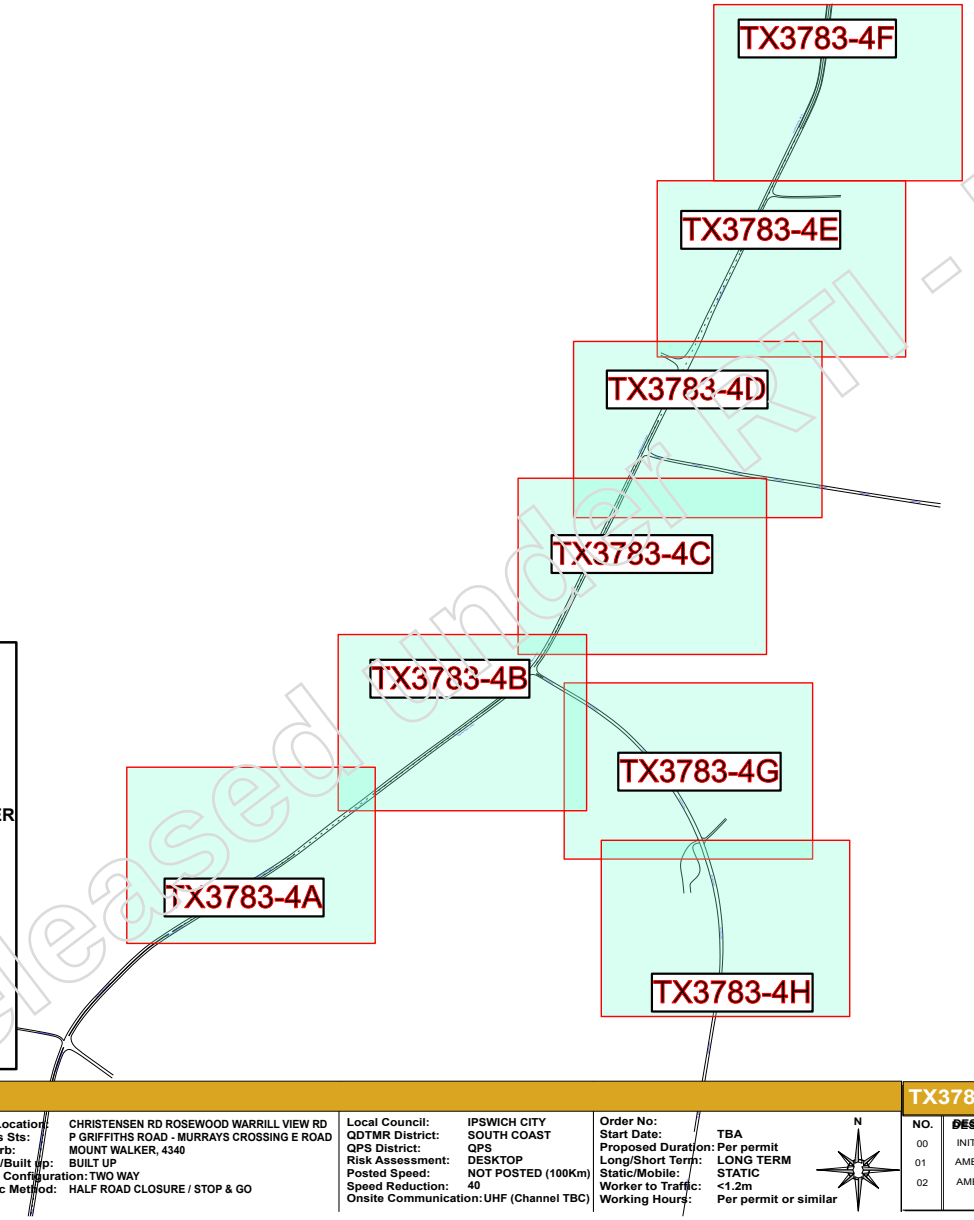
N

TX3783-4 (SITE SUITABLE NOTES) (SHEET 2 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

TGS LAYOUT



SHADOW VEHICLE REQUIREMENTS

SINGLE LANE NO SHOULDER:
60 shadow ute
70 shadow ute -risk assess LTMA
80> TMA

SINGLE LANE WITH SHOULDER:
60 spotter HOLD TRAFFIC TO INSTALL TAPER
70 pre warning
80> pre warning

MULTI LANE NO SHOULDER
60 shadow ute
70 shadow ute -risk assess LTMA
80> TMA

MULTI LANE WITH SHOULDER
60 shadow ute
70 pre warning- risk assess LTMA
80> TMA

Released under RTI - DTMR

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-4 (TGS LAYOUT) (SHEET 3 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

TRAFFEX

SITE SPECIFICS

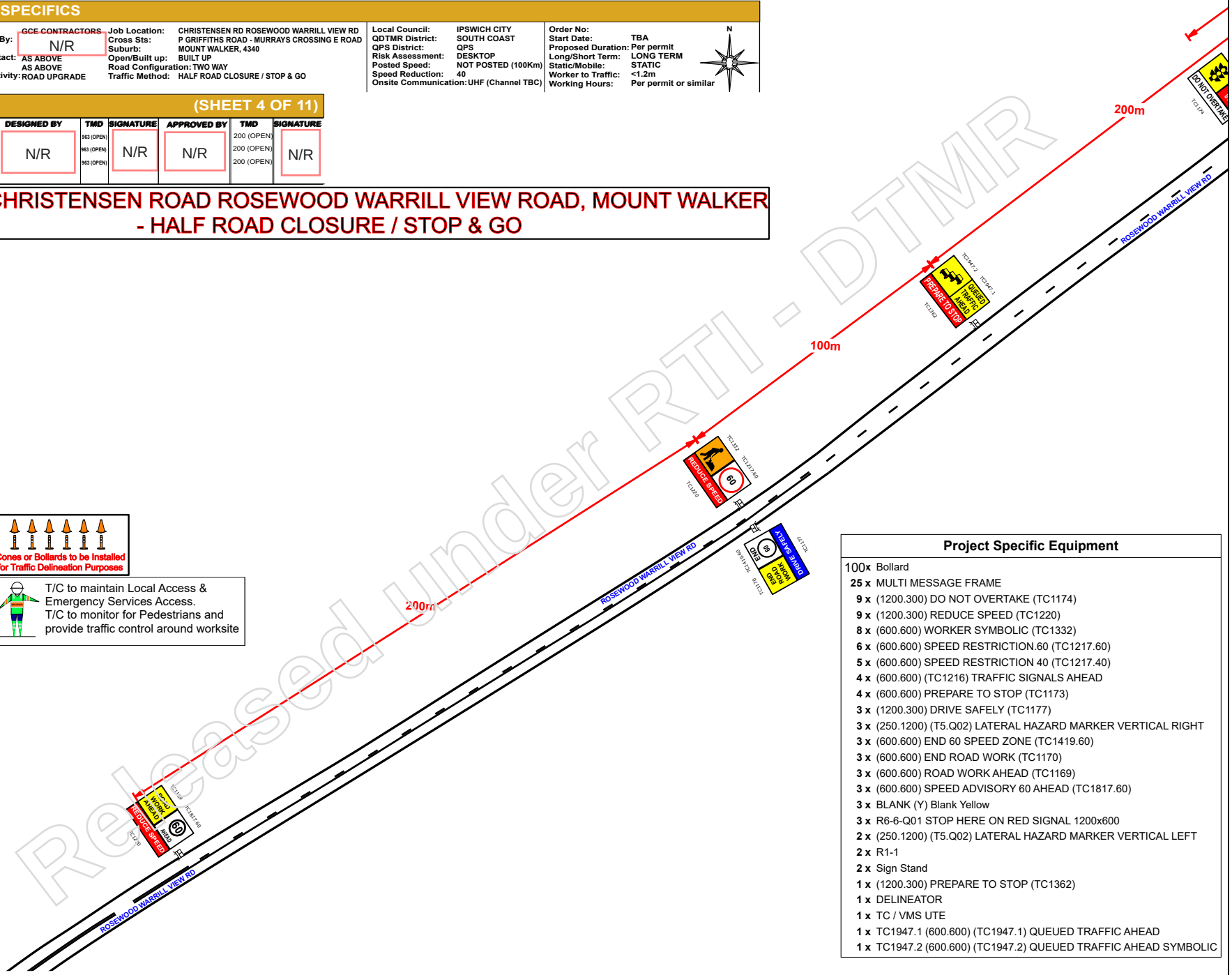
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-4A (SHEET 4 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Released under RTI - DTMR

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-4B (SHEET 5 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

SCHOOL BUS STOP TO BE RELOCATED SOUTH SIDE OF THE WORK ZONE

SCHOOL BUS STOP

ROSEWOOD WARRILL VIEW RD

CHRISTENSEN RD

Safety Buffer 20m

30m

6m

6m

STOP HERE ON RED SIGNAL

Approx. Queue Length 26m

PTSS 2 - AUTOMATED SIGNALS

PTSS 2 - AUTOMATED SIGNALS

Safety Buffer 30m

UTE

Safety Buffer 30m

TC Taper 30m

6m

6m

STOP HERE ON RED SIGNAL

Approx. Queue Length 44m

120m

200m

ROSEWOOD WARRILL VIEW RD

REDUCE SPEED

40

DO NOT OVERTAKE

09

DO NOT OVERTAKE

OUTSIDE WORK HOURS

TC1332 WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

AADT = 1147
AADT IN ONE DIRECTION = 574
PEAK HOUR VOLUME = 58
VOLUME FOR 5 MINUTES = 5
HEAVY VEHICLES 10%= 1
QUEUE LENGTH = (4x6) + (20x1) = 44m

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

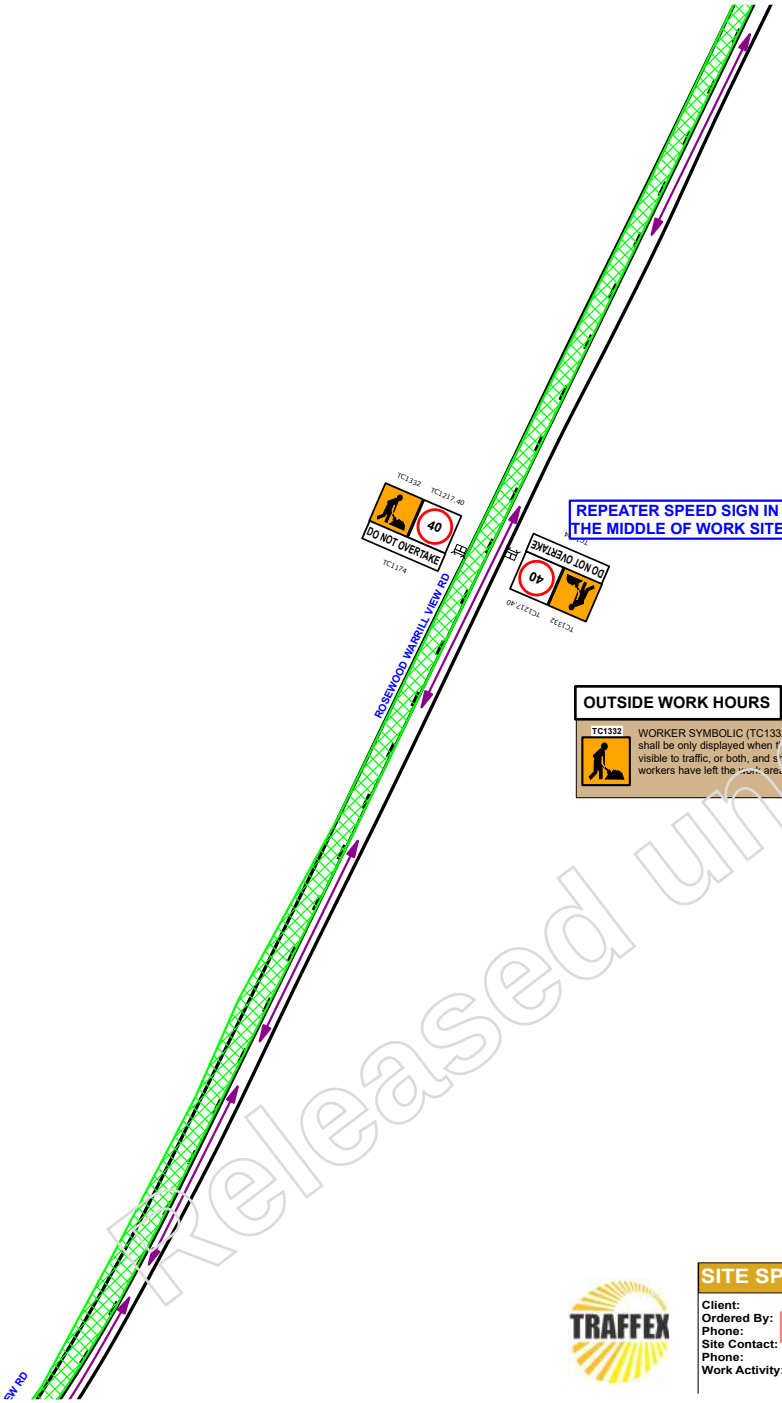
Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released Under RTI DTMR



A SMART VMS system that will notify exiting traffic the direction of the shuttle flow with a flashing arrow which is connected directly to the 2 way lights

INTEGRATED VMS BOARD FOR DRIVEWAY NOTIFICATION

SMART VMS CAN BE REPLACED BY TCs TO MANAGE DRIVEWAYS AS REQUIRED ON SITE

REPEATER SPEED SIGN IN THE MIDDLE OF WORK SITE

OUTSIDE WORK HOURS

TC1332 WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

TX3783-4C (SHEET 6 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)		N/R	200 (OPEN)	
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

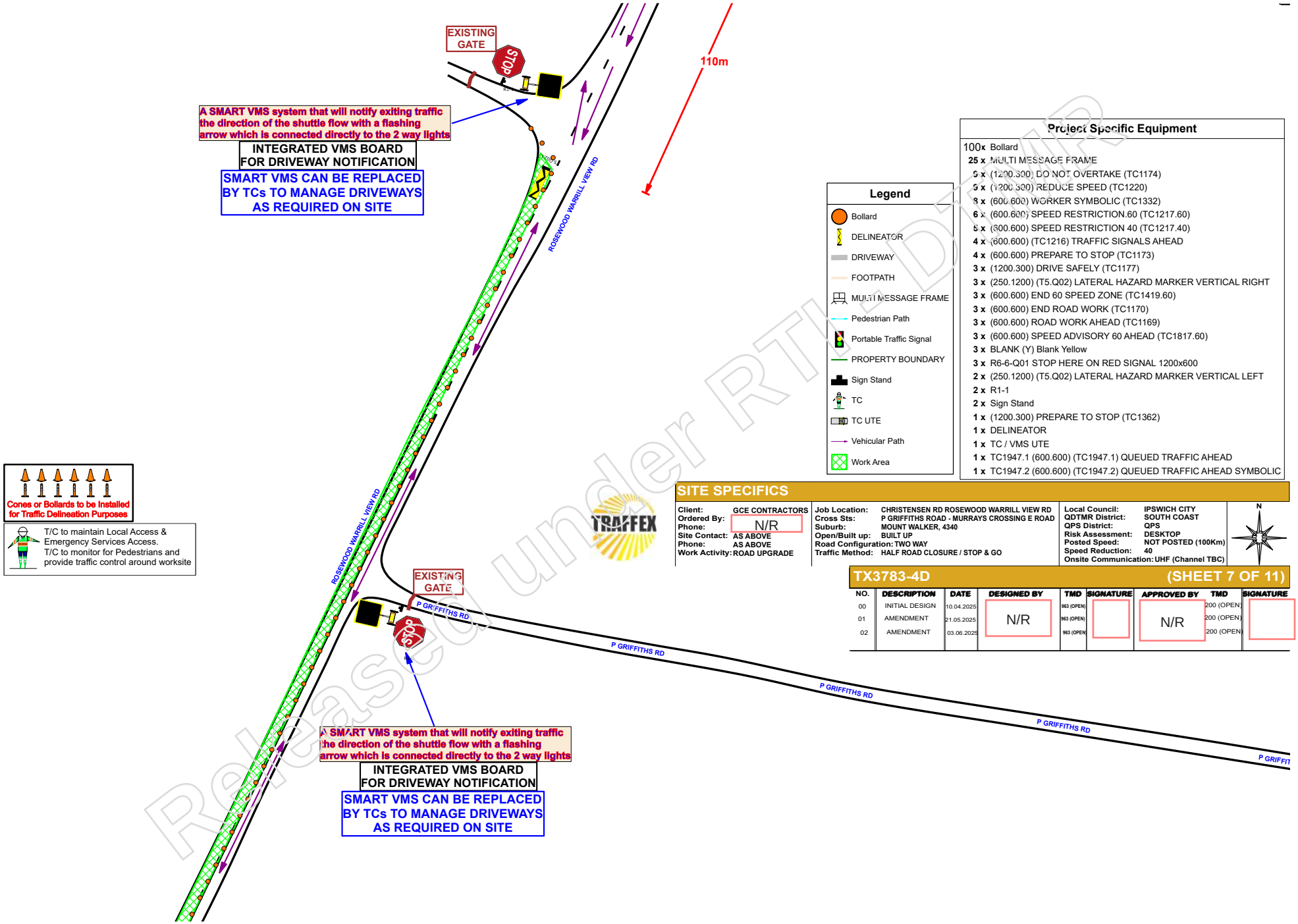
TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

Released under RTI - DTMR



Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(300.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

SITE SPECIFICS

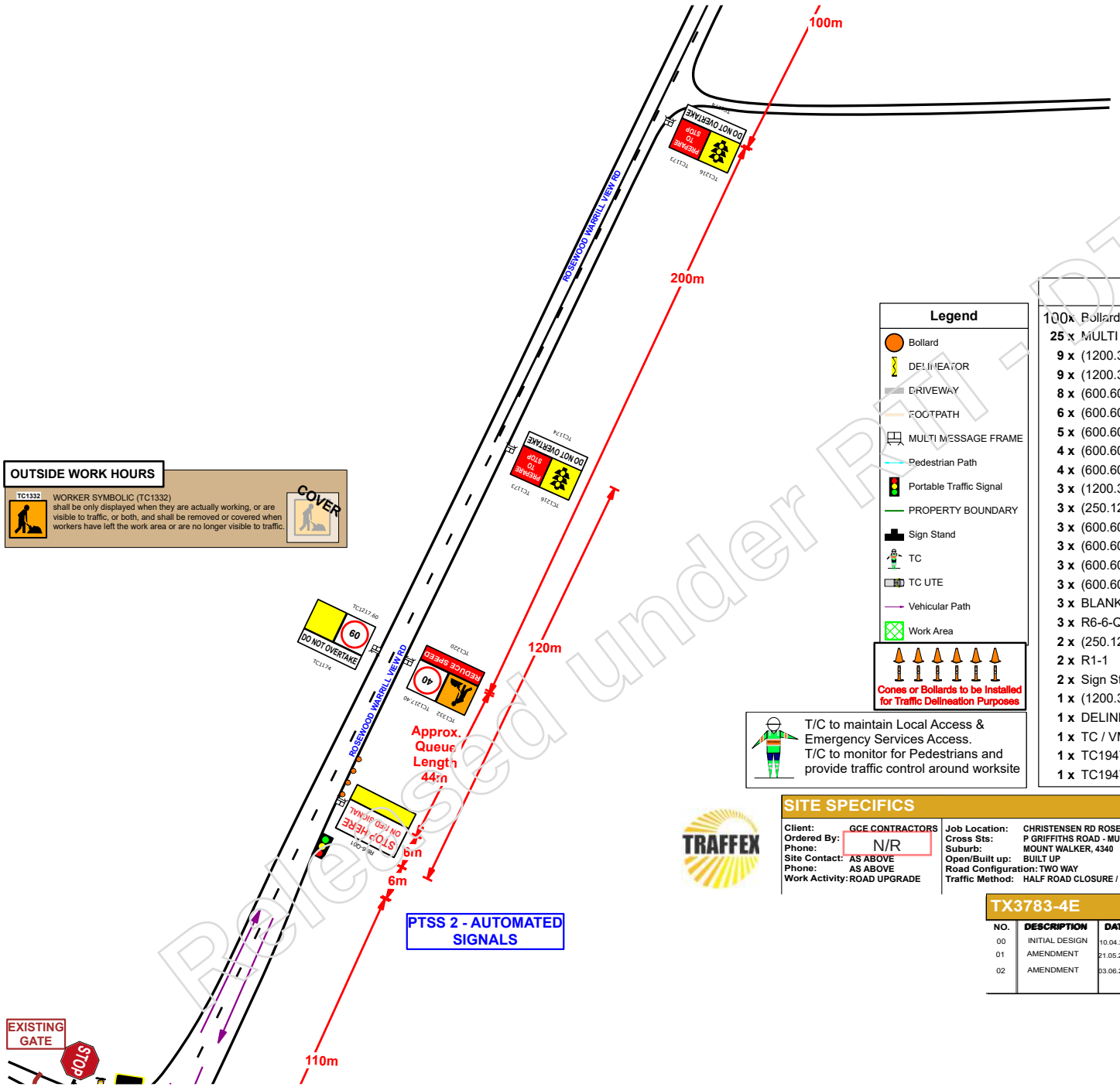
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40
				Onsite Communication:	UHF (Channel TBC)

N

TX3783-4D (SHEET 7 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)		N/R	200 (OPEN)	
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

Released under RTI DMR



OUTSIDE WORK HOURS

TC1332 WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Speed Reduction:	NOT POSTED (100Km)
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Onsite Communication:	40
					UHF (Channel TBC)

N

TX3783-4E (SHEET 8 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

Released under RTI - DTMR

SITE SPECIFICS

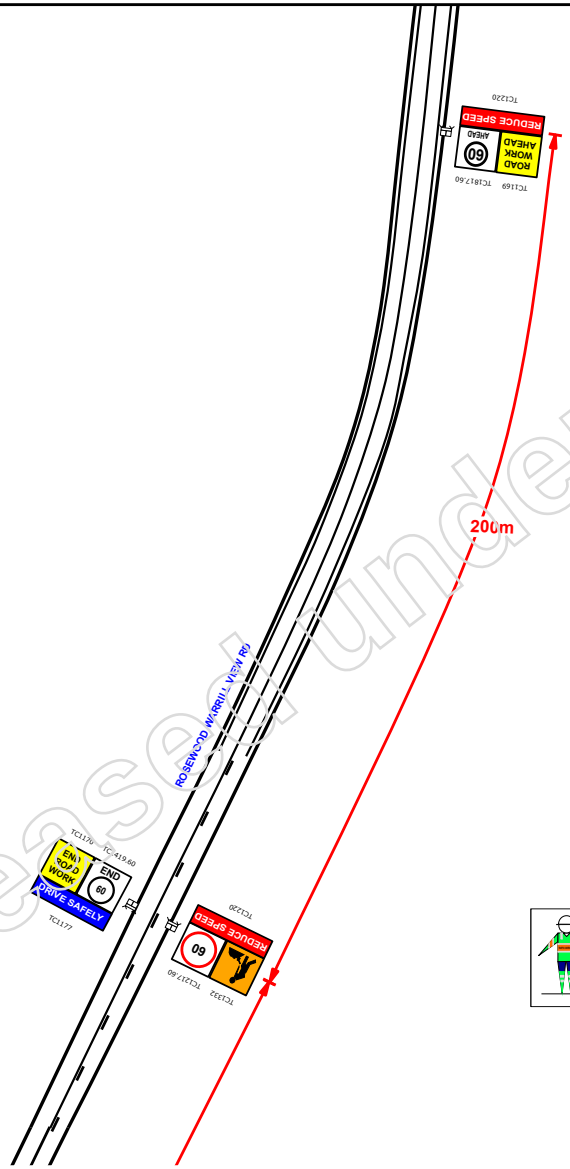
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-4F (SHEET 9 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released under RTI - DTMR

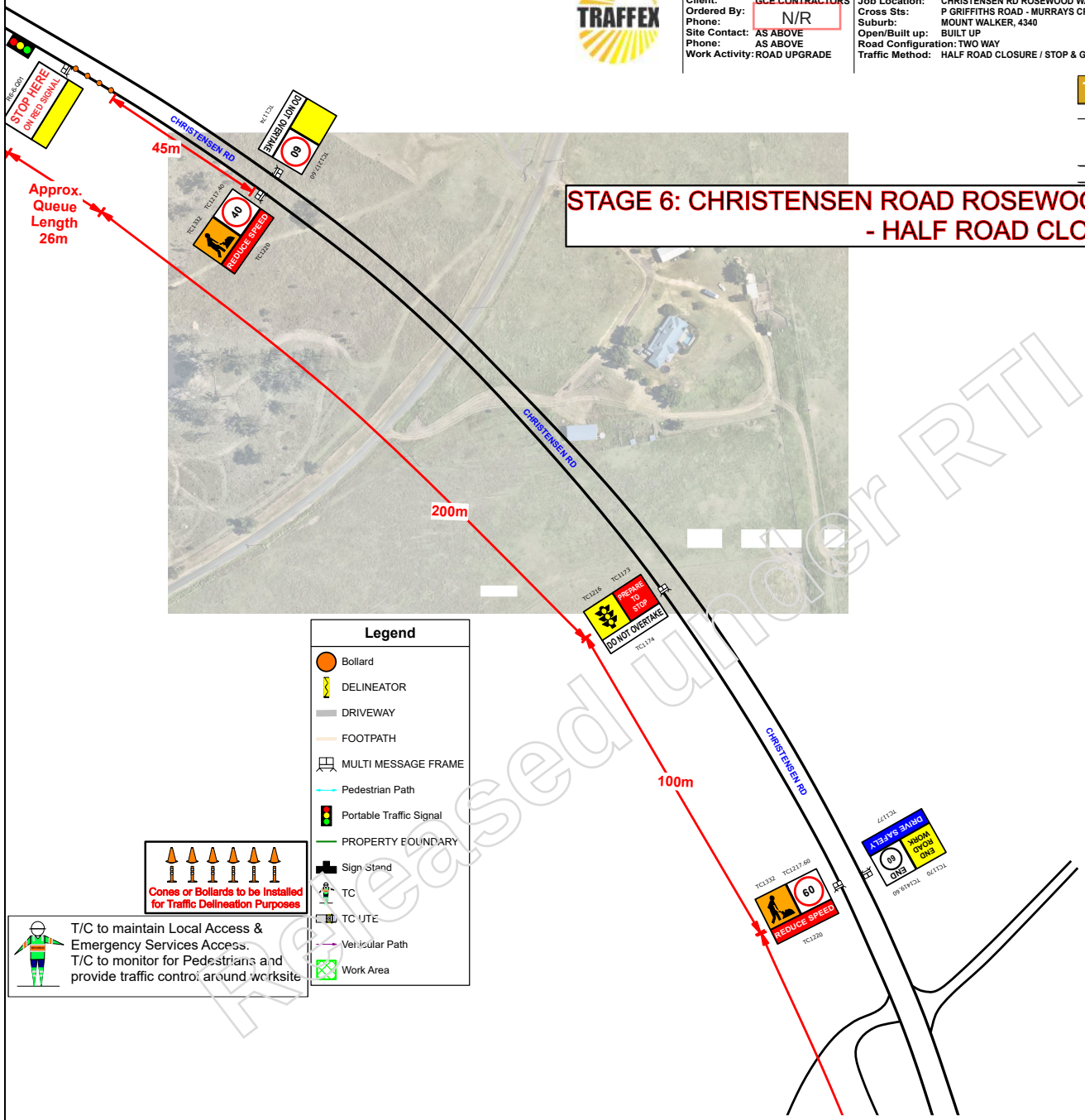
SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

TX3783-4G (SHEET 10 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

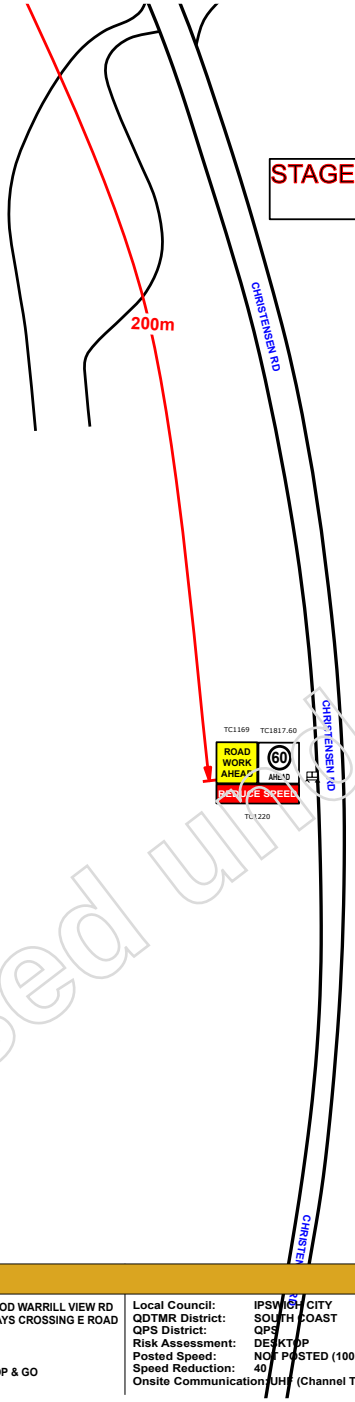


Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released under RTI - DTMR

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Released under RTI - DTMR

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

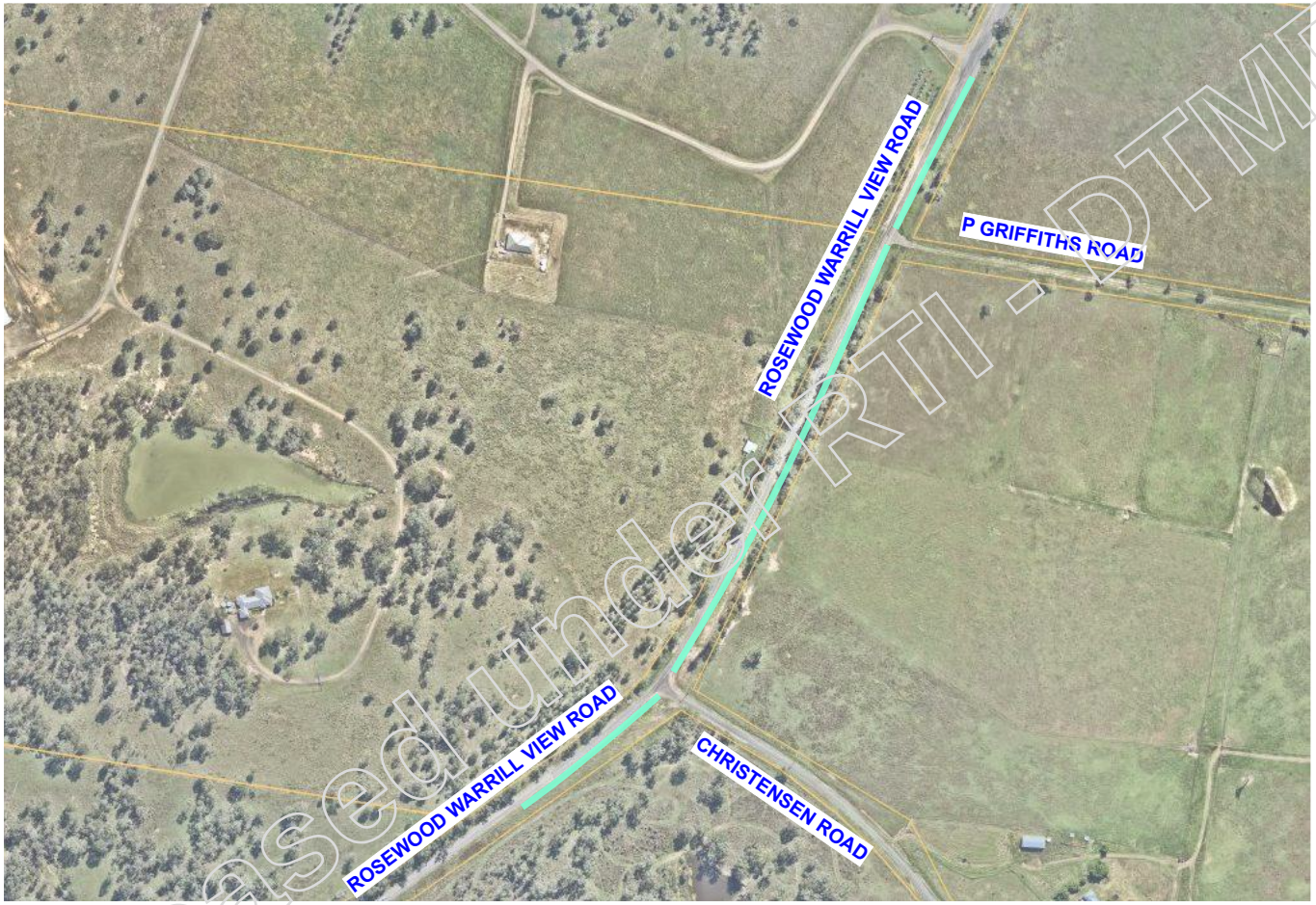
N

TX3783-4G (SHEET 11 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

CROSS STREETS: P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD



Released under RTI - DTMR

TC RESOURCES (Installation of Long Term Signs - Unsealed Not Posted (100Km/Hr)

TRAFFIC CONTROLLER	TC UTE	VMS UTE	SUPER UTE	POD / CONE TRUCK	TMA	LIGHT TMA	PTSS TYPE 2	VMS BOARDS	SMART VMS
4	-	1	-	1	-	-	3	-	2

TC RESOURCES (During Work Hours - Unsealed Not Posted (100Km/Hr)

TRAFFIC CONTROLLER	TC UTE	VMS UTE	SUPER UTE	POD / CONE TRUCK	TMA	LIGHT TMA	E-STOP	VMS BOARDS	QPS OFFICER
2-3	1	-	-	-	-	-	-	-	-

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-5 (COVER PAGE) **(SHEET 1 OF 11)**

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

SITE SUITABLE NOTES

Table 2.2 - VALUE OF DIMENSTION 'D'

SPEED LIMIT (km/h)	DIMENSON D (m)
≤55	15
56 - 65	45
≥ 66	Equal to the speed (km/h)

Figure 2.2: Speed to be used for advance warning sign spacing

Value of 'D' chosen against the higher speed limit in the first 200m of the start of the new speed zone to ensure greater distance is provided to more accurately reflect potential travel speeds in these zones.

Section 2.5.3 - TOLERANCE IN DISTANCE (m)

Measurement	-10%	+25%
15	13	18
45	41	56
70	63	87
80	72	100
90	81	112
100	90	125
110	99	137

Table 2.5 - MINIMUM LANE WIDTHS

CRITERIA	LANE WIDTH (m)
≤60	3
> 60 km/h	3.5
Curve with radius 100-250 m	Curve widening 0.5 per lane
Curve with radius < 100 m	Consider swept path of long vehicles (e.g. buses, trams)
Approach lane is < 3 m wide	Equal to approach lane*
Two-way residential street	5.5 (sum both ways)
Residential street with shuttle flow	3.5

Table 2.3 - RECOMMENDED SIGHT DISTANCES TO A TRAFFIC CONTROL DEVICE

SPEED LIMIT (km/h)	DISTANCE (m)
≤45	50
46 - 55	70
56 - 65	90
≥ 66	Two times the speed (km/h)

Table 5.1 & 5.2 - EDGE CLEARANCE

SPEED LIMIT (km/h)	DISTANCE (m)
For traffic cones, bollards, longitudinal channelising barricades or any other delineation device	
≤ 65	0.3*
≥ 66	0.5
For post-mounted reflectors, temporary hazard markers	
All Speed	1m
For kerbed edges of traffic lanes	
All Speed	1m
Road Safety Barrier System Clearance to Traffic Lane	
≤ 40	0.3
41 - 80	0.5
> 80	1m

REQUIRED QUALIFCATION OF PERSONNEL

- TC: Traffic Controller who is responsible for manual control of traffic within the TTM worksite through use of a Portable Traffic Control Device or a Stop/Slow bat.
- TMI: Traffic Management Implementer who is responsible for the traffic management within a TTM worksite and TTM workers under their direction
- TMD: Traffic Management Designer who is responsible for the planning and initial risk assessment of a TTM worksite and who develops the TMPs and TGSs to mitigate the risks for implementation by the TMI.
- RPEQ Certified: Person Who can practice outside requirements or scope of QGTTM & MUTCD after preparing a risk assessment.

NOTE: TO THE IMPLEMENTATION OFFICER / TRAFFIC CONTROLLER

- Ensure TGS has been approved.
- Plan your emergency escape route & document on the pre-start. An accredited traffic controller must not contravene the Traffic Controller Accreditation Scheme Approved Procedure (TCASAP) & must direct traffic in a way stated in both the Approved Procedure & the Manual of Uniform Traffic Control Devices.
- Breaks shall be taken as specified in TCASAP. (See Section 2.4) Additional Controllers may need to be rostered for this purpose.
- Ensure a site specific risk assessment is undertaken prior to ALL traffic control setups or when required due to changes in conditions on site.
- Ensure you maintain a safe working distance from traffic.
- Remain aware of traffic conditions and maintain line of sight.
- All traffic control devices on site will be inspected once daily to ensure the adequacy of such devices and arrangements. Records to include times and any actions that were required during each check.
- All signs to be clean, undamaged & legible.
- Existing signs & traffic control devices which are inappropriate to, or conflict with, the temporary work site situation shall be fully covered or removed.
- Where the TGS includes changes to regulatory signs or devices, this is to be documented; Signs covered or removed must be recorded on a signage usage checklist sheet including time covered / removed and time uncovered / replaced. A copy is to be signed and a copy retained by the client.
- All signs that are removed shall be delivered to a storage site designated by the client.
- DUPLICATE SIGNAGE: MAY BE OMITTED IF INSUFFICIENT ROOM; Leg Extensions may be used to mount Guardrail/Median.

PEDESTRIAN AND CYCLIST MANAGEMENT

Pedestrians and Cyclists for the duration of the works will be monitored as required. Appropriate pedestrian warning and directional signage will be erected and monitored throughout the duration of the works as required

INCIDENT MANAGEMENT

The contractor is to determine the appropriate procedure for incident management but should not be limited to:

- Call for assistance if required by incident
- Notify the worksite supervisor immediately of any incident
- Maintain effective traffic control (i.e. possible relocation of TC Station clear of any danger)
- Record sufficient notes of the incident, including obsercations in order to be able to complete an incident report form

RECORD KEEPING

Supervisory personnel shall keep daily records at a regular time period throughout the shift of the signage arrangement or Construction Traffic Control Plan (CTCP) and should be kept in a diary or in a worksheet. Special attention should be given to recording the installation, alteration and removal of all regulatory signs and devices and weather.

GENERAL CONSIDERATIONS FOR PUBLIC TRANSPORT

1. Where possible it is preferable to work outside of the service hours as not to disrupt the service
2. Where works will interfere with public transport routes the contractor shall in the first instance liaise with the relevant authority to inform them of and seek approval for the temporary relocation of pick up/drop off points
3. The contractor shall supply additional traffic controllers to effective and efficiently manage the affected service to ensure minimal inconvenience.

INSTRUCTIONS FOR USAGE OF PORTABLE TRAFFIC SIGNAL SYSTEM

Use, Operation & Monitoring of Portable Traffic Signals as per Guideline Traffic Management at Works on Roads Clause 2.5.3.3

Portable Traffic Signal System (PTSS) to be Fixed Time or Vehicle Actuated - Type 2 that can be used after hours also

PTSS shall only be operated when all safety, operation, and service instructions contained in the manufacutruer's manual are understood by the operator. Operators shall understand and comply with the manufacturers instruction accompanying each PTSS.

A Type-2 PTSS can operate unattended. When operating unattended, a Type-2 PTSS shall be inspected at least once every 24 hours to confirm its correct operation, or shall have remote error monitoring and reporting functionality.

NOTES:

1. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Signs and devices are to be positioned in accordance with tolerances shown in section 4.1.6 of the MUTCD part 3: Works on Road
2. This TGS is suitable for Long Term Works.
3. If not already noted, the existing posted speed limit is to be noted on this TGS.
4. The value of speed limits displayed shall match the speed zone approval.
5. Ensure all project and road authority approval requirements are met prior to commencing set up.
6. Cover all conflicting road signage where required.
7. The site MUST comply with the Queensland Manual of Uniform Traffic Control Devices Part 3: Works on Roads Nov 2019

Amendments:
All amendments to the TGS must be clearly documented on this plan. Amendments can only be made by the Traffic Control Supervisor holding a current TMD card in consultation with the project works supervisor.

Name: _____

TMD: _____

Reason for Modification: _____

Date: _____ Sign: _____

SITE SPECIFIC RISK ASSESSMENT

VERY HIGH	: Urgent - Stop work immediately, the risk requires immediate attention
HIGH	: Continue with supervision & control measures in SWMS or Site RA
MEDIUM	: Use control measures to ensure risk is low as reasonably possible
LOW	: Manage by routine procedures and safe practices

Potential Risk or Hazard	Current Risk	Action Taken to Reduce Risk to Safe Level	RISK AFTER CONTROL	Proposed Further Action
Workers exposed to passing Traffic on Rosewood Warrill View Rd		1. Advance signage to be implemented to advise traffic about changing conditions 2. Speed reduction to 40Km/h if workers are within 1.2m close to traffic. 3. Proper Delineation guiding traffic actual travelling path.		Routine Traffic Control Audits shall be completed
Failure in observing a lane closure on Rosewood Warrill View Rd		1. All or most of the works will be carried out during the low to medium volume traffic hours 2. Value of TC Taper will be 30m on posted speed 100Km/h giving ample amount of time to the traffic to be diverted into opposite lane. 3. Advance signs will be installed prior to lane closure & Pts position		Routine Traffic Control Audits shall be completed
Lane width not compliant with AGTTM part 3 table 3.5		1. One traffic lane will remain open at all times for shuttle flow 2. Minimum Temporary Lane Width for Traffic shall be maintained as 3m 3. Edge Clearance 0.3m shall be provided too.		Routine Traffic Control Audits shall be completed
Mental and physical exhaustion of traffic controllers stopping them working normally.		1. Minimum 10 hrs. between shifts. Complete Daily Health and Safety Record - Fatigue Management section. 2. Trailer Mounted portable traffic signals to be used to hold traffic temporarily		Allocation & Operations Team to confirm TCs getting sufficient breaks b/w shifts
Orientation of Signs / Displaced traffic cones and signage		1. Signs should face towards approaching traffic approximately at right angles to the line of sight from the driver to the sign 2. Drive through checks will be performed by TCs after regular intervals to confirm signs and cones are in their original position as shown on TGS.		Routine Traffic Control Audits shall be completed
On Road Cyclists in the Restricted Flow Arrangement		- No existing provision for Cyclists or pedestrians - Advance Roadworks warning signs will notify cyclists in about the road condition prior to works - Like for like conditions to be maintained		T/Cs Monitoring road users around the work site
END OF QUEUE COLLISION		- Estimated queue length based on the traffic volume data - Advance sign Queue Ahead to be installed at a sight distance to approx. end of Queue		T/Cs Monitoring road users around the work site

Released under RTI - DTMR

SITE SPECIFICS

TRAFFEX

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

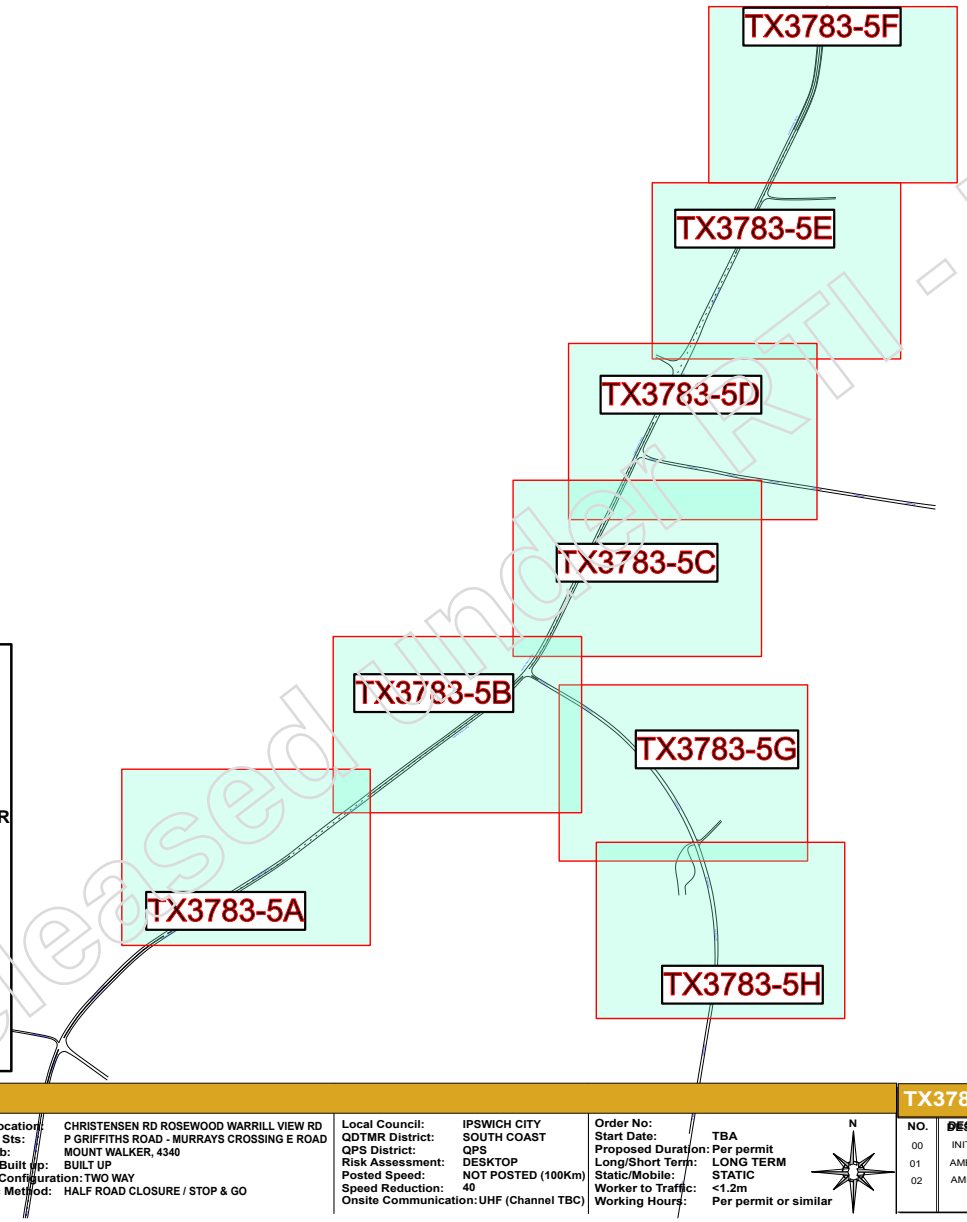
N

TX3783-5 (SITE SUITABLE NOTES) (SHEET 2 OF 10)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO

TGS LAYOUT



SHADOW VEHICLE REQUIREMENTS

SINGLE LANE NO SHOULDER:
60 shadow ute
70 shadow ute -risk assess LTMA
80> TMA

SINGLE LANE WITH SHOULDER:
60 spotter HOLD TRAFFIC TO INSTALL TAPER
70 pre warning
80> pre warning

MULTI LANE NO SHOULDER
60 shadow ute
70 shadow ute -risk assess LTMA
80> TMA

MULTI LANE WITH SHOULDER
60 shadow ute
70 pre warning- risk assess LTMA
80> TMA

Released under RTI - DTMR

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-5 (TGS LAYOUT) (SHEET 3 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

SITE SPECIFICS

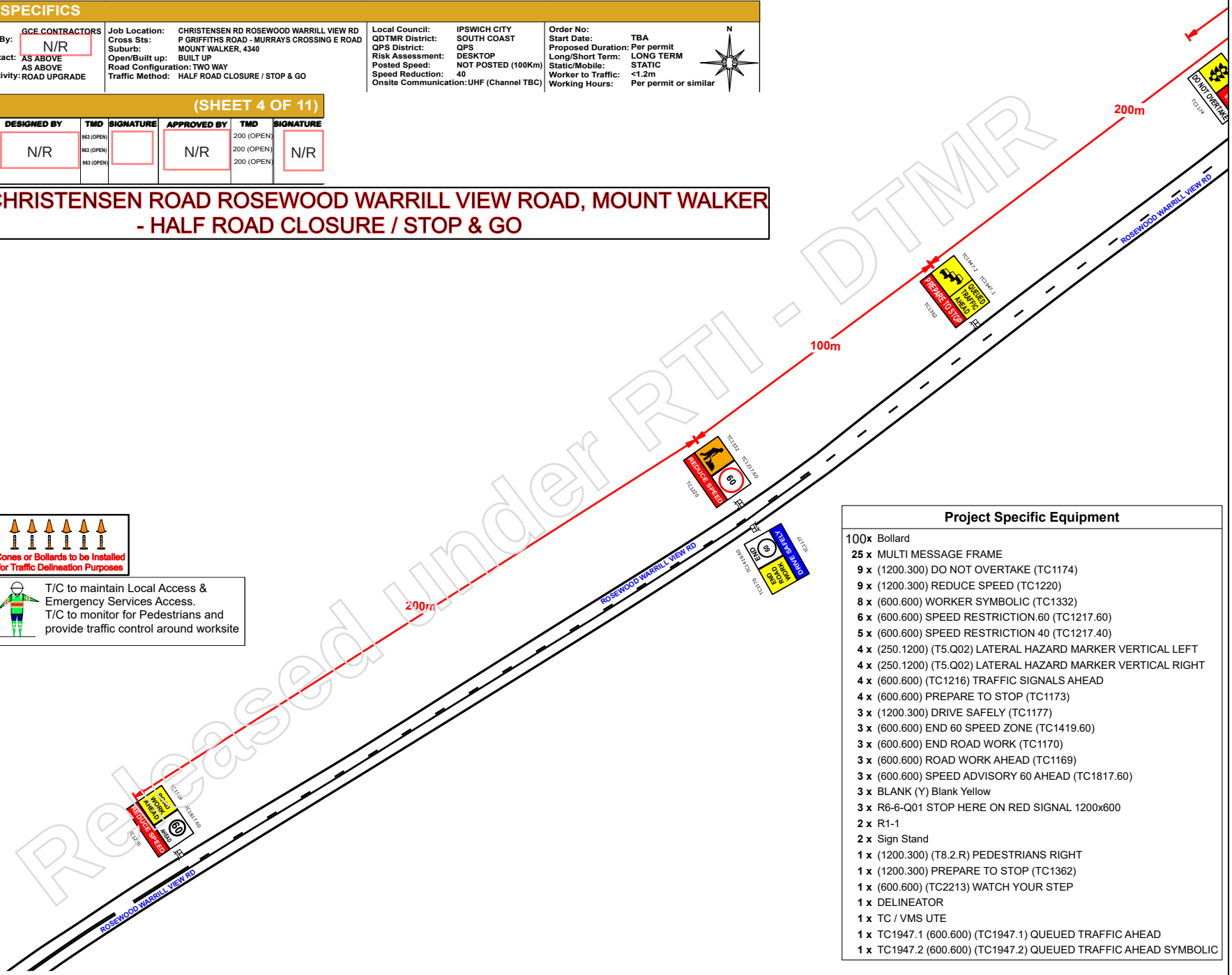
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-5A (SHEET 4 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)		N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Released under RTI - DTMR

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

- 100x Bollard
- 25 x MULTI MESSAGE FRAME
- 9 x (1200.300) DO NOT OVERTAKE (TC1174)
- 9 x (1200.300) REDUCE SPEED (TC1220)
- 8 x (600.600) WORKER SYMBOLIC (TC1332)
- 6 x (600.600) SPEED RESTRICTION.60 (TC1217.60)
- 5 x (600.600) SPEED RESTRICTION 40 (TC1217.40)
- 4 x (250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
- 4 x (250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
- 4 x (600.600) (TC1216) TRAFFIC SIGNALS AHEAD
- 4 x (600.600) PREPARE TO STOP (TC1173)
- 3 x (1200.300) DRIVE SAFELY (TC1177)
- 3 x (600.600) END 60 SPEED ZONE (TC1419.60)
- 3 x (600.600) END ROAD WORK (TC1170)
- 3 x (600.600) ROAD WORK AHEAD (TC1169)
- 3 x (600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
- 3 x BLANK (Y) Blank Yellow
- 3 x R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
- 2 x R1-1
- 2 x Sign Stand
- 1 x (1200.300) (T8.2.R) PEDESTRIANS RIGHT
- 1 x (1200.300) PREPARE TO STOP (TC1362)
- 1 x (600.600) (TC2213) WATCH YOUR STEP
- 1 x DELINEATOR
- 1 x TC / VMS UTE
- 1 x TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
- 1 x TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD
Ordered By:	N/R	ross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD
Phone:		uburb:	MOUNT WALKER, 4340
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP
Phone:	AS ABOVE	Road Configuration:	TWO WAY
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO

Local Council:	IPSWICH CITY
QDTMR District:	SOUTH COAST
QPS District:	QPS
Risk Assessment:	DESKTOP
Posted Speed:	NOT POSTED (100Km)
Speed Reduction:	40
Onsite Communication:	UHF (Channel TBC)

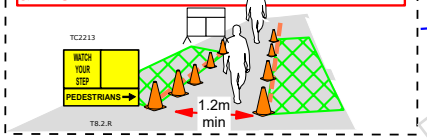
Order No:	
Start Date:	TBA
Proposed Duration:	Per permit
Long/Short Term:	LONG TERM
Static/Mobile:	STATIC
Worker to Traffic:	<1.2m
Working Hours:	Per permit or similar

N

TX3783-5B (SHEET 5 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

TO MAINTAIN ACCESS TO CHRISTENSEN ROAD, MINIMUM OF 1.2M WIDTH MUST BE MAINTAINED THROUGH WORKS DELINEATED WITH CONES & MESH FENCE.



SCHOOL BUS STOP

PTSS 2 - AUTOMATED SIGNALS

ROSEWOOD WARRILL VIEW RD

CHRISTENSEN RD

Safety Buffer 20m

30m

6m

6m

Approx. Queue Length 26m

STOP HERE ON RED SIGNAL

R6-6-Q01

OUTSIDE WORK HOURS

TC1332 WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

PTSS 2 - AUTOMATED SIGNALS

AADT = 1147
AADT IN ONE DIRECTION = 574
PEAK HOUR VOLUME = 58
VOLUME FOR 5 MINUTES = 5
HEAVY VEHICLES 10%= 1
QUEUE LENGTH = (4x6) + (20x1) = 44m

110m

6m

6m

Approx. Queue Length 44m

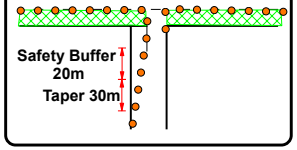
120m

200m

ROSEWOOD WARRILL VIEW RD

WORKS AT INTERSECTION TO BE DONE IN HALVES TO ALLOW TRAFFIC ENTER EXIT CHRISTENSEN RD

Delineation Options



Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

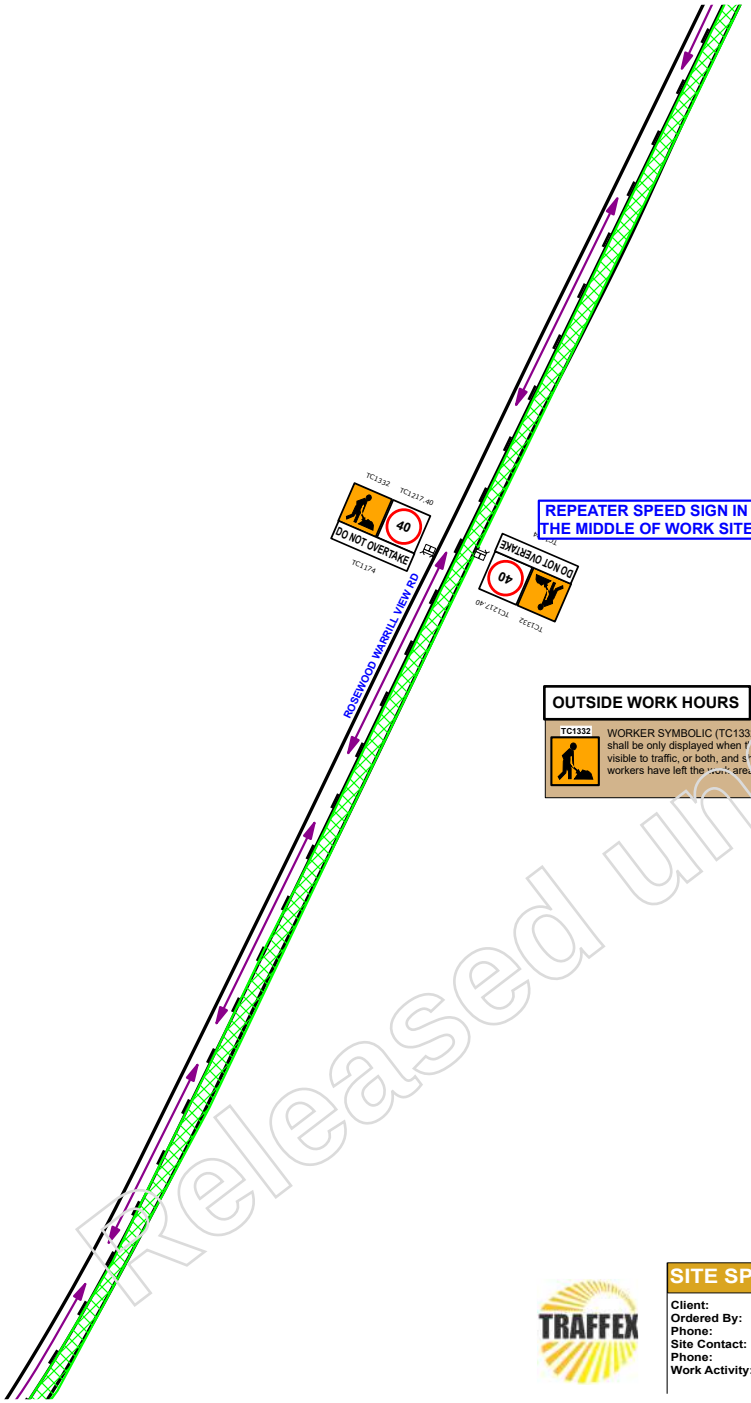
Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) (T8.2.R) PEDESTRIANS RIGHT
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	(600.600) (TC2213) WATCH YOUR STEP
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released under RTI - DTMR



A SMART VMS system that will notify exiting traffic the direction of the shuttle flow with a flashing arrow which is connected directly to the 2 way lights

INTEGRATED VMS BOARD FOR DRIVEWAY NOTIFICATION

SMART VMS CAN BE REPLACED BY TCs TO MANAGE DRIVEWAYS AS REQUIRED ON SITE

REPEATER SPEED SIGN IN THE MIDDLE OF WORK SITE

OUTSIDE WORK HOURS

TC1332 — WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

Cones or Bollards to be installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) (T8.2.R) PEDESTRIANS RIGHT
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	(600.600) (TC2213) WATCH YOUR STEP
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

TX3783-5C (SHEET 6 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

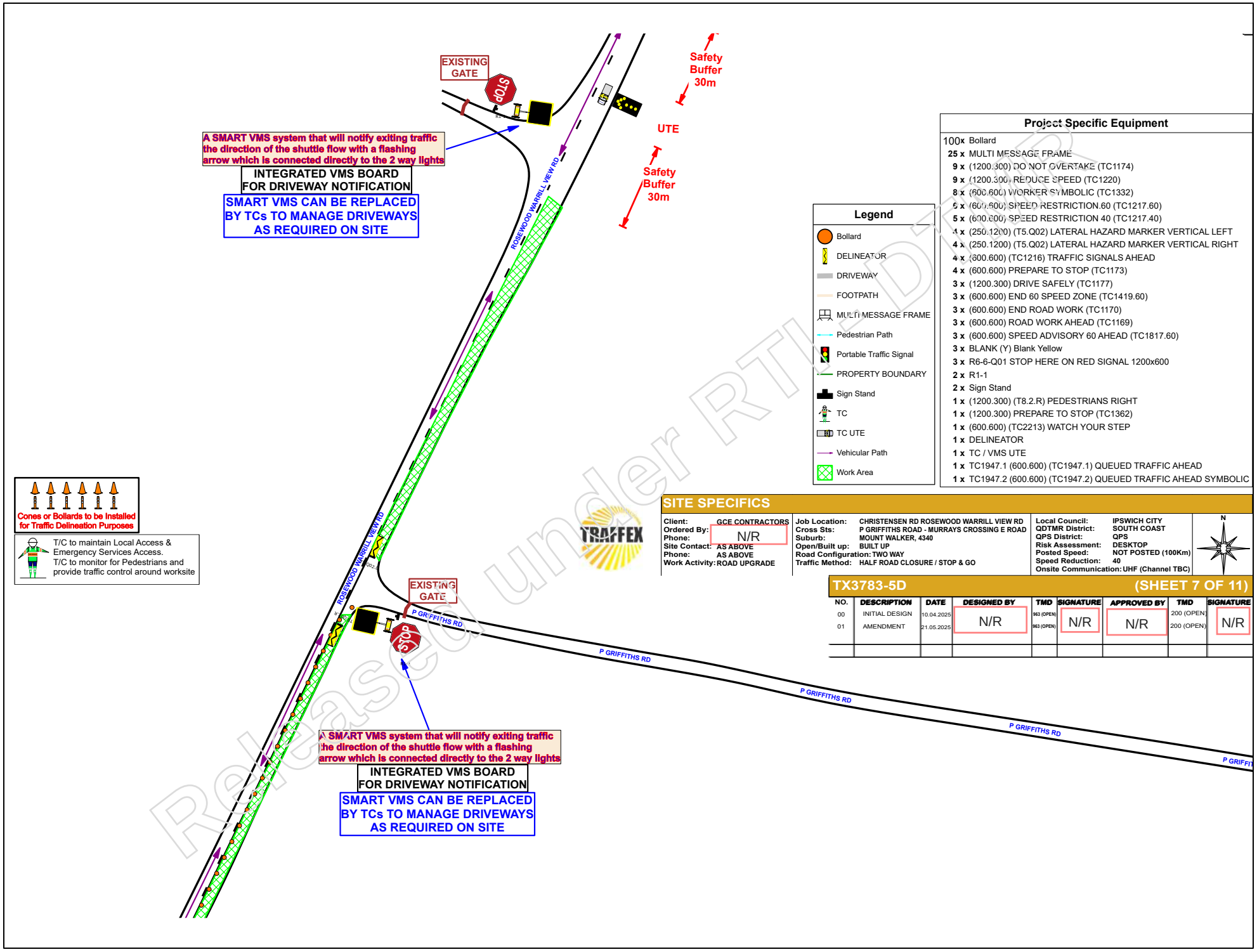
TRAFFEX

SITE SPECIFICS

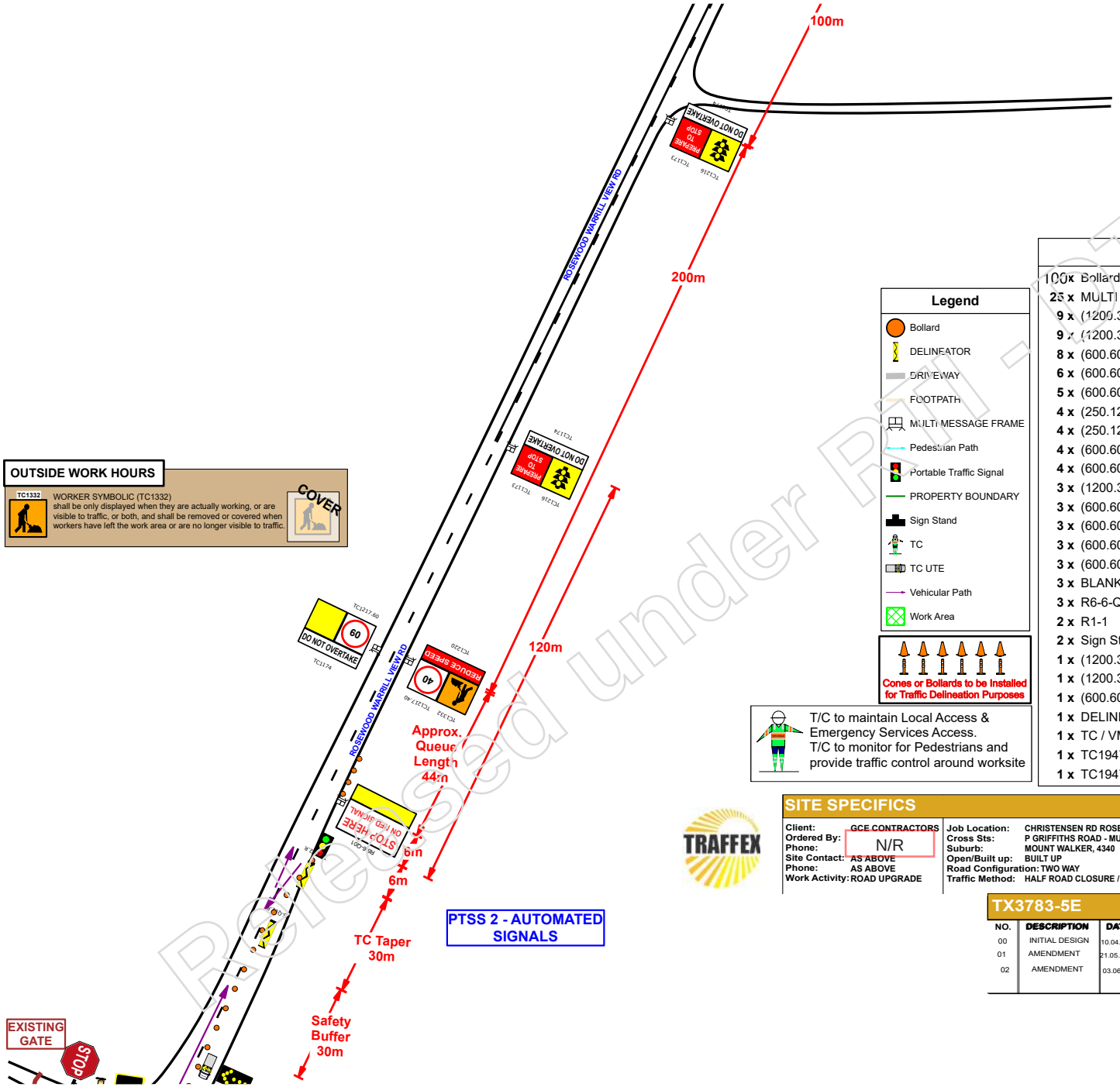
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

Released under RTI - DTMR



Released under RTI-DTMR



OUTSIDE WORK HOURS

TC1332 WORKER SYMBOLIC (TC1332) shall be only displayed when they are actually working, or are visible to traffic, or both, and shall be removed or covered when workers have left the work area or are no longer visible to traffic.

COVER

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access. T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) (T8.2.R) PEDESTRIANS RIGHT
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	(600.600) (TC2213) WATCH YOUR STEP
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40
				Onsite Communication:	UHF (Channel TBC)

N

TX3783-5E (SHEET 8 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN			200 (OPEN	

Released under RTI - DTMR

SITE SPECIFICS

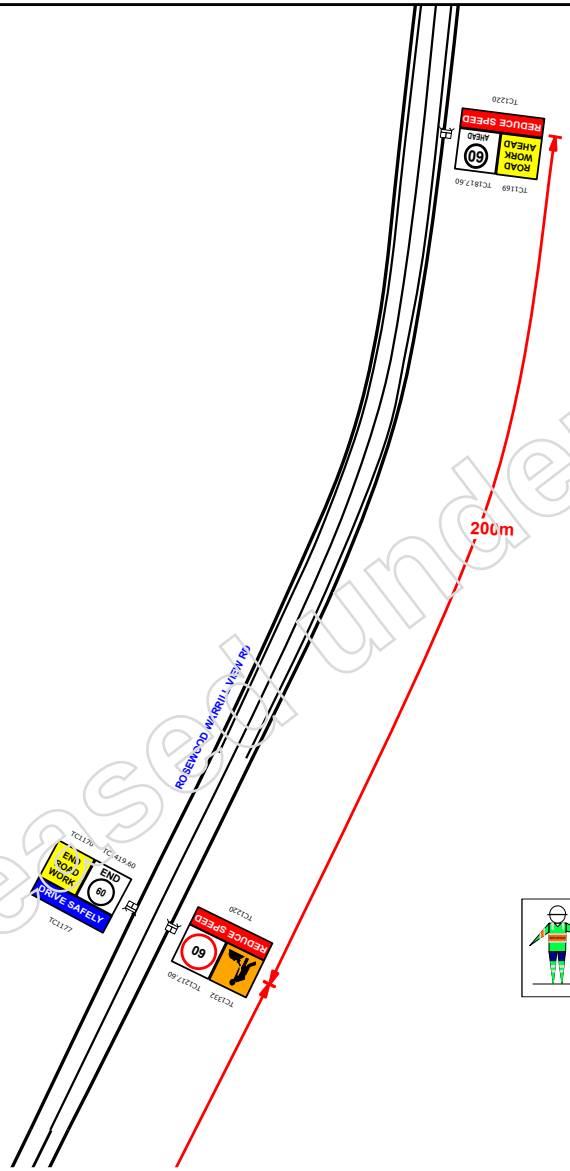
Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-5F (SHEET 9 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) (T8.2.R) PEDESTRIANS RIGHT
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	(600.600) (TC2213) WATCH YOUR STEP
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released under RTI - DTMR

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40
				Onsite Communication:	UHF (Channel TBC)

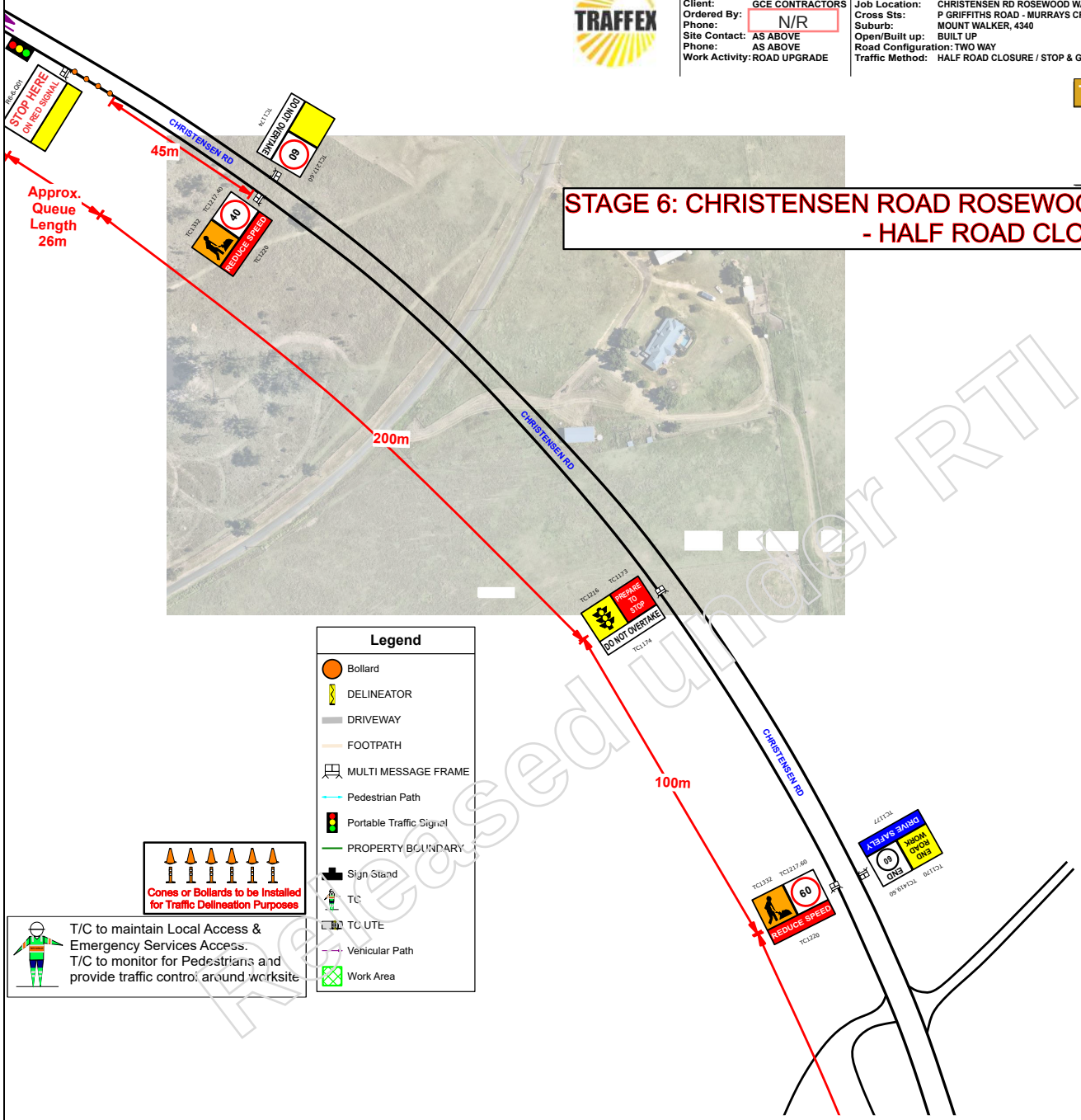
Order No:	
Start Date:	TBA
Proposed Duration:	Per permit
Long/Short Term:	LONG TERM
Static/Mobile:	STATIC
Worker to Traffic:	<1.2m
Working Hours:	Per permit or similar

N

TX3783-5G (SHEET 10 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		513 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

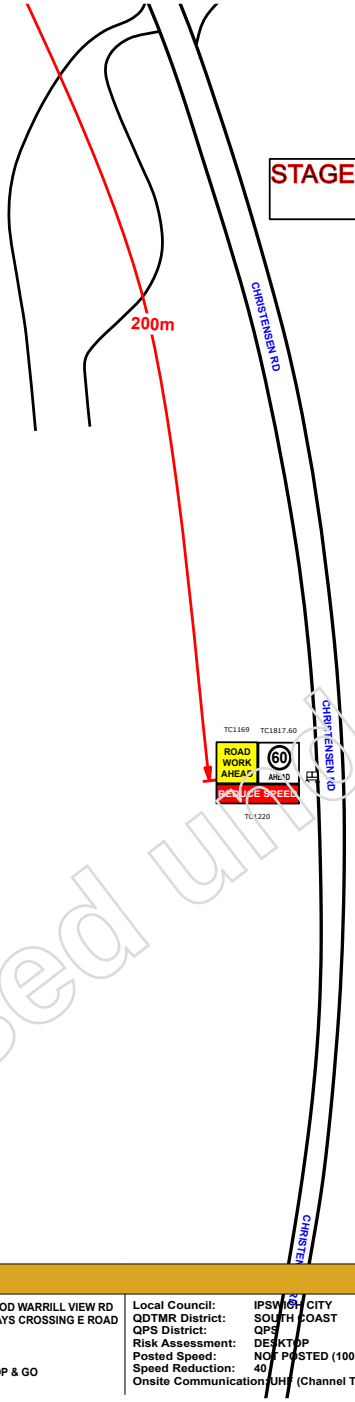
Project Specific Equipment

100 x	Bollard
25 x	MULTI MESSAGE FRAME
9 x	(1200.300) DO NOT OVERTAKE (TC1174)
9 x	(1200.300) REDUCE SPEED (TC1220)
8 x	(600.600) WORKER SYMBOLIC (TC1332)
6 x	(600.600) SPEED RESTRICTION.60 (TC1217.60)
5 x	(600.600) SPEED RESTRICTION 40 (TC1217.40)
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
4 x	(250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
4 x	(600.600) (TC1216) TRAFFIC SIGNALS AHEAD
4 x	(600.600) PREPARE TO STOP (TC1173)
3 x	(1200.300) DRIVE SAFELY (TC1177)
3 x	(600.600) END 60 SPEED ZONE (TC1419.60)
3 x	(600.600) END ROAD WORK (TC1170)
3 x	(600.600) ROAD WORK AHEAD (TC1169)
3 x	(600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
3 x	BLANK (Y) Blank Yellow
3 x	R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
2 x	R1-1
2 x	Sign Stand
1 x	(1200.300) (T8.2.R) PEDESTRIANS RIGHT
1 x	(1200.300) PREPARE TO STOP (TC1362)
1 x	(600.600) (TC2213) WATCH YOUR STEP
1 x	DELINEATOR
1 x	TC / VMS UTE
1 x	TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
1 x	TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Released under RTI - DRAFT

1 x TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

STAGE 6: CHRISTENSEN ROAD ROSEWOOD WARRILL VIEW ROAD, MOUNT WALKER - HALF ROAD CLOSURE / STOP & GO



Project Specific Equipment

- 100x Bollard
- 25 x MULTI MESSAGE FRAME
- 9 x (1200.300) DO NOT OVERTAKE (TC1174)
- 9 x (1200.300) REDUCE SPEED (TC1220)
- 8 x (600.600) WORKER SYMBOLIC (TC1332)
- 6 x (600.600) SPEED RESTRICTION.60 (TC1217.60)
- 5 x (600.600) SPEED RESTRICTION 40 (TC1217.40)
- 4 x (250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL LEFT
- 4 x (250.1200) (T5.Q02) LATERAL HAZARD MARKER VERTICAL RIGHT
- 4 x (600.600) (TC1216) TRAFFIC SIGNALS AHEAD
- 4 x (600.600) PREPARE TO STOP (TC1173)
- 3 x (1200.300) DRIVE SAFELY (TC1177)
- 3 x (600.600) END 60 SPEED ZONE (TC1419.60)
- 3 x (600.600) END ROAD WORK (TC1170)
- 3 x (600.600) ROAD WORK AHEAD (TC1169)
- 3 x (600.600) SPEED ADVISORY 60 AHEAD (TC1817.60)
- 3 x BLANK (Y) Blank Yellow
- 3 x R6-6-Q01 STOP HERE ON RED SIGNAL 1200x600
- 2 x R1-1
- 2 x Sign Stand
- 1 x (1200.300) (T8.2.R) PEDESTRIANS RIGHT
- 1 x (1200.300) PREPARE TO STOP (TC1362)
- 1 x (600.600) (TC2213) WATCH YOUR STEP
- 1 x DELINEATOR
- 1 x TC / VMS UTE
- 1 x TC1947.1 (600.600) (TC1947.1) QUEUED TRAFFIC AHEAD
- 1 x TC1947.2 (600.600) (TC1947.2) QUEUED TRAFFIC AHEAD SYMBOLIC

Legend

- Bollard
- DELINEATOR
- DRIVEWAY
- FOOTPATH
- MULTI MESSAGE FRAME
- Pedestrian Path
- Portable Traffic Signal
- PROPERTY BOUNDARY
- Sign Stand
- TC
- TC UTE
- Vehicular Path
- Work Area

Cones or Bollards to be Installed for Traffic Delineation Purposes

T/C to maintain Local Access & Emergency Services Access.
T/C to monitor for Pedestrians and provide traffic control around worksite

Released under RTI - DTMR

TRAFFEX

SITE SPECIFICS

Client:	GCE CONTRACTORS	Job Location:	CHRISTENSEN RD ROSEWOOD WARRILL VIEW RD	Local Council:	IPSWICH CITY	Order No:	
Ordered By:	N/R	Cross Sts:	P GRIFFITHS ROAD - MURRAYS CROSSING E ROAD	QDTMR District:	SOUTH COAST	Start Date:	TBA
Phone:		Suburb:	MOUNT WALKER, 4340	QPS District:	QPS	Proposed Duration:	Per permit
Site Contact:	AS ABOVE	Open/Built up:	BUILT UP	Risk Assessment:	DESKTOP	Long/Short Term:	LONG TERM
Phone:	AS ABOVE	Road Configuration:	TWO WAY	Posted Speed:	NOT POSTED (100Km)	Static/Mobile:	STATIC
Work Activity:	ROAD UPGRADE	Traffic Method:	HALF ROAD CLOSURE / STOP & GO	Speed Reduction:	40	Worker to Traffic:	<1.2m
				Onsite Communication:	UHF (Channel TBC)	Working Hours:	Per permit or similar

N

TX3783-5H (SHEET 11 OF 11)

NO.	DESCRIPTION	DATE	DESIGNED BY	TMD	SIGNATURE	APPROVED BY	TMD	SIGNATURE
00	INITIAL DESIGN	10.04.2025	N/R	963 (OPEN)	N/R	N/R	200 (OPEN)	N/R
01	AMENDMENT	21.05.2025		963 (OPEN)			200 (OPEN)	
02	AMENDMENT	03.06.2025		963 (OPEN)			200 (OPEN)	

Appendix D – Stakeholder Consultation Plan

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 108 of 300

Christensen Road Upgrade

Communications & Stakeholder Management Plan

Rev 1.0

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 109 of 300

Document approvals and revisions

Project Number:	1007
Document number:	0002
Revision date:	19 September 2025
Revision:	1.0

Rev	Date				Remarks
1.0	19/09/2025	N/R			
Signature:					
Signature:					
Signature:					
Signature:					

Document Control

The Project Manager is responsible for the preparation and ongoing updates of this document. The Project Manager is responsible for updating this plan to reflect changes to the project, legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the Project Manager and/or client before being distributed / implemented.

Revision Details

Revision	Details

Released under RTI - DTMR

Contents

1. Project Overview 5
1.1 Scope of Works 5
2. Purpose of this Plan 5
3. Roles and Responsibilities 5
3.1 Project Manager 6
4. Stakeholder Management Framework 6
4.1 Engagement Approach 6
4.2 Engagement Objectives 8
5. Project Stakeholders 8
5.1 Stakeholder Analysis 8
5.1.1 Affected Properties 10
5.2 Risk Assessment 10
5.2.1 Stakeholder Issue and Mitigation Matrix 11
5.3 Mitigating Impacts 12
6. Engagement and Communication 15
6.1 Engagement and Communication Tools 15
6.2 Notification Requirements 16
7. Land Access Management 17
7.1 Land Access Approach 17
7.2 Readiness for Construction Activities 17
7.3 Property Management Plans 18
7.4 Notification of Access for Works 18
8. Policies and Procedures 19
8.1 Engagement Commitment 19
8.2 Construction Code of Conduct 19
8.3 Disruptive Works Policy 20
8.3.1 Noise and Vibration During Construction 20
8.3.2 Dust During Construction 20
8.3.3 Light Impacts During Construction 21
8.4 Property Condition and Monitoring Procedure 21
8.4.1 Damage Claims 22
9. Enquiries and Complaints Management 22
9.1 Enquiries and Complaints Handling Procedure 22
9.1.1 Responding to Enquiries and Complaints 22
9.1.2 Response Timeframes 23
9.1.3 Verifying Complaints 23
9.1.4 Issues Escalation 23
9.2 Stakeholder Database and Records Management 23
9.2.1 Data Entry Timeframes 24
9.3 Data Privacy 24
Appendix A – Key Messages 25

Released under RTI - DTMR

Tables

Table 1 IAP2 levels of public participation 7
Table 2 Key stakeholders 9
Table 3 High-level Project risks and proposed mitigation 11
Table 4 Project impacts or events, risks and proposed mitigations 12
Table 5 List of communication and engagement tools 15
Table 6 Required advance notification standards, distribution areas and approval timeframes 16
Table 7 Response times for complaints 23
Table 13 Data entry timeframes 24

Released under RTI - DTMR

1. Project Overview

The project being undertaken is for the roadworks comprising upgrading of the Christensen Road Intersection on Rosewood-Warrill View Road to include channelised left turn and basic right turn treatments. Works shall be carried out on (Ch. 0 – Ch. 80) Christensen Road – and (Ch.34.56 – Ch. 392.37) Rosewood Warrill View Road.

1.1 Scope of Works

The Project will include the following elements:

- Establishment and ongoing maintenance of erosion and sediment controls;
- Clearing and grubbing;
- Earthworks formation, including traffic lanes, batters, turn path widening and bus bay;
- Drainage line and stormwater infrastructure;
- Formation and compaction of pavement works;
- Sealing of roads trafficway and shoulder surfaces;
- Road sign installation;
- Line marking and installation of road furniture; and
- Reinstatement and rehabilitation of disturbed non-sealed areas.

2. Purpose of this Plan

This Communications and Stakeholder Management Plan (CSMP) identifies the management systems, procedures, processes and methodologies to be applied to ensure the successful community and stakeholder management for the Christensen Road Intersection on Rosewood-Warrill View Road Project, in accordance with the requirements of Mt Walker Quarries QLD and the Project Specifications. The scope of this plan includes:

- Community and stakeholder management approach
- Roles and responsibilities
- Stakeholder overview
- Engagement and communication principles, objectives and approach
- Engagement and communication tools, including reputation management
- Community and stakeholder policies and procedures
- Reporting, monitoring, evaluation and review.

The CSMP also describes how the Project will manage communities and stakeholders on the Project to satisfy the requirements of local Council and any other key authorities.

3. Roles and Responsibilities

Specific roles and responsibilities for the project's personnel in relation to communications and stakeholder management and reporting are described below.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 113 of 300

3.1 Project Manager

To successfully deliver the project, the Project Manager (PM) will ensure effective communication flow, decision making and interface management to ensure the project advance through key stages without encumbrances.

The PM will:

- Encourage open and honest communication within the Project team and lead by example
- Communicate strategic direction and be responsive to staff feedback
- Facilitate and sometimes lead communication activities
- Attend and participate in community engagement meetings and stakeholder engagement sessions
- Incorporate stakeholder input where possible in key decisions relating to adjacent properties
- Assist in obtaining project approvals and manage project interfaces to deliver the project with the least disruption to local residents and travelling commuters
- Review the CSMP as required.

4. Stakeholder Management Framework

4.1 Engagement Approach

GCE Contractor's approach to communities and stakeholders reflects our commitment to achieving positive reputational outcomes for during Project delivery. As the foundation for how we engage and communicate, our strategies will support the Project to:

- Develop and maintain proactive, collaborative and effective working relationship with the community, stakeholders and key authorities
- Minimise the impacts on the community and stakeholders and keep them informed during the delivery of the works
- Protect and enhance the reputation of Mt Walker Quarries QLD, the Project and its purpose.

The following principles will support successful delivery of our engagement strategy:

- **Be open**: ensure stakeholders have access to information about the construction works program and upcoming construction activities
- **Be proactive**: inform and engage stakeholders early in the process, ensure they remain fully informed with the ability to voice any feedback
- **Be responsive**: respond to all stakeholder contact in a timely manner and manage a fair and open engagement process
- **Be aware**: with an overarching approach to carry out works with minimal impact on the local community where practically possible.

In alignment with the International Association of Public Participation (IAP2)'s for effective stakeholder engagement, the Plan's engagement approach is based on the IAP2 spectrum (see table 1) for establishing an effective communication and engagement strategy. IAP2 is recognised for advancing public involvement and participation in government programs and services. Australian government departments, at all levels, use IAP2 as the industry guidelines for community engagement. Our level of engagement on the Project will be adapted according to the likely impact on stakeholders and their influence.

IAP2's Public Participation Spectrum is designed to assist with selection of the level of participation that defines the public's role in any community engagement program. The different levels of public participation are:

- Inform

RTI-5755 Release.pdf - Page Number: 114 of 300
Released under RTI - DTMR

- Consult
- Involve
- Collaborate
- Empower.

Table 1 IAP2 levels of public participation

Inform	Consult	Involve	Collaborate	Empower
Goal				
Provide stakeholders with balanced and objective information to assist them in understanding the issues, alternatives and opportunities.	Obtain stakeholder feedback on options and/or decisions.	Work directly with stakeholders throughout the process to ensure that their concerns and aspirations are consistently understood and considered.	Partner with stakeholders in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	Decision-making by affected stakeholders.
Promise to Stakeholders				
We will keep you informed and provide you with tailored information for you to better understand key concepts.	We will keep you informed, listen to and acknowledge concerns and provide feedback on how stakeholder input has been considered.	We will work with you to ensure that your concerns and aspirations are understood and provide feedback on how stakeholder input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions and incorporate your advice into the decisions to the maximum extent possible.	We will look to you to make decisions on negotiable elements of the project and provide you with the resources you require to make well informed decisions.
Examples				
• Construction notifications • Website • SMS and email updates • Meetings • Stakeholder briefings • Online, social media and printed publications such as newsletters.	• Community Information sessions • Community Liaison Group • Stakeholder presentations • Door knocking			

Our approach to stakeholder and community activities integrates highly developed, tested systems and tools that aid successful project delivery and customer service. This approach is based on the Inform and Consult levels of the spectrum and involves:

- Preparation and constant evaluation of this plan for the life of the Project
- Thorough planning and stakeholder analysis to minimise impacts on landholders, asset owners, businesses and communities
- Identification of all stakeholders and issues that may influence planning and accessibility during construction

RTI-5755 Release.pdf - Page Number: 115 of 300

- An engagement model that enables our team to be responsive to all issues raised in a timely and accurate way throughout all phases of the Project
- Monitoring, recording and responding professionally to all community and stakeholder interactions
- Training for all Project personnel, contractors and suppliers in our expected level of performance and behaviour in communications and community engagement.

4.2 Engagement Objectives

We will ensure active, ongoing and timely communications and meaningful engagement opportunities with our local communities and key stakeholders to build positive perceptions of the project throughout development, delivery and operations.

The Project will involve a range of impacts to traffic and access at times, in addition to other impacts from road construction such as vegetation removal, noise, dust and vibration.

We aim to reach a diverse range of stakeholders through direct and online activities and tools. We will continuously communicate with highly impacted and interested stakeholders using a variety of tools, including high-quality printed and visual materials, including maps, timelapse videos, photos, animations and information graphics to increase understanding of construction activities.

The Project's engagement objectives are to:

- Ensure that stakeholders and the community have a strong understanding of the nature of the Project's activities, design rationale and timing
- Facilitate opportunities for recognition of Project milestones to build and maintain strong support for the Project and its benefits
- Minimise disruptions to community and stakeholders via effective programming of Project works, decision making and approvals
- Develop and maintain strong relationships with stakeholders and the community with direct and timely lines of communication
- Follow through on commitments made for the life of the Project
- Provide for a diverse range of stakeholder and community members' engagement needs
- Ensure the Project's systems, culture and decision-making processes support stakeholder and community input
- Ensure stakeholder and community engagement is effectively resourced and managed to deliver quality outcomes.

5. Project Stakeholders

GCE Contractor's engagement approach will build on the stakeholder relationships established by Mt Walker Quarry's engagement to date. From Contract award, we will aim to build strong relationships with affected landholders, tenants, local businesses and the community through proactive engagement.

An initial desktop analysis of stakeholders has been undertaken of the areas and location affected by or adjacent to the Project. Further detailed analysis and appropriate engagement mechanisms will be developed in accordance with Seqwater's existing engagement strategy upon contract award.

5.1 Stakeholder Analysis

Stakeholder analysis will provide a clear understanding of stakeholders and insights as to how best to engage them through assessing their level of engagement and influence and interest in the Project.

Identifying the influence and interest of stakeholders and tailoring the degree to which the team liaises with individual stakeholders to meet their expectations and gain their trust and satisfaction.

A summary of key stakeholders and anticipated areas of interest is noted in Table 2.

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 116 of 300

Table 2 Key stakeholders

Stakeholder category	Specific stakeholders	Issues and opportunities
Key Government Departments and Agencies	• Department of Local Government, Water and Volunteers • Queensland Department of Health • Queensland Department of Transport and Main Roads • Queensland Department of the Premier and Cabinet • Queensland Department of Environment, Tourism, Science and Innovation • Queensland Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism	• Reputation of the Government and approving department • Function, constructability, sustainability, safety, community satisfaction with operations, environmental management • Approvals • Environmental protection and vegetation management • Water supply, safety • Access during construction, impact on community and local road network • Political reputation, financial management, community perception • Sustainability, connectivity • Public and worker safety • Access • Disability discrimination • Aboriginal affairs, Native Title, cultural heritage.
Local Government	• Scenic Rim Regional Council.	• Approvals • Dust management • Noise and Vibration management • Environmental protection and safety • Water supply, safety • Traffic, impact on local road network • Road safety • Access during construction, impact on community • Political reputation, community perception • Sustainability • Public and worker safety.
Emergency Services	• Queensland Police • Queensland Ambulance Service • Queensland Fire Service • Queensland Rural Fire Service • SES.	• Emergency management and access • Road design – support emergency services access • Safety and access during construction – traffic changes, road closures, etc.
Representative bodies	• Local Government Association • AgForce • National Farmers Federation	• Property values • Benefits to local industry, best practice construction

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 117 of 300

	• Queensland Water and Land Carers • Civil Contractors Federation • Queensland Major Contractors Association.	• Advocacy for community environmental groups • Advocacy for connectivity and water accessibility for communities / customers • Motorist safety, road design • Freight movement impacts during construction and long-term improvements • Impacts to motorists, taxi companies • Disruptions to transport services during construction, maintaining services • Benefits to local industry, best-practice construction.
Traditional Owners, First Nations people	• Mununjali, Wangerriburra and Ugarapul Peoples of the Scenic Rim • The Dajera Family	• Cultural heritage protection • Employment and local business development • Community benefit opportunities.
Utility services	• Energex • Telstra	• Work interface • Community sentiment – service disruptions.
Media	• Queensland Times • Courier Mail • Queensland Country Life • Radio – ABC Southern Queensland, community radio • Metropolitan media – television and radio • Social media -- X, Facebook, Instagram.	• Community attitude • Project milestones • Project progress • Human interest stories • Safety • Community disruption.

5.1.1 Affected Properties

Along the road corridor are a number of properties that will require ongoing engagement throughout the life of the Project. Based on preliminary investigations of the alignment, 16 privately owned lots are adjacent to the area where construction activities will occur.

GCE Contractors recognises that consistent and early engagement in our approach to affected landholders and local community is an effective engagement mechanism. Levels of engagement and use of communication channels will be informed by specific work activities. Where there are higher impacts, such as access changes, road closures, specific communications will be developed.

5.2 Risk Assessment

Regular risk assessments during the life of the project will be undertaken and appropriate mitigation measures developed and implemented to effectively manage the risk.

Table 3. shows a preliminary high-level risk assessment of events related to stakeholders and their engagement that will require management during the Project.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 118 of 300

5.2.1 Stakeholder Issue and Mitigation Matrix

Table 3 High-level Project risks and proposed mitigation

Stakeholder Group	Issues/Risk	Mitigation Strategy
External stakeholders		
Affected landholders and residents (owners, tenants)	• Access processes • Weed management • Construction impacts (dust, noise, vibration and loss of privacy) • Changes to access • Disruption to services caused by construction • Changes to traffic movements • Increased movements on local roads • Heavy vehicles • Visual amenity impacts • Behaviour of construction workers.	• Early, proactive communication with landholders and residents about construction works, timing and duration • Agreed access protocols and requirements • Early and regular engagement with identified sensitive receptors (residents with temporary access impacts, noise, dust, vibration) to liaise on works and address concerns • Consult on works, particularly where there are access, noise and vibration impacts • Traffic management communication.
Wider community	• Changes to road • Transport route changes • Access changes • Motorist safety • Increased movements on local roads.	• Early, proactive communication with about construction works, timing and duration • Build understanding of the Project and benefits • Communicate management strategies.
Road users	• Changes to road • Transport route changes • Access changes • Motorist safety • Increased movements on local roads.	• Prioritise early, proactive and targeted information to road users on changes • Use multiple channels for traffic communication (VMS boards, signage, radio announcements / narrow casting, email updates, SMS).
Public transport users / school transport providers	• Changes in access / routes resulting in delays • Pedestrian safety • Delays due to movement of construction equipment and materials • Increased movements on local roads.	• Early communication on changes via signage at affected stops and online • Planning of construction material / equipment movement to minimise impacts • Leverage communication via local transport providers and schools.
Authorities / Emergency Services	• Changes to traffic access causing delays • Increased movements on local roads • Service disruption / temporary loss of services.	• Prioritise early engagement and consultation regarding the Project's design, works scheduling, traffic management, relocation impacts, public transport scheduling, safety and environmental impacts

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 119 of 300

		• Ongoing collaboration.
Elected representatives	• Constituent concerns • Constituent issues / complaints • Negative publicity.	• Provide timely information via Seqwater about Project works, constraints and mitigation measures • Early resolution of issues / complaints • Involvement of elected representatives in project events • Site tours to educate on works progress • Promotion of benefits.
Traditional Owners and Cultural Heritage groups	• Cultural heritage items discovered during works • Sense of place impacts.	• Cultural heritage management
Interest groups (community, environment)	• Concern about traffic disruption, construction movements on local roads, environmental impacts, water use.	• Early engagement with interest groups to identify and address issues • Monitor media and social media for potential issues and collaborating to manage potential issues
Media	• Community interest, political focus.	• Clear messaging on purpose of works and engagement process to date.
Internal Stakeholders		
Local Government, State Government, Federal, relevant agencies	• Reputational impacts • Construction delays • Increased costs.	• Timely delivery of project in adherence with requirements • Proactive engagement and collaboration on issues and risk mitigation and positive positioning of Project during construction and leading into operation
Employees / subcontractors	• Safety, reputation, industrial action.	• Closely monitor potential issues and work with appropriate parties to identify issues and resolve.

5.3 Mitigating Impacts

Minimising construction related impacts such as tree and vegetation removal, noise, dust, vibration and disruptions to traffic and road users will be key to the successful delivery of the project.

We will continually review our approach to design, construction methodology, traffic staging and safety and environment based on the issues identified and best for project mitigation measures. Preliminary project-specific impacts, risks and proposed mitigation measures are outlined in Table 4. All risks will continue to be reviewed and identified through regular risk and opportunity workshops.

Table 4 Project impacts or events, risks and proposed mitigations

Project impact or event	Risk	Proposed mitigation
Site establishment	• Complaints due to location of site offices,	• Obtain all necessary approvals

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 120 of 300

	laydown areas and site activities (dust and machinery noise).	• Advise residents of site establishment • Ensure access to driveways is maintained.
Commencement of early works	• Complaints due to changed traffic conditions, dust, noise and vegetation removal.	• Advise residents and local businesses of commencement of works • Provide contact points for enquiries.
Aboriginal Heritage	• Damage to an Aboriginal Heritage site.	• Engage cultural heritage monitors during civil works in culturally sensitive locations including creek lines
Vegetation clearing	• Negative media • Complaints due to impacts on native or threatened fauna or flora.	• Obtain all necessary approvals • Advise residents and local community why it is necessary to remove vegetation • Inform residents and local community of reinstatement activities that will result from the Project's activities • Look for opportunities to minimise clearing or the impacts of clearing (e.g. walk clearing lines prior to activity, undertake seed collection and fauna relocation, salvage mature trees).
Disruption to local businesses, including primary production	• Access and delivery restrictions • Revenue loss concerns.	• Establish an understanding of business and access use needs to develop specific management process and notification requirements • Provide businesses with user friendly 'access maps' to provide to their customers during any temporary access changes • Communicate expected changes to road and traffic conditions early and widely through local information points.
Access / changes to road conditions	• Complaints due to road closures / detours and traffic congestion • Concern at public safety due to construction traffic on local roads • Concern at the condition of road during works	• Provide advance notification to residents of access disruptions and engage them in developing mitigation measures to minimise impacts and managed access • Ensure clear directional signage is provided onsite and the needs of all users are considered • Establish a clear communication plan which incorporates regular and open dialogue and advance notification of impacts • Communicate expected changes to road, traffic, pedestrian and cycle access conditions early and widely • Monitor onsite performance and take remedial action if necessary • Ensure temporary access arrangements are safe.
Property impacts	• Concern from the owners of property regarding access • Concern from landholders regarding works on or near property	• Activities will be communicated • Access agreements will be put in place prior to works occurring • Pre-construction surveys undertaken for identified properties prior to works commencing.

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 121 of 300

	• Concern at service authorities accessing private property.	• Property Management Plans to be prepared where access is required for works to be carried out.
Disturbance associated with the need to carry out-of-hours work (weekend and nightworks)	• Complaints due to work taking place outside of regular construction hours if required	• Consider opportunities to adjust construction methodologies to minimise the likelihood or severity of such impacts • Monitor onsite performance and take remedial action if necessary • If required, plan to install dust and noise mitigation measures as early as possible to reduce the potential for impacts on neighbouring properties • Ensure a Noise and Vibration Plan has been approved and all conditions have been complied with prior to work commencing. This will include advance notification of works to residents adjacent to the construction zone, and (where possible) scheduling of works to include the noisiest activities during the early evening period • Provide contacts points for residents • Establish and maintain a complaints procedure, including protocols for response time and escalation.
Construction impacts (including noise, dust, vibration, haulage, property damage)	• Complaints due to dust, noise, vibration, site access associated with construction.	• Consider opportunities to adjust construction methodology to minimise the likelihood or severity of such impacts • Monitor onsite performance to ensure compliance with regulatory approval conditions • Ensure internal permits have been obtained prior to commencement of works, and that all conditions have been met • Implement management practices for dust – watering carts etc. • Establish a clear communication plan which incorporates regular and open dialogue with the community and stakeholders and advance notification of impacts • Ensure property pre-condition survey inspections are undertaken • Prepare (and make readily available) FAQs on aspects included works process, dust / noise / vibration management. • Ensure a property damage procedure and claim process is in place and communicated to landholders in the unlikely event their property is damaged as a direct result of the works • Provide contact points for community • Establish a complaint procedure including protocols for response time and escalation.
Government relations	• The relationship with SRRC representatives is strained.	• Fulfil all requirements and provide all the information required by SRRC to support the relationship.

Released under RTI ACT/IR

RTI-5755 Release.pdf - Page Number: 122 of 300

Negative media	• The media reports of the works are negative.	• Ensure adequate information and consultation with key stakeholders and the community • Manage media enquiries appropriately.

6. Engagement and Communication

6.1 Engagement and Communication Tools

A variety of tools will be used to communicate and engage with the community and stakeholders. These are in line with best-practice engagement outlined in the IAP2 framework and the GCE Contractors will continue to look for ways to provide information, seek feedback and resolve issues.

A list of communication and engagement tools that can be used across the project are outlined in the table below.

Table 5 List of communication and engagement tools

Tool	Explanation and purpose
Advertising	• To communicate significant impacts such as road closures or diversions if required
Community information line	• Available for members of the community to seek information, make enquiries or raise issues.
Community Liaison Group	• Meetings held with group to: ○ Provide the community with information about the activities ○ Receive feedback as project progresses.
Doorknocks	• Used to advise residents and businesses of construction impacts if required on ground.
Email updates	• Distributed to community members and local residents who have subscribed to inform them of Project progress, key milestones or upcoming activities. The email list will be regularly updated to reflect those individuals who have 'opted-in' or 'opted-out'. Stakeholders will be offered the opportunity to register to receive email updates via public materials produced for the Project.
Fact sheets	• Used as required to explain key aspects of the Project to the community and other stakeholders. Copies will be available via the website and will be part of the Project's public online library of reference material. Can also be provided at local libraries in project area.
FAQ document	• A ready-reference compilation of frequently asked questions with approved responses.
Key messages	• Developed for use in all Project materials to ensure consistency.
Meetings with individuals or community groups	• Briefings with key interest groups or individuals as required to provide understanding of works or address issues. Also used to consult directly with impacted residents, businesses and the local community.
Notification of works	• An easy-to-understand document to explain upcoming work, potential impacts or address an issue with specifically targeted residents or stakeholders.
Phone calls to affected residents and businesses	• To discuss the Project, potential impacts and benefits. Follow-up meetings will also be made available for residents or businesses concerned about the work and impacts imposed or would like a face-to-face meeting about the Project.
Project mailbox (email)	• An email address will be established and managed with enquiries addressed accordingly.

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 123 of 300

	A Project database has been established to track all points of contact.
Project update (monthly)	• To outline Project progress and achievements • Used to inform the community on the status of current and upcoming activities • Circulated to the Project's local catchment area (residents, businesses, community groups), key stakeholders, those on the mailing list and published on the T2W website.
Signage	• To help the community understand why the work is being performed and to assist the public with directional and safety information • Electronic signboards will be used to communicate road detours and to provide advance notice of any changed traffic conditions to motorists • All signage will be in accordance with government requirements.
Site inductions	• Community engagement inductions will be carried out routinely as part of broader site inductions. These inductions will emphasise expectations relating to communication and engagement, complaints handling, media management and acceptable behaviour when on site • Cultural-awareness training will feature at all inductions.
SMS notifications	• Used to provide time-critical, Project-related information to directly affected stakeholders such as local residents and businesses. SMS notifications are intended to supplement, not replace, email alerts or notifications.
Stakeholder database	• A databased used to record all community and stakeholder interactions including meetings, door knocking, emails, phone calls and SMS.
Photography	• To visually capture Project progress and key milestones. These images will be incorporated in a range of communication materials.

Initial key messages have been developed to support the development of various communication and engagement tools. These are located in Appendix A.

6.2 Notification Requirements

GCE Contractors will provide advance notice of work for key stakeholders and directly impacted residents surrounding the construction work. The required advance notification standards, distribution areas and approval timeframes are outlined in the table below.

Table 6 Required advance notification standards, distribution areas and approval timeframes

Notification Type	Notification period
Works notification (specific activity / access changes)	Minimum 5 business days
Night work	Minimum 7 calendar days
Notification of property access	Minimum 2 calendar days
Changes to program (e.g. extension of notified work timeframes)	Minimum 1-2 business days
Road closures	Minimum 5 business days
Temporary work area establishment	Minimum 5 business days
Access restrictions	Minimum 5 business days
Water supply interruptions	Minimum 48 hours
Weekend work (day)	Minimum 48 hours

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 124 of 300

7. Land Access Management

7.1 Land Access Approach

A positive, productive relationship with affected landholders will be critical to the project's success. GCE Contractors is committed to building and maintaining trusted and enduring relationships with owners and residents of the land on which the Project will be constructed and operated. Our approach to land access is based on:

- Engaging with each directly affected or adjacent landholder within the Project area prior to any activity on their land
- Providing fair and equitable safeguards for the interests of landholders while providing access to land needed to construct the Project
- Ensuring consistency in activities in relation to land access
- Forecasting and scheduling Project activities to reduce the impacts on landholder activities and residents of the land.
- Our land access process is underpinned by our commitment to open and transparent communication and will comply with the Queensland Government's Land Access Code, which outlines mandatory requirements when undertaking activities on private land.

7.2 Readiness for Construction Activities

GCE Contractors will commence engagement to prepare for access prior to works commencing to ensure landholders understand access needs and work requirements. In understanding this to be a critical phase of construction planning, the following impacts will be at their highest during this phase and may include:

- Meetings with Project staff to discuss construction process and access requirements
- Field visit to sample / test water, vegetation and soil for planning prior to construction
- Machinery such as bulldozers, graders and water trucks to undertake vegetation clearing and preparing access areas (e.g. lay-down areas and access tracks)
- Machinery such as semi-trailers will be on site to deliver equipment for construction
- Machinery such borers and trenching equipment will be on site for construction
- Machinery such as standard work vehicles will be on site to undertake regular inspection and compliance, and to test and commission the asset
- Various machinery will be on site to reinstate works area (dependent on level of works)
- Meeting with Project staff to discuss completion of activities.

Building on engagement activities to date with landholders, prior to construction commencing the GCE Contractors will:

- Review individual access agreements with landholders and develop a Property Management Plan for specific works
- Develop and implement a biosecurity management plan if required
- Notify before entry or any activity commences on a property
- Undertake ongoing assessments and update mapping so potential impacts can be mitigated
- Establish agreed property access points and location of any associated infrastructure avoid proicate land use activities where possible
- Implement property access protocols regarding the limitation of vehicle and machinery movements
- Agree on speeds and movements, the opening and closure of gates and the use of water

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 125 of 300

- Agree on fencing of Project works and laydown areas to prevent unwanted access by stock / people and limit the access of unauthorised persons based on an appropriate risk assessment approach
- Minimise disturbance to livestock and land-use activities
- Promptly rectify any damage caused to land or infrastructure
- Install gates and grids where necessary to minimise stock disturbance
- With prior notice, carry out routine visits to complete operational, environmental and safety checks after work on their property is finished
- Reduce visual impact as much as possible
- Rehabilitate land progressively throughout the Project and at the completion of activities, which may include the respreading of topsoil and restoring vegetation.

7.3 Property Management Plans

GCE Contractors understands that the needs of each landholder are unique and that standard access conditions may not address all specific property requirements. To manage individual requirements, we will develop Property Management Plans to capture property specific information, rules and entry conditions to address the following:

- The landowner's communication and notification requirements prior to and during construction
- Agreed access points, roads and tracks
- Preferred construction scheduling for works on the property
- Noise restriction times (if any)
- Any construction and vehicular movement protocols required to minimise impact on property operations (such as crop and livestock production cycles)
- Actions to be undertaken by the contractor during construction to prevent the spread of declared pests (including compliance with the requirements of any registered biosecurity management plan)
- Items brought on to the land
- Gates, grids and fences
- EWPs in accordance with the EMP
- Any vegetation clearing arrangements
- The management of fire risk
- Confidentiality
- Protocols for construction in wet conditions
- Rehabilitation / reinstatement plans for the property.

Once discussed and agreed, this information will also be captured in our management procedures and document..

7.4 Notification of Access for Works

A Notification of Works will be issued to inform landholders and residents of the GCE Contractor's proposed access and occupation of private land. This notification process includes:

- Internal planning, discussions and programming to understand required timeframes
- A Notification of Works is issued to landholder a minimum of 7 days prior to the proposed works commencement. The notification will outline the following information:
    - The purpose of entry
    - Details of the proposed use of the land

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 126 of 300

- The estimated commencement date
- The period of occupation
- Proposed safety measures for temporary access and occupation
- Any other proposed measures to guarantee the privacy of the land occupier
- Internal distribution of the final notification to the relevant Project team members.

- Tracking and monitoring of Notification of Works will be managed through the three-month look ahead planner, and in line with construction and planning meetings.

8. Policies and Procedures

8.1 Engagement Commitment

GCE Contractors is committed to engaging the local community in constructive and cooperative dialogue based on mutual trust and respect by:

- Communicating in an open, transparent and timely manner
- Informing the local community of design
- Informing the local community of planned works in advance
- Implementing strategies to minimise construction impacts on the local community
- Consulting the local community and responding appropriately to issues of concern
- Responding promptly to community enquiries:
  - We will respond to telephone enquiries within two hours
  - We will respond to email enquiries within two working days of receipt
  - We will acknowledge or reply to written communications within three working days of receipt
  - We will identify the need for provision of translation and interpreting services
  - We will honour commitments made.

8.2 Construction Code of Conduct

GCE Contractors recognises the scrutiny that will be placed on the Project by residents and the local community.

As such the Project team, including subcontractors, will undergo an induction before commencing any works on site, which will provide an overview of the works, safety requirements, and how to behave and interact with the community.

The following expectations form our Code of Conduct and will apply to the entire workforce:

- Interactions with local residents, key stakeholders, members of the public and visitors must be courteous
- Community queries received by personnel will be referred to the Project Manager immediately.
- No comments will be made to media or political representatives without authorisation
- All Project team members will be required to behave in a sensible and sensitive manner towards the general public.

The following conduct will be prohibited along the works alignment. Any breaches of this expected conduct will be managed in line with the Safety Management Plan:

- Swearing, yelling, loud or abusive language
- Any behaviour that is deemed culturally disrespectful or offensive to First Nations people
- Littering in public areas, including cigarette butt disposal

Released under RTI - DTMR

- Loud music from radios from vehicles
- Unauthorised, unnecessary or improper use of noisy equipment and tools
- Unnecessary idling of motors in construction vehicles nearby residential properties
- Parking on private property unless for the specific purpose of undertaking works in that area with approved access
- Fighting, horseplay, practical jokes, bullying or disruptive behaviour
- Urinating in public areas
- Working outside of agreed work hours / days.

8.3 Disruptive Works Policy

Disruptive works may include activities that generate noise, vibration, dust or light impacts during normal construction hours or outside of normal construction hours.

We are committed to keeping the local community informed in advance about all construction works with a potential impact and in particular, ensure that they are aware of any planned disruptive activities outside our normal working hours. This commitment will extend to looking after the wellbeing of the community during prolonged night works.

Our construction team will plan works to minimise impact on the community, using best-practice measures to mitigate construction impacts from noise, vibration, dust and light spill. Disruptive works will be assessed with the best interest of the Project and local residents as a priority. A fair and equitable set of protocols and procedures will govern our approach, assessment and mitigation measures with a strong focus on reputation management.

For all potentially disruptive works, appropriate notification will be provided in advance, at least five business days prior to works commencing, unless works are deemed unplanned emergency works.

Community members will be able to contact the Project team at any time via the provided contact points which will be managed by GCE Contractors during work hours.

Normal hours of work are considered to be 7:00am to 5:00pm Monday to Friday.

Work out of hours may occur due to:

- Unplanned emergency works
- Unacceptable risks to property, people or traffic
- Traffic management constraints, including oversized deliveries.

8.3.1 Noise and Vibration During Construction

GCE Contractors is committed to undertaking work in accordance with the *Environmental Protection Act 1994* (Qld).

Our Construction Environmental Management Plan will articulate the noise and vibration targets that have been developed and the level of engagement required for low, medium, high and above target noise levels. Where works are required outside of normal working hours, noise and vibration levels will be assessed. Appropriate monitoring measures will be implemented for any works that are likely to exceed the noise and vibration targets.

8.3.2 Dust During Construction

Works involving excavation and removal of soil will likely generate dust. The amount of dust generated will vary depending on the time of year and ground conditions. GCE Contractors will manage dust in accordance with the *Environmental Protection Act* and other environmental requirements. The Project's EMP will provide details of air quality targets, monitoring and mitigation measures to be implemented. Typical methods of controlling dust include:

- Water suppression

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 128 of 300

- Covering exposed stockpiles
- Covering truckloads before leaving site
- Application of polymer emulsion soil stabilisers.

Sensitive stakeholders (including residents) will be identified and additional mitigation measures implemented as required.

8.3.3 Light Impacts During Construction

Where works are required to occur at night or during early morning / late afternoon, temporary construction lighting will be used to perform the works safely. Pre-construction planning will be undertaken to ensure that potential light spill into nearby residential properties and noise from light generators is controlled.

8.4 Property Condition and Monitoring Procedure

Where appropriate, GCE Contractors will commission a suitably qualified independent assessor to conduct property condition assessments of existing building and other structures and assets within (approximately) 50m of major construction activities along the identified alignment of Christensen Road and Baills Road prior to commencement of those works.

Photographic records will be used to record the condition of the structures and assets. This will establish a baseline condition survey of properties prior to works commencing. GCE Contractors will implement the following communication and engagement procedure in relation to property condition and assessments:

- Identify eligible properties
- Engage an independent assessor to undertake the property condition and heritage assessments
- Notify all identified landholders in writing to:
    - Advise them of the terms of the inspection
    - Request their consent to undertake an internal and external inspection of their property (at no cost to the landholder)
    - Arrange access to the property for the condition assessment, including notification to any tenants if the property is not occupied by the landholder
    - Make an appointment time for the inspection with the landholder (to be communicated to the tenant) at a mutually convenient time
- A team member will accompany the independent assessor at each appointment and capture any key discussion points in the stakeholder database.
- Provide a copy of the property condition report to the landholder on request
- Store all property condition and heritage assessments in accordance with the GCE Contractors records management procedure
- Request any owner or occupier denying access for a property inspection to provide confirmation in writing that they have denied the offer, releasing the GCE Contractors from any liability for changes to the property during construction
- When a complaint is made regarding the property condition assessment process, or any other aspect of this activity such as a damage claim, initially handle them in accordance with the Enquiries and Complaints Handling Procedure and record all interactions in the stakeholder database
- In the event of a property damage claim, compare visual records from the baseline survey with visual records of the property at the time the claim was made
- An assessment of the claim will be made by the Project Manager and outcome communicated to the landholder

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 129 of 300

- If there is no clear outcome from the initial assessment, engage an independent qualified assessor to make an assessment and provide a report of the outcomes to GCE Contractors for resolution of the damage claim.

8.4.1 Damage Claims

A process will be developed for Project Manager approval to manage potential third-party damage claims. These claims could come from:

- Motorists claiming debris from the works area or a Project vehicle has damaged their property
- Landholders who claim construction work has impacted their building or structures
- Local councils or other public authorities who claim construction work damaged roads or paths

The property damage process will be managed by the Project Manager.

9. Enquiries and Complaints Management

GCE Contractors is committed to responding to enquiries and managing and resolving complaints in a timely, fair and consistent manner. Enquiries and complaints will also be an important feedback mechanism to improve processes and mitigation measures to avoid or minimise further complaints.

A complaint is defined as any communication received from a stakeholder expressing dissatisfaction about an issue for which GCE Contractors is responsible. This is a purposely broad definition and will be used to ensure that matters of concern to stakeholders are addressed promptly.

As part of our commitment to minimising impacts and maximising community satisfaction, a community contact point will be staffed by Project Team during all work periods. This will ensure a timely, responsive and consistent approach to responding and recording initial contact with stakeholders in the stakeholder records database will be undertaken.

9.1 Enquiries and Complaints Handling Procedure

The following procedures for receiving, managing, resolving, escalating and reporting on all community and stakeholder complaints will be applied by the GCE Contractors in accordance with the requirements of the Australian Standard AS/NSZ 10002:2014 Guidelines for Complaint Management in Organisations.

9.1.1 Responding to Enquiries and Complaints

Enquiries and complaints will be managed promptly and effectively to avoid unnecessary escalation. Telephone contact will be made with a complainant where a phone number is provided or available. All team members will employ the following methods to establish the nature of the complaint and the needs of the complainant:

- Active listening
- Reducing barriers
- Open and closed questioning
- Summarising the call
- Confirming level of satisfaction with the actions and timeframes.

GCE Contractors will investigate and determine the source of a complaint immediately and provide an immediate response. The aim of complaints resolution will be to adequately resolve the complaint to the satisfaction of the complainant, take all actions and implement all practicable measures to prevent the re-occurrence of stakeholder and community complaints.

Released under RTI DTMR

RTI-5755 Release.pdf - Page Number: 130 of 300

9.1.2 Response Timeframes

Targets in relation to initial responses and resolutions are outlined below.

Table 7 Response times for complaints

Enquiry source	Acknowledgement response time	Formal response time
General enquiry	4 hours	2 working days
Technical enquiry	4 hours	14 working days
General works complaint	2 hours (outline complaints management process)	Remedy complaint within 24 to 48 hours of notification
Out of hours works complaint	1 hour	Remedy complaint within 2 hours of notification

9.1.3 Verifying Complaints

All complaints will be investigated, issues researched, any requirement breaches determined, and corrective action undertaken, if appropriate. A timeframe for this action and the appropriate feedback / response to the complainant will be determined based on the complaint / issue received.

A written response will be provided to the stakeholder to close out the complaint and document the resolution for both parties. Each complaint will be assessed using the following criteria:

- The seriousness of the issue or complaint in terms of the impact it may have on safety (public, the environment and Project personnel), stakeholders or the project's reputation
- If measures taken by the Project team have failed to prevent a potentially damaging issue
- If the issue or complaint is outside of the Project scope but may have impact on the long-term implementation of the Project
- If the issue or complaint has potential to escalate in seriousness to affect more people
- If the issue or complaint has potential for negative media connotations.

9.1.4 Issues Escalation

Complaints and issues will be escalated when the nature of the complaint falls into one of the following categories:

- An activity generates three complaints within a 24-hour period (separate complainants)
- Any construction site receives three different complaints within a 24-hour period
- A single complainant reports three or more complaints within a three-day period
- A complainant threatens to escalate their issue to the media or government representative.

9.2 Stakeholder Database and Records Management

The Project team will manage a summary of complaints and all stakeholder correspondence and ensure that all records are captured in the stakeholder database.

GCE Contractors will ensure all contact and associated information is maintained and meets confidentiality and security of information requirements. Each entered enquiry or complaint will typically include the following information:

- Event type: enquiry, complaint (avoidable / unavoidable), feedback
- Event date: time the contact was made
- Details of the enquirer / complainant: name and contact details (phone number and email address)

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 131 of 300

- Issue / complaint: e.g. construction impacts, traffic management, design, tree removals, acquisition
- Stakeholder comments: details of the enquiry, complaint or request
- Project team member comments: details of any supporting information to assist resolve the enquiry or issue
- Actions: details of actions to be undertaken (or other) with an assigned team member and date to close out the issue
- Date of resolution: date the issue was closed out.

9.2.1 Data Entry Timeframes

Data captured through various engagement activities will be recorded in the stakeholder database within the following timeframes.

Table 8 Data entry timeframes

Record source	Date entry requirement
Phone calls and emails	Daily
Meetings	Weekly
Community event feedback	Post activity

9.3 Data Privacy

GCE Contractors acknowledges that personal data will be provided or made available for the purpose of undertaking works in delivering the Project and under no circumstances will this personal data be used for any purpose other than meeting Project requirements.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 132 of 300

Appendix A – Key Messages

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 133 of 300

Key Messages

Construction

What to expect

- An increase in construction workers and vehicles in the area
- A potential increase in noise, dust and vibration. These impacts will be reduced as much as possible
- Temporary changed traffic conditions, including lane closures and reduced speed limit. Traffic control will be in place where required to maintain the safety of road users, the community and workers.
- Work is subject to relevant approvals and suitable weather conditions.
- Every effort will be made to keep disruption to a minimum for residents and businesses in close proximity to the project site.
- During this work, nearby residents may experience an increase in noise, dust and vibration. These impacts will be reduced as much as possible by using the latest in environmental management and construction techniques.
- While traffic delays should be minor, traffic control officers will be in place (as required) to maintain the safety of road users, the community and workers.

Work hours

- The project's work hours standard work hours are 7:00am to 6:00pm, Monday to Friday, and 7:00am to 1:00pm Saturday in accordance with Scenic Rim Regional Council requirements. Some works may be required out-of-hours; with nearby residents to be notified ahead of these works.
- Works will generally occur between 7:00am and 6:00pm, Monday to Friday, and 7:00am to 1:00pm Saturday weather and construction conditions permitting.
- Workers may arrive onsite approximately one hour prior to the planned start time to prepare for the shift's activities.

Emergency work

- Emergency works are required from time to time and are done so to ensure the safety of the local community, road users and project team members.
- These works can be undertaken outside the standard operating hours if there is an issue that:
    - is endangering the life or health of a person; or
    - is endangering the structural safety of a building; or
    - is endangering the operation or safety of community infrastructure that is not a building; or
    - is required to prevent environmental harm.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 134 of 300

Program

- Due to the nature of the project, the program is dynamic and likely to change due to seasonal weather requirements or unforeseen circumstances.

Environmental Management

- When undertaking construction works, GCE Contractors have a responsibility to minimise impacts to the environment.
- In accordance with Queensland Government guidelines, a Construction Environmental Management Plan has been developed and implemented so that measures are put in place to mitigate construction impacts as much as reasonably practicable.

Noise

- Construction work can generate noise and can be experienced differently by each person with an acceptable level of noise for one person being unacceptable to another.
- A range of mitigation measures have been implemented to reduce noise; these include:
    - Selecting machinery and plant most suited to the task and making sure it is properly maintained to reduce the potential for noise
    - Adopting construction practices which emit lower noise, such as using pre-fabricated materials to reduce noise-generating work on site.
- Early and on-going engagement with the local community will continue to occur across the delivery of the project to actively understand and respond to concerns about potential noise and discuss mitigation measures.
- The project team is committed to minimising impacts (including noise) on the community. Other forms of noise mitigation implemented on site include:
    - Providing advance notification to nearby residents and businesses ahead of high-impact work
    - Ensuring machinery and plant is properly maintained and most suited to the task.

Vibration

- It is normal to feel some low-level vibration during large construction projects, but it is important to note that these vibrations will be managed carefully in line with environmental requirements.
- Some construction activities have the potential to generate levels of vibration that may be felt by nearby residents and businesses. Some of these activities include compacting the ground during earthworks, the delivery of bulk fill and demolition activities, where required.
- During construction, some vibration from machinery is unavoidable. However, experiencing vibration does not mean structural damage to properties will occur and the works required for this project are not expected to result in structural damage to any properties.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 135 of 300

- To help minimise the effect of construction vibration, a range of measures will be implemented including:
    - Operating equipment on the lowest effective vibration setting;
    - Implementing speed restrictions for construction trucks and machinery;
    - Maintaining equipment to minimise vibration; and
- A Property Condition Report was offered to identified property owners prior to these works commencing. These properties were identified based on their proximity to project works.
- These reports record the condition of your property prior to project commencement and if you have any concerns about your property's condition, it can be used as a baseline from which forensic engineers can investigate.
- Infrastructure is safely built next to houses throughout Australia, however, if you have concerns, please contact GCE Contractors.

Air quality

Dust

- Unfortunately, dust cannot be eliminated during construction, however where possible GCE Contractors will minimise dust impacts by:
    - Implementing speed restrictions on unsealed surfaces
    - Resurfacing areas as soon as possible
    - Spraying water on work areas and stockpiles to dampen any dust, particularly during hot and windy weather
    - Cover stockpiles and transported materials
    - Install grids or ballast rocks at works areas to help reduce excess material on tyres
    - Monitoring weather conditions and altering activities where possible during periods of high wind.
- If you experience a high level of dust again, please call us straight away.

Odours from the works

- During the placement of asphalt and final wearing surface, some odours from the works may be experienced.
- The asphalt contains bitumen, a by-product of the crude oil refining process, and when the old asphalt road surface is being removed and new asphalt road surface is being placed it releases an odour similar to petrol. These notable odours are due to 'aromatic' hydrocarbons and sulphides.
- The asphalt industry is a highly regulated industry and asphalt companies are required to undertake fume testing of their products to ensure emissions are at an acceptable level. However, sulphides (commonly referred to as 'rotten egg gas') can be noticed at microscopic levels (parts per billion in air) and some members of the community may be more sensitive to the odours/dust than others.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 136 of 300

Flora and Fauna

- The Contractor is working with specialists to identify, manage, relocate and protect flora and fauna if required within the works area.
- An arborist has been engaged to assess vegetation within construction areas. Arborists specialise in identifying, assessing and caring for vegetation.
- Vegetation clearing is required in some areas, with this work undertaken in compliance with relevant authorities.

Vegetation removal

- The road alignment has been designed to minimise vegetation impacts, as much as practically possible. The project team will work closely with relevant authorities and interested parties to minimise and manage impacts to vegetation and wildlife in accordance with government requirements.

Water

- Discharge of surface water and groundwater from Project Works must comply with the Queensland Government's environmental requirements and the Construction Environmental Management Plan as approved by the Scenic Rim Regional Council.
- All project works, and work areas, are designed and implemented to avoid inundation from stormwater and avoid the redirection of uncontrolled water flows, including stormwater flows, to areas outside of worksites.

Erosion and sediment control

- Erosion controls are designed to prevent soil erosion in construction areas.
- Sediment control is designed to contain eroding soil on site and keep it out of water ways.
- Controls used on site may include:
    - silt fencing to keep disturbed soil in place within various construction areas;
    - silt socks which are fabric tubes filled with organic matter to allow water to flow through, while trapping sediment; and
    - rumble grids and rubble may be used at various points to remove debris from vehicle tyres before exiting the construction areas. This helps to reduce the potential for debris leaving site.

Work area rehabilitation

- Work areas used for the project will be rehabilitated as soon as practicable upon completion of the works or commissioning of project.
- Rehabilitation works will include management of soil erosion and sedimentation, landscaping and visual impact.
- All planting and landscaping works undertaken as part of rehabilitation will be undertaken in accordance with landscape and design plans prepared in consultation with the local Council.

Released Under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 137 of 300

Traffic management

- While the impact of construction works on local property access is acknowledged, please be assured that every effort is made by the Contractor to minimise disruption to the travelling public, as much as practically possible.
- It is the responsibility of the Contractor, to ensure appropriate traffic management is in place on the work site, including maintaining records of start and finish times, as well as any changes to the traffic management set up.
- Any works being carried out on public roads are required to comply with Local and State Government legislation and associated standards, in accordance with traffic permits.
- While a significant volume of work will be undertaken ultimately resulting in an improved local road, the project team appreciates the patience and understanding of road users whilst undertaking these works.

Construction traffic

- Project construction traffic must be managed to avoid or minimise adverse impacts on road safety and traffic flow, public transport, freight movements, pedestrian and cyclist safety, and property access.
- During construction, workforce car parking is provided in specific work areas and managed to avoid workforce parking on the local road.
- Access for emergency services to the project work site and adjoining properties must be maintained throughout the construction phase.
- Practicable access is maintained to adjacent properties throughout the construction phase.
- Heavy construction vehicles use only designated routes for spoil haulage and deliveries of major plant, equipment and materials, in accordance with the Construction Environmental Management Plan. The designated haulage routes for each worksite must follow major or arterial roads to the extent practicable and has been developed in consultation with the local Council and TMR requirements.

Speed limits and wayfinding

- During construction speed limits are in accordance with signage displayed throughout the road works alignment.
- Signage will be in place to help guide you through the area. Please allow extra time when planning your journey. Please observe speed limits, lane restrictions and traffic controllers when travelling through the area
- Final operational speed limits will be determined by the local Council.

Property damage

- Where a post-construction building condition survey identifies that property damage has occurred as a consequence of the Project Works, such damage must be repaired as soon as practicable by the Contractor at no cost to the property owners. Such repairs must be undertaken in consultation with the property owners and occupants and must return the premises at least to the condition existing prior to

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 138 of 300

commencement of Project Works. The Contractor must agree the timing, method and extent of works required with the affected landowner and must gain permission to undertake such reparation works prior to their commencement.

Property Condition Report / Building condition surveys

- As part of pre-construction work on the project, pre-construction building condition surveys (dilapidation surveys) are undertaken at identified properties prior to construction activities commencing.
- It is industry best practice to document the existing structural condition of nearby properties prior to the start of major construction.
- The building condition survey process establishes a clear basis for understanding the present condition of nearby properties.
- Based on previous project experience of the project team only specific properties adjoining the project alignment will be eligible for surveys.
- Offers to undertake a building condition survey are not compulsory for property owners, however it is encouraged to participate in the process.
- Building condition surveys offered by the project are at no cost to the property owner.
- The predicted levels of vibration indicate no foreseeable structural damage as a result of construction activities.
- The locations of monitoring may change throughout construction depending on the type of work being completed.
- We adjust our monitoring regime in line with construction activities to enable our specialists to document and review our activities, mitigation measures and inform future construction planning.
- Some identified properties may be required to undergo additional assessments to ensure the full property detail is captured, and a detailed report can be provided to the property owner and project team.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 139 of 300

Environmental

Management Plan (Construction)

	Site Details
Principal:	GCE Contractors
Site Name:	Christensen Road Upgrade – Intersection with Rosewood Warrill Valley View Road
Project Number:	1007
Project Commencement Date:	December 2025
Issue Date:	19/09/2025

© 2021 GCE Contractors Pty Ltd

Reproduction of this document, in whole or in part, in any format or media is prohibited without express permission from the authorised Quality Representative of GCE Contractors.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 140 of 300

Revision History

Version	Date	Revision Details	Complied by	Project Manager
1	12/08/2025	Issue for Internal Review.	N/R	
2	19/09/2025	Issue to TMR		
3				

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 141 of 300

Contents

1 Introduction 6
1.1 Project Overview 6
1.2 Work Location 6
1.3 Hours of operation 7
2 Environmental Management Plan 8
2.1 Purpose 8
2.2 Objectives of the EMP (C) 9
2.3 Environmental Policy 9
2.4 EMP (C) Structure 11
3 Environmental Process & Management Control 12
3.1 Environmental Aspects, Impacts & Risk Management 12
3.2 Health, Safety & Environment Integration 14
3.2.1 Health, Safety and Environment (HSE) meetings 14
3.2.2 Emergency Planning 14
3.3 Legal and Other Requirements 14
3.4 Health, Safety & Environment meetings 15
4 Implementation 15
4.1 Organisational Structure 15
4.2 Environmental Responsibilities 15
4.3 Sub-contractor & Procurement Management 16
4.4 Training, Awareness & Competence 17
4.4.1 Project Induction 17
4.4.2 Toolbox Talks/Ongoing Environmental Awareness Training 17
4.4.3 Pre-start Meetings 18
4.4.4 Environmental Monitoring Equipment 19
4.4.5 Cultural Heritage Induction 19
4.4.6 Environmental Professional and Field Resources 19
4.4.7 Environmental Consultants 20
5 Communication and complaint Resolution 21

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 142 of 300

6 Review and Improvement 21

7 Reporting Requirements 21

7.1 Weekly Inspections 21
7.2 Monthly Reports 21
7.3 Incident Reports 21
7.4 Waste Tracking 22
7.5 Water Quality Monitoring 22
7.6 Complaints Register 22

8 Environmental Control Plans 23

8.1 Aspect: Air – Quality, Noise & Vibration 23
8.1.1 Objectives 23
8.1.2 Monitoring 23
8.1.3 Sensitive Receptors 24
8.1.4 Activities likely to impact Air Quality 24
8.1.5 Performance Criteria 25
8.1.6 Impact & Mitigation Measures 25

8.2 Aspect: Water Quality 28
8.2.1 Objectives 28
8.2.2 Location of waterways (within 50m of boundary limits of construction works) 28
8.2.3 Performance Criteria 29
8.2.4 Impact & Mitigation Measures 30

8.3 Aspect: Erosion and Sediment Control 33
8.3.1 Objectives 33
8.3.2 Performance Criteria 33
8.3.3 Impact & Mitigation Measures 33

8.4 Aspect: Land Management 35
8.4.1 Objectives 35
8.4.2 Existing Soil Quality 35
8.4.3 Performance Criteria 35

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 143 of 300

8.4.4 Impact & Mitigation Measures 35
8.5 Aspect: Chemical Management 37
8.5.1 Objectives 37
8.5.2 Performance Criteria 37
8.5.3 Impact & Mitigation Measures 37
8.6 Aspect: Cultural Heritage 39
8.6.1 Objectives 39
8.6.2 Cultural Heritage Assessment 39
8.6.3 Performance Criteria 40
8.6.4 Impact & Mitigation Measures 40
8.7 Aspect: Fauna / Flora 42
8.7.1 Objectives 42
8.7.2 Performance Criteria 42
8.7.3 Flora Survey Report 42
8.7.4 Impact & Mitigation Measures 43
8.7.5 Fauna Rescue Contacts 44
8.8 Aspect: Weed / Pest 45
8.8.1 Objectives 45
8.8.2 Performance Criteria 45
8.8.3 Weed Status of Site 45
8.8.4 Impact & Mitigation Measures 45
8.9 Aspect: Waste Management 48
8.9.1 Objectives 48
8.9.2 Performance Criteria 48
8.9.3 Impact & Mitigation Measures 49

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 144 of 300

Part 1

1 Introduction

1.1 Project Overview

Scope as defined by GCE Contractors includes:

- Storage of supplies as required by projects undertaken by GCE Contractors
- Fabrication Works
- Workshop Repairs on plant and equipment
- Chemical storage
- Yard office

1.2 Work Location

The battery limits for works to be completed at the intersection is defined as below and approved drawing plans 210173P – Chainage 0 – 80 on Christensen Road and Ch 34.56 – 392.37 on Rosewood = Warrill View Road.

SCHEDULE OF DRAWINGS	
SHEET No.	SHEET TITLE
C800	COVER SHEET AND LOCATION PLAN
C801	STANDARD NOTES
C820	DEMOLITION LAYOUT PLAN
C825	25m B-DOUBLE SWEPT PATH LAYOUT PLAN
C835	INTERSECTION EROSION AND SEDIMENTATION CONTROL PLAN
C836	INTERSECTION EROSION AND SEDIMENTATION CONTROL DETAILS
C840	EARTHWORKS LAYOUT PLAN
C860	ROAD INTERSECTION OVERALL LAYOUT PLAN
C861	INTERSECTION LAYOUT PLAN SHEET 1 OF 2
C862	INTERSECTION LAYOUT PLAN SHEET 2 OF 2
C863	ROSEWOOD-WARRILL VIEW ROAD DETAILS
C864	ROSEWOOD-WARRILL VIEW ROAD LONGITUDINAL SECTIONS
C865	ROSEWOOD-WARRILL VIEW ROAD CROSS SECTIONS SHEET 1 OF 3
C866	ROSEWOOD-WARRILL VIEW ROAD CROSS SECTIONS SHEET 2 OF 3
C867	ROSEWOOD-WARRILL VIEW ROAD CROSS SECTIONS SHEET 3 OF 3

SCHEDULE OF DRAWINGS	
SHEET No.	SHEET TITLE
C868	CHRISTENSEN ROAD LONGITUDINAL SECTION
C869	CHRISTENSEN ROAD CROSS SECTIONS
C870	INTERSECTION SIGNAGE LAYOUT PLAN SHEET 1 OF 2
C871	INTERSECTION SIGNAGE LAYOUT PLAN SHEET 2 OF 2
C875	PAVEMENT LAYOUT PLAN SHEET 1 OF 2
C876	PAVEMENT LAYOUT PLAN SHEET 2 OF 2
C880	INTERSECTION SIGHT LINE PLAN
C890	CATCHMENT LAYOUT PLAN
C891	STORMWATER LAYOUT PLAN SHEET 1 OF 2
C892	STORMWATER LAYOUT PLAN SHEET 2 OF 2
C895	STORMWATER CULVERT SECTIONS SHEET 1 OF 2
C896	STORMWATER CULVERT SECTIONS SHEET 2 OF 2
C897	STORMWATER LONGITUDINAL SECTIONS
C898	STORMWATER CALCULATIONS TABLE
C899	STORMWATER DETAILS

Figure 1 - Approved Drawing List

:

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 145 of 300

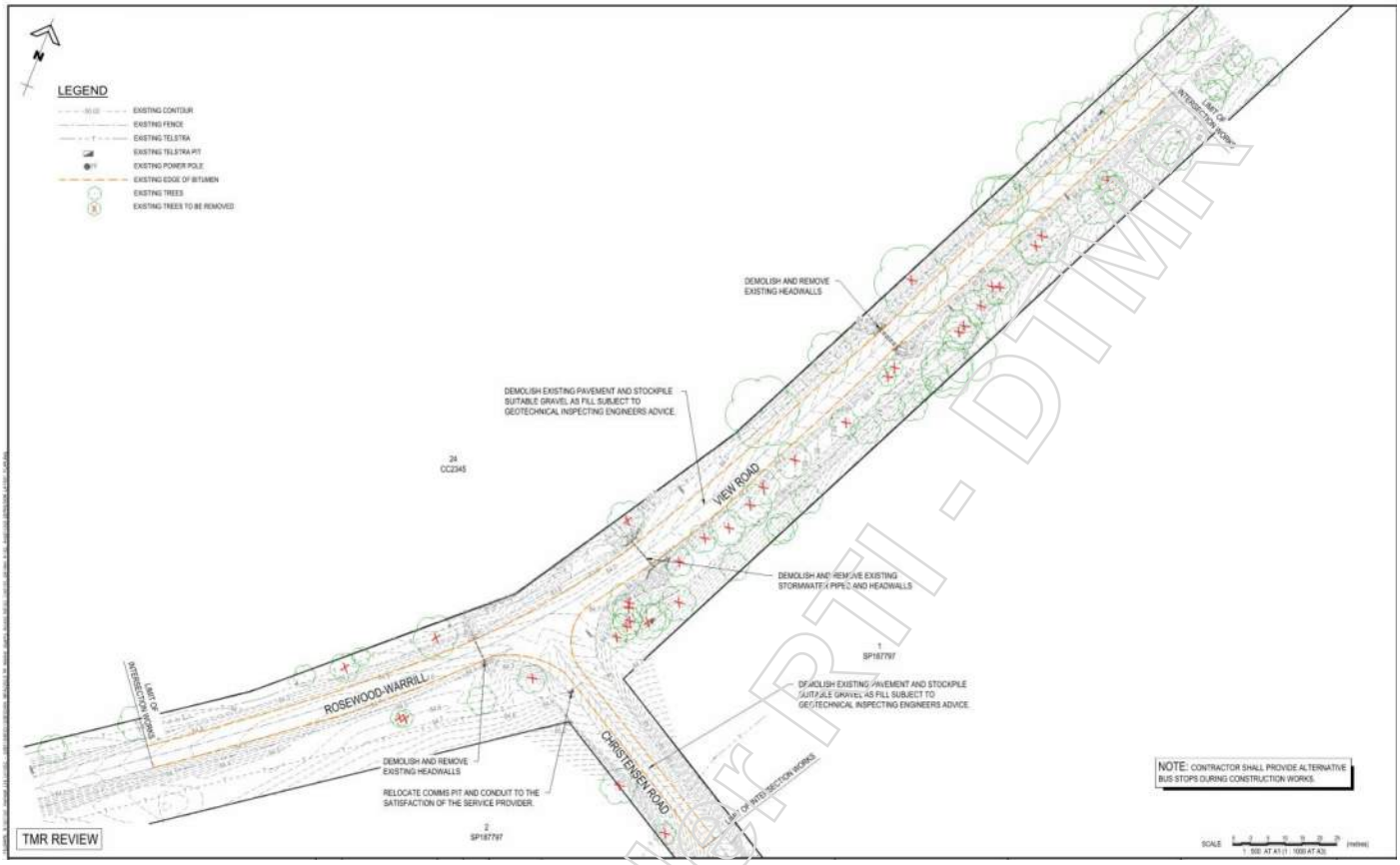


Figure 2 - Defined Limit of Intersection Works

1.3 Hours of operation

The road upgrade is located in an Rural Zoning with neighbouring properties consisting of residential dwellings. Construction noise levels are likely to exceed existing ambient levels. However, GCE Contractors will where possible target operation hours within the Office to the following times:

- Monday to Friday, 6.30am – 6.30pm to comply to the Environmental Protection (Noise) Policy 2008

GCE Contractors will also mitigate noise levels by implementing the measures outlined in Section 7.1 of this EMP (C)(C).

It is noted that the above timeframes may not apply in special circumstances/emergency situations. This could include, but not be limited to the following:

- Flood, cyclone, fire etc

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 146 of 300

2 Environmental Management Plan

This Environmental Management Plan (Construction) (hereafter known as the EMP (C)) provides a system and procedures to ensure that GCE establishes and maintains best practice controls to manage potential environmental impacts during construction activities.

(Herein referred to as the "Project") and, wherever practicable, realise opportunities to enhance environmental outcomes. The EMP (C) is compliant with the GCE Contractors Pty Ltd Management System.

This EMP (C) consists of two parts:

- Part 1 of the EMP (C) provides details on the Project scope, documents used, EMP (C) methodology and the various components and how ISO14001 components will be addressed throughout the life of the Project.
- Part 2 of the EMP (C) provides a practical application of each relevant environmental element (also referenced as Environmental Control Plans [ECP]) requirements including objectives/performance criteria, tEMP (C)orary and permanent mitigation measures, monitoring, preventative, and corrective actions.

All Personnel are to ensure their work activities and those of sub-contractors, suppliers, consultants, and others associated with the Project are carried out in accordance with this EMP (C).

GCE is committed to providing the services it offers in a manner that conforms to the contractual requirements and to all relevant regulatory and legislative requirements. To achieve this, the Project Team will plan, implement, and control construction works in accordance with GCE Environmental Management Plan (EMP (C)) that achieves the stated environmental objectives and performance criteria.

This EMP (C) explains the process for determining, implementing, and managing mitigation measures, identified, and assessed through the environmental documents prepared for the Project to meet regulatory requirements. The Plan includes objectives and performance criteria, risk assessments, management actions, procedures, monitoring, auditing, training, and reporting requirements and clearly specifies areas of responsibility related to the construction phase of the Project.

2.1 Purpose

The purpose of this plan is to establish and communicate how the Project shall be managed from award to final completion. This EMP (C) has been established to:

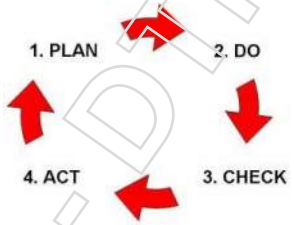
- Assist the Site Management Team in understanding their operational and Project responsibilities
- Identify and address key Project issues, including legislative and client requirements

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 147 of 300

- Wherever practical identify, eliminate, and reduce hazards and associated risks inherent in specific work activities, which if untreated will lead to a diminished product or create the potential for an accident, dangerous occurrence, or environmental incident. Strategies shall be developed, implemented, and reviewed a regular basis, to ensure all risks are identified, measured, and recorded throughout the course of this Project.

This EMP (C) has been established to:

- Plan Planning
- Do Implementation and Operation
- Check Monitoring and Measuring
- Act Evaluation



2.2 Objectives of the EMP (C)

Key objectives of the EMP (C) are:

- Comply with requirements and continually improve the effectiveness of the Environmental Management System.
- Comply with all applicable environmental laws.
- Recycle and reuse products wherever possible.
- Use modern equipment and technology in place of those considered harmful or pollutive.
- Maintain an accredited integrated Environmental Management System.
- Continuously improving the Environmental Management System.
- Encourage environmental awareness of EMP (C)loyees, subcontractors, suppliers, and consultants by ensuring communication regarding EMS processes and their effectiveness between all levels of our organisation through regular formal and informal communication methods.

2.3 Environmental Policy

GCE Contractors Pty Ltd (GCE) is committed to a sustainable development throughout our construction operations. Setting objectives, measuring progress, and communicating results will achieve continual improvement in the environmental performance.

To deliver sustainable development, we will:

- Communicate GCE environmental policy and procedures to all EMP (C)loyees.
- Providing a safe and healthful workplace.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 148 of 300

- Comply with applicable environmental laws, regulations, statutory obligations, and relevant voluntary codes of practice.
- Make business decisions that work towards achieving sustainable development and a reduction in pollution.
- Having an environmentally sustainable aware culture by ensuring our EMP (C)loyees, subcontractors, suppliers, and consultants the awareness of their environmental obligations with respect to GCE operations.
- Taking steps to improve environmental performance continually by striving to conserve resources, reduce waste and eliminate or minimise adverse environmental effects and risks that may be associated with our services and operations.
- Work with our clients and other stakeholders to help them achieve their environmental objectives and obligations.
- Working with suppliers who promote sound environmental practices.

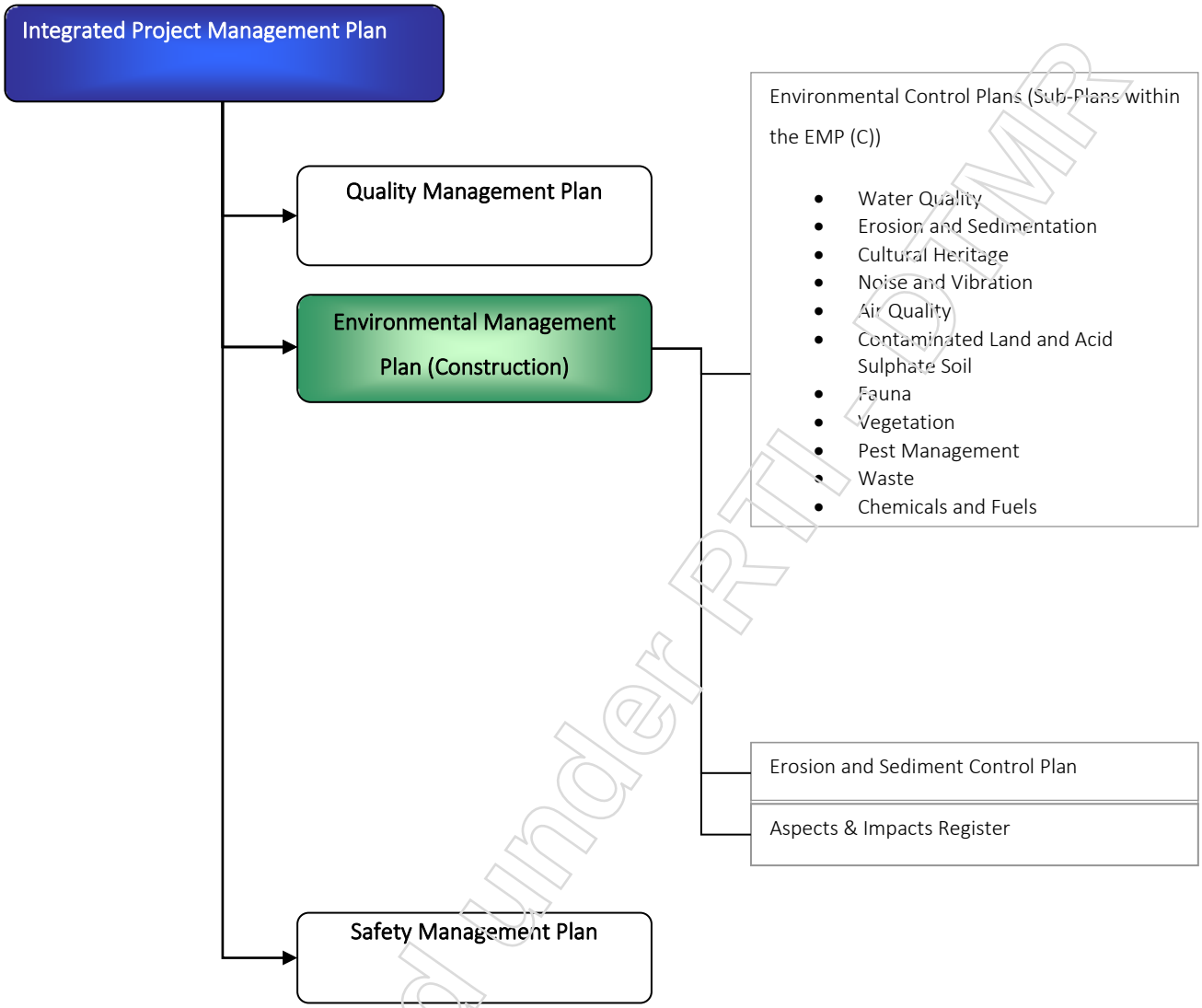
Periodically review and revise our environmental policy and procedures to maintain their relevance.

We will respond to the environmental challenges in all areas of our business and it's the responsibility of every EMP (C) employee to implement this policy.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 149 of 300

2.4 EMP (C) Structure



Released under RTI DNRM

Figure 2-2: EMP (C) Structure

RTI-5755 Release.pdf - Page Number: 150 of 300

3 Environmental Process & Management Control

3.1 Environmental Aspects, Impacts & Risk Management

The identification of the potential environmental aspects and impacts that could eventuate during the Project is central to the selection of appropriate environmental safeguards. The relationship of aspects and impacts is one of cause and effect. The process of identifying impacts is one of progressively breaking down each activity into environmental aspects. A copy of the Project Aspects & Impacts Register is included in Appendix A.

Example construction related environmental risks are those that:

- Have the potential to cause the discharge or release of pollutants to the water, air, or land
- Impact on flora, fauna, or heritage
- Have the potential to create change to the environment, including noise
- Generate wastes

The following risk analysis matrix will be used as a guide when predicting the potential level of risk of construction activities. The potential environmental/community consequences or impacts of the activity, and the likelihood of an incident occurring when undertaking activities, will be rated as Extreme, High, Medium, or Low.

Table 1-1: Predicted Level of Risk

CONSEQUENCES	LIKELIHOOD			
	(4) Very likely	**(3)** Likely	**(2)** Unlikely	**(1)** Very Unlikely
(4) Major	1/H	1/H	1/H	2/M
(3) Moderate	1/H	1/H	2/M	2/M
(2) Minor	1/H	2/M	2/M	3/L
(1) Insignificant	2/M	2/M	3/L	3/L

Note: High risk ratings equals a significant definition under ISO14001

Table 3-2: Environmental Risk Likelihood Guide

Likelihood	Overview/Guide
4 - Likely	Could occur at almost any time, under any circumstances
3 - Possible	Could occur
2 - Unlikely	Could occur but not expected. Would require multiple failures of systems/controls

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 151 of 300

1 - Very Unlikely	Occurs only in exceptional circumstances

Table 3-2: Environmental Risk Consequence Guide

Consequence	Overview/Guide
4 - Major	Serious damage to the environment, medium to long-term impact, rehabilitation at considerable expense. Possible legal non-compliance and/or damage to corporate reputation. Irreparable/long-term damage/widespread environmental effects may include disturbance/death to threatened species (flora & fauna) and ecological communities, unauthorised damage to significant cultural or heritage sites. Occurrence may result in significant regulatory intervention.
3 - Moderate	Localised, short-term damage/disturbance to the environment requiring relatively short-term remedial action (<1 month)
2 - Minor	Noticeable impact on the natural environment/corporate reputation requiring little to no remedial action
1 - Insignificant	Negligible impact on the environment which is difficult to notice and does not require remedial action

The outcomes of this process (i.e., the Environmental Aspects, Impacts and Risk Management Register) will be reflected in and managed within Part 2 of this EMP (C). This second part of the EMP (C) includes detailed objectives/performance criteria, mitigation measures, monitoring, preventative, and corrective actions for relevant environmental aspects. The Environmental Aspects, Impacts and Risk Management Registers are revised periodically in accordance with Project activities and program requirements by the QSE Manager and is reviewed and signed by the Project Manager, Construction Manager, QSE Manager and a copy kept on site with the Foreman. (Appendix A – Environmental Aspects, Impacts and Risk Management Register)

In addition to this, key items will be addressed through relevant Safe Work Method Statement (SWMS) submitted to the Project Manager (or suitable delegate) by sub-contractors for their review prior to use onsite. The SWMS will identify the specific hazards and risks according to the typical sequence of activities. As a part of the SWMS relevant mitigation measures are identified for implementation to ensure environmental objectives are met.

The development of these SWMSs will assist field staff with appreciation of key issues/potential impacts and identify specific instructions for undertaking Project works in a safe and environmentally responsible manner. The SWMSs will incorporate actions to ensure environmental commitments made by GCE to stakeholders are suitably addressed.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 152 of 300

It is recognised that SWMSs play an important role in the management of desired environmental outcomes. The SWMSs will be reviewed on an as needed basis, annually, following an incident or following a major change in scope of works.

3.2 Health, Safety & Environment Integration

3.2.1 Health, Safety and Environment (HSE) meetings

Daily pre-start meetings are held to discuss specific job safety instructions, changes in job procedures and work practice, changes in rules and regulations, any other relevant information, and addressing the various following environmental related topics:

- Discuss environmental and local community concerns
- Promote incident and accident prevention
- Review accident/incident investigations/reporting
- Review audit and inspection findings.

Further details are included in the Safety Management Plan.

3.2.2 Emergency Planning

Details on the Emergency Planning is outlined in the Safety Management Plan which discuss emergency procedures, training, the establishment of an emergency control organisation and other information including environmental related emergency procedures as required, to implement details of this plan.

The personnel likely to be involved in incident response will be trained in (but not limited to) the following:

- Identify potential/actual incidents
- Understand the level of incident response (categories)
- Lines of communication
- Best practice response actions
- How to assist external State Emergency Response (SES) personnel in their site control (if required)

3.3 Legal and Other Requirements

Environmental management is subject to legislative control through the operation of statutes and associated regulations. Statutory control is also evidenced within the various approvals, licenses and permits that may be necessary for the commencement and control of some Project work. Identifying and understanding the relevant legal and other requirements that govern the Project's activities is as important as evaluating the aspects and impacts, as this forms the foundation for an EMS. As part of the EMP (C) the Project must ensure that there is access to the current legislation affecting the Projects' operations.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 153 of 300

The HSE Manager is responsible for ensuring that the Environmental Legislation and Other Requirements Register is maintained and updated, as necessary. A copy of this register is available in Appendix B.

3.4 Health, Safety & Environment meetings

Daily meetings are held to discuss specific job instructions, changes in job procedures and work practice, changes in rules and regulations, any other relevant information, and may also address as required the various following environmental related topics:

- Discuss environmental and local community concerns
- Promote incident prevention
- Review incident investigations/reporting
- Review audit and inspection findings.

4 Implementation

4.1 Organisational Structure

The Project organisational structure and interfaces are identified in the Organisational chart. The organisational chart will be updated progressively for any changes and displayed prominently in the site office.

Position descriptions will be developed for all Project Personnel to detail the responsibilities and authorities applicable to the position in accordance with the PMP. Relevant environmental management responsibilities for key positions are described with reference to those who must:

- Initiate actions to ensure compliance to EMP (C) requirements
- Identify and record environmental problems
- Provide solutions or instigate corrective actions
- Verify results
- Check to ensure that problems are corrected
- Initiate emergency procedures in the event of incidents

4.2 Environmental Responsibilities

All staff members have a responsibility for their own work and the impact they have on environmental performance. All Project staff members are required to:

- Undertake all activities in accordance with the agreed plans of management, procedures, and work methods
- Ensure that they are aware of the contact person regarding environmental matters

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 154 of 300

- Report any activity that has resulted in, or has the potential to result in an environmental incident
- Ensure that they attend the environmental induction/training/toolbox provided.

Position descriptions are available for all Project Personnel to detail the responsibilities and authorities applicable to the position in accordance with the Project Management Plan (PMP). Relevant environmental management responsibilities for key positions are described with particular reference to those who must:

- Initiate actions to ensure compliance to EMP (C) requirements (i.e., the HSE Manager)
- Identify and record environmental problems
- Provide solutions or instigate corrective actions
- Verify results
- Check to ensure that problems are corrected
- Initiate emergency procedures in the event of incidents

4.3 Sub-contractor & Procurement Management

GCE recognises that the interface between the Project Team and sub-contractors presents a potential risk with regards to environmental performance due to:

- Their contractual detachment from the main construction delivery teams, and therefore the potential for miscommunication regarding environmental risks
- The number of sub-contractors on site
- The fact that some sub-contractor's work is undertaken off site.

GCE acknowledges its responsibility to ensure that all persons on the Project including sub-contractors and their EMP (C)loyees comply with the relevant environmental requirements. As a minimum, sub-contractors and their EMP (C)loyees will be required to comply in full of the environmental requirements outlined in the EMP (C). All sub-contractors' personnel are considered equivalent to the GCE Project Personnel in all aspects of environmental management and control, and their responsibilities in this respect mirrors those outlined in Section 4.1

Sub-contractors working on the Project will be required to:

- Observe sub-contract and statutory requirements relating to environmental protection and all relevant Environmental Law and to follow instructions issued by supervisory personnel
- Cooperate fully with site emergency incident procedures and consultative arrangements
- Follow procedures, mitigation measures and relevant reporting requirements identified in the EMP (C)
- Submit SWMS to the Project Manager for review

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 155 of 300

Relevant Project Personnel will determine the appropriate environmental management requirements which will be applicable to specific sub-contractors during contract meetings and include these in Sub-contract Agreements. Depending upon the complexity of the sub-contractor's work, GCE may require the sub-contractor to produce documentation detailing their own environmental management and where necessary to prepare their own Project specific EMP (C)s, SWMS and/or Environmental Procedures to augment requirements under this Plan. Details within the sub-contractors EMP (C)s will be consistent with this EMP (C).

4.4 Training, Awareness & Competence

4.4.1 Project Induction

In accordance with GCE requirements all personnel, including direct GCE EMP (C)loyees and sub-contractors, will be required to attend a compulsory Project Induction before commencing any work on the Project. The content and delivery of the Project induction will be consistent across all Project worksites and offices. The environmental component of the induction will include (but not be limited to) the following items:

- EMP (C) overview
- Environmental objectives
- Environmental responsibilities under the EMP (C) in relation to implementing mitigation measures, monitoring, reporting, and implementing corrective actions
- *General Environmental Duty* and *Duty to Notify* as per *Environmental Protection Act 1994* and other relevant legislation
- Key conditions of environmental permits and approvals
- Key environmental issues and controls as identified in this EMP (C) including identification of environmentally sensitive areas, clearing, significant vegetation areas, refuelling, waste management, limits of construction and the like
- Heritage Management
- Emergency/environmental incident response and reporting requirements

Induction records will be maintained in accordance with the PMP and SMP. All personnel involved in the project are referred to read the EMP (C).

4.4.2 Toolbox Talks/Ongoing Environmental Awareness Training

Toolbox Talks include relevant environmental management awareness training as well as site-specific environmental information that may be required to undertake a particular construction activity. Toolbox Talks may also be developed

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 156 of 300

and delivered to improve performance and in response to an Environmental Incident or non-conformance observed on the Project or similar Projects throughout Australia.

Appropriate Supervisors, Senior Project Personnel, visiting Government Bodies or specialist consultants may deliver or participate in the Toolbox Talks depending on the subject matter. It is anticipated that environmental related Toolbox Talks will be delivered on an as needed basis, although at least fortnightly to the construction team. The following list identifies example Toolbox Talks that may be delivered during the life of the Project:

- Project environmentally sensitive areas
- Sediment and erosion controls/wet weather management (soil and water conservation)
- Truck movement – environment and community considerations
- Indigenous heritage appreciation
- Waste management and recycling
- Key environmental controls: noise, dust/air quality, water management
- Key fauna or flora within the Project area
- Changes in environmental instructions (including legislation)
- Project environment issues (arising from time to time)

Toolbox talks will be scheduled around key trade packages and construction programme of activities being undertaken onsite and/or current environmental issues of concern (e.g., up and coming wet season, in response to complaints, etc).

4.4.3 Pre-start Meetings

Pre-start meetings are held by Supervisors, Foreman, or Leading Hands prior to commencing each shift. This meeting typically itemises the work that will be undertaken during the shift and where applicable the following environmental related components:

- Weather observations/forecast
- Potential visits from external stakeholders or environmental auditors
- Feedback on environmental issues that have recently occurred on the Project
- Notices about up-and-coming events such as Safety and Environment Committee Meetings, Audits, Environmental Inspections

All personnel undertaking work within the construction crew will sign onto the Pre-start attendance record form and sub-contractors shall submit forms to GCE supervisor.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 157 of 300

4.4.4 Environmental Monitoring Equipment

All environmental monitoring equipment (as required) such as water quality meters, noise meters, dust meters etc – will be maintained and calibrated according to manufacturer's specifications.

Laboratory calibration records will be retained on the Quality Engineering, Safety and Environment (QESE) electronic storage database and will contain the following information:

- Equipment makes and model numbers
- Serial numbers of instrument and any components
- Calibration date
- Signature of person performing the test
- Test equipment and relevant standard references

A field calibration register is to be kept on site to record the field calibrations performed where required on site by the trained user of the monitoring equipment. The field calibration register will contain the following information:

- Equipment makes and model numbers
- Serial numbers of instrument and any components
- Calibration date and name of person performing the test
- Parameters calibrated
- Maintenance (i.e., change batteries), adjustments made and comments

4.4.5 Cultural Heritage Induction

Prior to commencing ground disturbing activities within designated Cultural Heritage listed areas, relevant Project Personnel working on the Project will need to attend an Indigenous Cultural Heritage Induction course nominated by the principle (if required). All site personnel including management staff through to plant operators and labourers (including subcontractors) working on site will attend the site induction which will include Cultural Heritage to understand Duty of Care requirements including:

- Due Diligence – The Precautionary Approach;
- Aboriginal cultural heritage duty of care

4.4.6 Environmental Professional and Field Resources

The resources required to implement the control measures and obligations identified in the environmental document are detailed in the respective Environmental Control Plans (ECPs). Resources will include:

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 158 of 300

- General labour to install, inspect, maintain, and repair controls during construction activities, preparedness for wet weather, Project shut down requirements, emergency response and other requirements
- Plant and equipment such as dozers, excavators, back hoes, etc
- Hand tools plus fencing and flagging tape to secure 'no go zones' (e.g., protected plants, habitat, culturally significant areas, and artefacts)
- Erosion and sediment equipment and treatment (e.g., sandbags, sediment fences, flocking agents)
- Emergency response equipment including spill control for land and water as appropriate

4.4.7 Environmental Consultants

Environmental consultants will be commissioned by GCE (as required) to provide specialist input and advice on environmental matters, undertake surveys and inspections, implement monitoring programs, or prepare environmental reports. The specialist may include the following subject to client requirements:

Element	Consultant Details	Overview of Service Provided
Approval/license/permit applications	TBA	Identify, prepare applications, and assist with negotiations
Design solutions	Fishology	Consistent with environmental documents and agency requirements (e.g., fish passage, fauna friendly design, water quality treatment ponds, etc.)
Acoustic consultant	Alpha Acoustics	Monitor and prepare noise reports and identify attenuation requirements
Indigenous heritage	TBA	As per CHMP
Non-Indigenous Heritage	TBA	Where non-indigenous heritage exists, investigation and permits to proceed with Project requirements may be required
Contaminated land	Epic Consultants	Including investigation / assistance with disposal permit, tracking and any subsequent reporting in accordance with DEHP guidelines
Soil and water management / conservation	Topo	Concept erosion and sediment control design and maintenance, ESC training at all levels
Flora and Fauna	Trend Environmental	Significant flora translocation, botanical survey, habitat survey, fauna relocation
Spotter / catcher	FCA Consultants	Assist with vegetation clearing and works within a waterway
Weeds	Trend Environmental	Weed survey and management
Groundwater	Epic	Investigation and monitoring

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 159 of 300

5 Communication and complaint Resolution

All complaints are to be directed to admin@gcecontractors.com. They are to be entered into a complaint register with details including the complainants name (if provided), date of complaint, nature of complaint and a form of contact. A response should be completed within 3 business days to acknowledge the complaint, and to provide a resolution to the complaint if required.

6 Review and Improvement

This document is to be reviewed and updated annually at minimum, or as soon as practicable following changes in applicable legislation or local laws which may deem changes necessary. Changes in activities undertaken in the premises are also to be captured with appropriate adoption of mitigation measures should the altered actions result in changed impacts to the environment.

7 Reporting Requirements

7.1 Weekly Inspections

Weekly inspections will be completed using GCE template GCE-EMP-001 [A] Weekly Environmental Inspection (refer Appendix D). Any corrective actions are to be recorded in the project Corrective Actions Register with a due date and responsible person identified. Closed out actions are to be recorded to confirm completion and suitability of completed works.

7.2 Monthly Reports

Monthly reports will be completed by the 5th of each month for the previous calendar month and submitted to the Administrator. The template for the report is to be as per Technical Specification Appendix, MRTS51 Environmental Management – Form A (refer to Appendix D).

7.3 Incident Reports

Incident reports will be completed within 24 hours for high risk incidents and 3 days for medium and low risk incidents and submitted to the Administrator. The template for the report is to be as per Technical Specification Appendix, MRTS51 Environmental Management – Form B (refer to Appendix D).

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 160 of 300

7.4 Waste Tracking

All waste streams and volumes are to be recorded and shall record wastes generated, disposed, recycled and reused and Recycled Materials and Products utilised by the Work under the Contract in the Waste 2 Resource Calculator.

All Surplus Materials are to be recorded using the Form C - Contractor's Declaration for Deposition of Surplus Material template (refer Appendix D).

All regulated waste must be removed by a licence regulated waste contractor and recording using the DETSI Waste Tracking Certificates.

7.5 Water Quality Monitoring

Water Quality Monitoring shall be recorded using the GCE-EMP-003 [B] Permit to Discharge, with a spreadsheet register also recording the climatic conditions and received rainfall.

7.6 Complaints Register

A Complaints Register is to be maintained, recording the date, name and contact details (where supplied), and nature of the complaint. All complaints are to be acknowledged within 24 hours, and reviewed within 3 working days. All complaints recorded are to be closed out, acknowledging whether they were either frivolous, or the corrective action taken to resolve the complaint.

Where the complaint is deemed to be factual, an incident report is to be completed and forwarded to the Adminstrator.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 161 of 300

8 Environmental Control Plans

8.1 Aspect: Air – Quality, Noise & Vibration

8.1.1 Objectives

To mitigate the impact of operating an administrative business on all aspect related to air, including air quality and noise pollution.

Noise limits as per Environmental Protection (Noise) Policy will be observed:

Noise nuisance:

Construction plant and equipment:

Time	Noise Limit above background noise
7am – 6pm	40 dBA

Dust nuisance:

Any dust generated that may impact nearby vegetation and cause nuisance to others within vicinity of the construction site.

Pollution nuisance:

Any smoke nuisance (emissions) from operation of plant and fleet vehicles that persist. Queensland Road Rules—Section 291(1)(b) states: "*Wilfully starting or driving a vehicle in a way that makes unnecessary noise or smoke*."

8.1.2 Monitoring

Prevailing Wind speeds and direction will be recorded (using Bureau of Meteorology information(.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 162 of 300

8.1.3 Sensitive Receptors

Sensitive receptors to the project are shown below with the nearest being 290m from the project site.

Figure 3 - Sensitive Receptors near Construction works

8.1.4 Activities likely to impact Air Quality

Activities undertaken foe the upgrade of the road include:

- Use of construction machinery (graders, heavy vehicles, rollers)
- Stripping and grubbing

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 163 of 300

- Installation of culverts, and rock for high velocity and discharge locations
- Construction of formation and pavement layers of road
- Road surface sealing

8.1.5 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil complaints from neighbouring businesses;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State -- Department of Environment, Tourism, Sports and Innovation (DETSI) and Queensland Police relating to air quality / noise impacts).

8.1.6 Impact & Mitigation Measures

Impact	Mitigation Measures
Noise Pollution from fleet vehicles	• Regularly maintain vehicles • Conduct pre-start on all fleet vehicles • Only start vehicles at reasonable hours
Noise Complaint due to Construction	• In the event of a justifiable noise complaint, the Contractor must: o Investigate the cause of the complaint through consultation with the complainant. Review and log the type, location and duration of the site activity, meteorological conditions and other extraneous noise events occurring at the time of the activity which is the subject of the complaint.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 164 of 300

	○ Develop and implement appropriate work procedures or Management Measures to prevent or minimise further noise impacts, and ○ Within five working days of receipt of the noise complaint, report the results of the investigation and the actions taken to close out the complaint(s) to the Administrator. • If directed by the Administrator, the Contractor shall undertake additional complaint related noise assessment: ○ Perform attended noise monitoring at the location from which the complaint arose (or a representative location) during a representative period to determine construction noise levels at the location of the complainant. Monitoring shall be conducted in accordance with applicable industry standards and note the ambient and background noise environment at the time of measurement. ○ Use attended noise monitoring data in the assessment of the impacts and identify reasonable and practicable noise Management Measures required to be implemented, and ○ Report the results of the monitoring, investigation and the actions taken to address the complaint to the Administrator.
Dust generation from plant & fleet vehicles movements	• Regularly wash and maintain that travel between office and project site locations • Maintain exit and entry points
Dust generation from earthworks	• Water cart utilised regularly (increased frequency in dry, windy conditions)

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 165 of 300

	• Stabilise exposed areas as soon as practicable with permanent surfaces (topsoil and seed, rock cover) or application of soil binder for interim coverage
Smoke generation through fleet vehicles	• Regularly maintain vehicles

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 166 of 300

8.2 Aspect: Water Quality

8.2.1 Objectives

To mitigate the impact of operating an administrative business on all aspect related to water quality, including stormwater management, water usage and waterway quality.

Water Quality (for nearby waterway) and stormwater discharge limits as per Environmental Protection (Water and Wetland Biodiversity) Policy and Scenic Rim Regional Council Guidelines will be observed:

Analyte:	Observation
pH	6.5 – 8.5
Total Suspended Solids (TSS)	< 50mg/L
Dissolved Oxygen	≥ 90%
Oils & Greases	No sheen to be observed

8.2.2 Location of waterways (within 50m of boundary limits of construction works)

There is a Fisheries identified waterway 80 m downstream of the works as per Figure 4 - Green Waterway downstream of project site below

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 167 of 300

Figure 4 - Green Waterway downstream of project site

8.2.3 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil complaints from neighbouring businesses;
- Nil major (>20L) hydrocarbon spill from plant / fleet vehicles;
- Nil discharges directly to stormwater;
- Nil sediment from plant and fleet vehicles onto road surface;

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 168 of 300

- Nil notices / fines from authorities (both local – Brisbane City Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI) and Queensland Police relating to water quality impacts.

8.2.4 Impact & Mitigation Measures

Impact	Mitigation Measures
Sediment runoff from vehicles into drainage paths	• Regularly wash and maintain plant and vehicles that travel between laydown and construction site locations • Check and maintain appropriate erosion and sediment control measures, including stormwater management • Install permanent swale and drainage infrastructure as soon as practicable (culverts, rock covers/dissipaters, rock checks) • Cover and reinstate disturbed areas as soon as practicable after earthworks completed • Maintain coverage on trafficable areas • Remain on designated travel paths
Hydrocarbon discharge into stormwater infrastructure	• Regularly maintain vehicles • Immediately clean any hydrocarbon spill / leak caused from plant / fleet vehicle and dispose off appropriately • Appropriately dispose of contaminated spill kit material • Conduct pre-start on all fleet vehicles • All hydrocarbons are to be stored in bunded areas

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 169 of 300

	• Avoid parking on roadside kerb as much as practicable – park in identified zones and not within 50m of a waterway • Fully stocked spill bin to be in laydown at all times • All vehicles to have fully stocked spill bags at all times
Water Quality Monitoring	• A location (not more than 100m upstream or downstream of the works) is to be nominated and utilised as a baseline representative of the water quality within the waterway • Water is to be tested anytime more than 20mm has been received within 24hrs, and daily thereafter until water ceases to runoff • A monitoring spreadsheet is to be maintained throughout the duration of the project (and up to 5 years after) • Any water quality exceedances are to be reported as a non-conformance to the Administrating Authority. • The non-conformance report is to contain the size of the rainfall event (Annual Recurrence Interval ARI), the duration of the rainfall event, the water quality parameter the was exceeded and the level that was recorded from within the site and downstream of the site, proactive mitigation actions insitu prior to rainfall event, and actions taken post event to correct any damage caused. • Any complaints received regarding water quality are to be recorded in the complaints register, investigated to establish validity of complaint and any corrective actions to be recorded, implemented and noted when completed.
Contamination of waterway during flood event	• Clean off any observed sediment on road prior to any rain event contributed from fleet vehicles

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 170 of 300

	• All chemicals are to be appropriately stored and bunded in accordance with AS1940-2017 • All chemicals to be approved prior to being brought onto site, including any soil binders • All SDS to be current, and storage of chemicals appropriate to recommendations • Housekeeping of laydown area to be completed daily • All erosion and sediment controls to be insitu at all times • Additional controls to be assessed and installed if deemed necessary
Excessive water usage	• Regularly monitor water usage through comparison of monthly consumption (record and review kL usage) • Regularly monitor water fittings and toilets for slow leaks • If required, organise suitable contractor to maintain infrastructure • Beneficial reuse of water from quarry sediment basins (after testing validates water quality in accordance with MRTS04 – General Earthworks)

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 171 of 300

8.3 Aspect: Erosion and Sediment Control

8.3.1 Objectives

To mitigate the potential impact of the erosion and sediment loss on the neighbouring waterways, landform and soil quality.

8.3.2 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil sediment discharges directly to waterways exceeding Total Suspended Solids parameter limits;
- Adherence to Best Practices Guidelines as per IECA Guidelines (2008), MRTS51 Environmental Management and MRTS52 Erosion and Sediment Control;
- No direct impact to water quality and environmental values of existing downstream waterways;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI) relating to water quality impacts.

8.3.3 Impact & Mitigation Measures

Impact	Mitigation Measures
Soil Loss	• Prepare and approve Erosion and Sediment Control drawings (drainage approved by RPEQ, ESC by CPESC) • Install all sediment controls immediately upon initial ground disturbance • Daily visual monitoring of sediment controls to ensure they are insitu and not >50% capacity of sediment at any time • Ground disturbance and topsoil stripping should be completed in a staged approach • Topsoil to be reinstated on batters as soon as practicable

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 172 of 300

	• Stabilisation practices (such as applying soil binder, mulch cover, rock cover) to be completed as soon as practicable • Rehabilitation of vegetated surfaces to be completed as soon as practicable. • A minimum coverage of 70% vegetation covers must be achieved within 3 months
Waterway Quality	• Any stockpiles are to be at minimum 50m from highbanks of any waterway • Waterways should be reinstated as soon as practicable to limit the period of disturbance • Instream sediment controls to be monitored daily • Reinstated waterway levels to match pre-disturbance natural ground levels • Cleanwater diversions are to be established to limit the volume of overland over disturbed areas • All overland flow over disturbed areas to be directed through a sediment control prior to discharge off site • Waterway water quality to be monitored as per Section 7.2.3 - Water Quality Monitoring • Where mulch is stockpiled, a maximum height of 2.5m is to be adopted where air temperature is <30° and humidity <70%. Where site climate conditions exceed this, mulch stockpiles should be reduced to a maximum height of 1.5m and monitored regularly for excess leachate and heat.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 173 of 300

8.4 Aspect: Land Management

8.4.1 Objectives

To mitigate the potential impact to the existing soil quality and mitigate the potential of soil loss.

8.4.2 Existing Soil Quality

The construction site is located within a Rural Zone which is utilised for both grazing and cropping purposes. The surrounding area consists of fertile soils, which must not be impacted by construction works. The presence of Acid Sulphate Soils (either AASS or PASS) is highly unlikely and is not identified on existing mapping (as viewed on available layers present in Qld Globe, viewed 14.08.2025). A search on the Unexploded Ordnance site has also been completed with no potential issues identified.

8.4.3 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil discharges directly to waterways;
- Soil physio-chemistry maintained;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI) relating to water quality impacts.

8.4.4 Impact & Mitigation Measures

Impact	Mitigation Measures
Stockpiles	• Maximum height of 2m • Ensure sediment controls are installed around the downstream toe of all stockpiles

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 174 of 300

	• If stockpiles are insitu longer than 3 months, stockpiles are to be stabilised with vegetation (soil binder in the interim) • Stockpiles are not to be located within 50m of a waterway or within a drainage pathway
Contaminated finds (unexpected)	• If indicators of contaminated soils are encountered during excavation works (asbestos, acid sulphate, odorous, visually contaminated materials ect), work in the immediate area is to cease • The suspected area is to be cordoned off and managed in accordance with the Unexpected Contaminated Finds Procedure (included as Appendix C on this EMP (C)

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 175 of 300

8.5 Aspect: Chemical Management

8.5.1 Objectives

To mitigate the potential impact of the storage and use of chemicals onsite required for the operation of a business.

8.5.2 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil observations of chemical spills;
- Nil discharges directly to stormwater;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI) relating to water quality impacts.

8.5.3 Impact & Mitigation Measures

Impact	Mitigation Measures
Environmental incidents with relevance to oil spills / chemical spills / contaminant leaks / refuelling	• Communicate requirements via induction and toolbox talks. • Maintain SDS register • Provide correct storage and allocated space for chemicals • Refuelling of fleet vehicles only at approved refuelling businesses • Conduct pre-start on all fleet vehicles • Utilisation of oil containers when servicing plant and vehicles. • Waste oils are to be stored in appropriate container which meets AS1692 with appropriate bunding

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 176 of 300

	• Waste oils must be collected and transported by a certified regulated waste tracking company and appropriate waste tracking documentation completed • Servicing and repairs of vehicles to only occur on hardstand within shed.
Hazardous substance storage areas	• Storage area to be appropriate for chemical type. • Ensure correct storage of hazardous substances in accordance with SDS. • Minimise storage requirements on site. • Lock up chemical container at night when yard is unoccupied. • Maintain spill kit equipment, preferably one within workshop area and one near chemical stores. • All chemicals must be contained in appropriate containers and labelled. Chemicals are not to be decanted into alternative containers.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 177 of 300

8.6 Aspect: Cultural Heritage

8.6.1 Objectives

To improve the awareness of all personnel surrounding cultural heritage including their duty of care and mitigate potential impact

8.6.2 Cultural Heritage Assessment

The site is a highly pre-disturbed *Developed Area* (existing roadway) and as such is unlikely to contain artefacts of cultural heritage significance. The footprint of the upgraded road remains within the existing road reserve and as such *No Additional Surface Disturbance* will occur.

However, it is acknowledged that unexpected finds may occur and as such the following mitigation actions have been identified to avoid further impacts. Due diligence and reasonable precaution prior to undertaking an activity which may harm Aboriginal cultural heritage is required to be observed at all times.

Definitions from Duty of Care Guidelines (Aboriginal Cultural Heritage Act 2003):

"***Developed Area***" means that the area is developed or maintained for a particular purpose such as use as a park, garden, railway, road or other access route, navigation channel, municipal facility or infrastructure facility, such as power lines, telecommunication lines or electricity infrastructure.

"***No Additional Surface Disturbance***" means surface disturbance not inconsistent with previous surface disturbance.

"***Significant Ground Disturbance***" means:

disturbance by machinery of the topsoil or surface rock layer of the ground, such as by ploughing, drilling or dredging;

the removal of native vegetation by disturbing root systems and exposing underlying soil.

"***Surface Disturbance***" means any disturbance of an area which causes a lasting impact to the land or waters during the activity or after the activity has ceased.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 178 of 300

The project HSE is the nominated Cultural Heritage Officer

Email contact – safety@gcecontractors.com

8.6.3 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil avoidable impact on physical and spiritual aspects of cultural heritage;
- Where an artefact or human remains are observed, immediate Stop Works to assess and manage as per guidance from Department and appropriate cultural heritage community members;
- Nil notices / fines from authorities (Department of Environment, Tourism, Sports and Innovation (DETSI) relating to cultural heritage impacts.

8.6.4 Impact & Mitigation Measures

Impact	Mitigation Measures
General awareness	• Provide training in induction and toolbox training to all personnel to provide basis of understanding in general obligations if unexpected finds (artefacts / human remains) are found
Cultural heritage find	• All personnel understand obligations under general duty of care • Project managers are to stop works (and follow the Find-Stop-Notify-Manage procedure below), and contacting appropriate personnel for further advice (DETSI for artefact find, police for human remains) • Area is to be flagged off and all project personnel informed of barrier via pre=start meeting.
Unexpected Find	• Implement Find – Stop – Notify – Manage procedure: a) FIND: An item of potential Cultural Heritage is found.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 179 of 300

	b) STOP: All work at the Find location shall cease. The item shall not be removed or disturbed. c) NOTIFY: The Contractor shall immediately notify the Administrator. The Administrator will promptly notify the Principal's Cultural Heritage Officer, and d) MANAGE: Principal's Cultural Heritage Officer will arrange for the potential Cultural Heritage to be inspected and assessed for significance. Principal's Cultural Heritage Officers shall provide the temporary management recommendations. This may include securing the find by erecting an exclusion zone for a period of time and precluding access to that area. The Contractor shall notify all Site personnel of the object and/or area and proposed treatment of the object and/or area as soon as possible, but prior to commencing work on the next working day.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 180 of 300

8.7 Aspect: Fauna / Flora

8.7.1 Objectives

To improve the awareness of all personnel surrounding fauna/ flora management.

8.7.2 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil direct (preventable) impact on fauna;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI), Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development relating to Flora Impact, Vegetation Management.

8.7.3 Flora Survey Report

A Flora survey has been completed "*FLORA SURVEY REPORT - CHRISTENSEN ROAD UPGRADE - MOUNT WALKER QUARRY*"(Trend Environmental, 2024) which found that the project will require the removal of one individual of Melaleuca irbyana within the Project Area (outside of the clearing impact area). Clearing activities for the project are not anticipated to adversely impact on the viability of any localised Melaleuca irbyana ecological communities from the loss of one individual from already cleared agricultural land. Also, in consideration of proposed planting of Melaleuca irbyana to take place within the Mount Quarry site (considered a net gain) as defined in the Impact Management Plan , the removal of this one individual would not be considered to impose a significant residual impact as defined under the DESI Policy.

Therefore, offsets are not considered applicable for this project.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 181 of 300

8.7.4 Impact & Mitigation Measures

Impact	Mitigation Measures
Fauna Impact	• Avoid travel at dawn and dusk when travelling in rural areas • Slow down in signed native fauna areas • Contact licenced native fauna handler if fauna struck is able to be rehabilitated • Prior to clearing, engage Fauna-spotter clearer to pre-walk the disturbance area and determine the management measures required (eg relocation and preservation of breeding places and animals if appropriate) • Avoid handling of native species. If a snake is spotted within any yard buildings, avoid contact and contact a licensed snake handler. • Avoid tampering with any least concern breeding places
Flora Impact	• Identification markers will be installed along the Limits of Clearing boundary prior to commencing vegetation clearing and ground disturbance • Identification markers shall be maintained for the duration of the Contract or at least until Works are complete in the adjacent area. • If the requirement for additional areas of vegetation or ground to be disturbed outside the specified Limits of Clearing is identified, the Contractor shall submit a request to the Administrator. • Areas of Significant Vegetation or habitat will be clearly marked by identification markers that are visibly different to the limits of clearing markers

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 182 of 300

	• Any vegetation clearing beyond the Limits of Clearing shall be reported. Details required to be provided will include the area (metre squared), the location, a description of the vegetation cleared and other issues that might relate to the clearing. • Boundary limits of clearing are defined by the road reserve boundaries within the defined construction are of Chainage 0 – 80 on Christensen Road and Ch 34.56 – 392.37 on Rosewood = Warrill View Road

8.7.5 Fauna Rescue Contacts

Brisbane Area Rescue Network (BARN) N/R (24 hour rescue hotline for all injured native wildlife – Brisbane & surrounds)

Wildcare – South-east Queensland – 07 5527 2444

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 183 of 300

8.8 Aspect: Weed / Pest

8.8.1 Objectives

To improve the awareness of all personnel surrounding biosecurity management and reduce impacts from biosecurity risks including weeds, fire ants and pests.

8.8.2 Performance Criteria

Measurement of this will be via the following performance criteria:

- Nil instances of violating Fire Ant Management protocols;
- Nil instances of Weed transfer to or from sites;
- Nil notices / fines from authorities (both local – Scenic Rim Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI), Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (DNRMMRRD) relating to Fire Ant Management and WONS Management.

8.8.3 Weed Status of Site

The Site Based Management Plan developed for the associated Quarry noted that "*It is noted that 'fire weed' is a noxious weed that is subject to strict control measures. It exists throughout the Scenic Rim area and is well-established on the adjoining neighbour's property.*" and as such should be brought to the attention of all personnel to visually check for and report if sighted.

8.8.4 Impact & Mitigation Measures

Impact	Mitigation Measures
Weed Management – prevent spread of weeds, including those listed as Weeds of National Significance	• Ensure construction plant and vehicles undergo a documented cleaned down prior to entry to Site.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 184 of 300

	• Ensure construction plant and vehicles operating in biosecurity-contaminated areas undergo a clean down in accordance with QDAF Vehicle and machinery cleandown procedures prior to movement out of the biosecurity-contaminated area • Management of any WONS identified weeds within the construction zone utilising best practice as prescribed by the DNRMMRRD website • Ensure use of pesticides is undertaken by appropriately licenced contractors and in accordance with the label including the requirements of Clause 7.3 and 8.3 of MRTS16 Landscape and Revegetation Works and retain records of spray activities. • Obtain biosecurity certificates certifying that all imported topsoils and mulches are free of prohibited or restricted biosecurity matters. • Rehabilitate batters, swales and non-sealed zones as soon as practicable with vegetative cover as soon as practicable (including establishment watering) to avoid weed establishment • Where temporary clean-down bays are used, the Contractor shall document: o Maintenance requirements and procedures. o Management Measures implemented to contain wastewater and restrict movement of Biosecurity Matters particularly to Waterways and drainage lines. o Management Measures to contain biosecurity matter, sediments, oils and greases, and o Prevention of vehicle recontamination.
Fire Ant Management	• Washdown of fleet vehicles if they have travelled over disturbed soils within a fire ant zone

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 185 of 300

	• Regular review of department website to review zoning areas
Pest Management	• Maintain good housekeeping • Engage a contractor to install pest management devices / sprays to limit ingress

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 186 of 300

8.9 Aspect: Waste Management

8.9.1 Objectives

To adhere to the waste management hierarchy (as below) and meet requirements under the Waste Reduction and Recycling Regulation 2023.

8.9.2 Performance Criteria

Measurement of this will be via the following performance criteria:

- Maximising waste generation through identification of segregation of waste streams and reuse/recycling opportunities;
- Nil notices / fines from authorities (both local – Scenic Rime Regional Council and State – Department of Environment, Tourism, Sports and Innovation (DETSI) relating to illegal waste disposal.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 187 of 300

8.9.3 Impact & Mitigation Measures

Impact	Mitigation Measures
Poor waste management practices	• Segregate materials for recycling or disposal. • Regulated waste to have separate receptacle • Waste oils must be contained in receptacles which meet AS1692 • Provide adequate waste bins for the site and frequent collection of waste to avoid odours and attraction of vermin/pest birds, cover bins etc. • Bins shall be fitted with lids and serviced prior to being filled to capacity. • Visual checks of site for poor housekeeping/poor practices during weekly inspection. • Order material according to schedule of quantities to minimise waste.
Generation of waste volume	• Identification of waste streams including but not limited to: o Cardboard o Batteries o Packaging o General waste o Recycling o Regulated Waste (Oils / Chemicals) o Waste Fill, Spoil • Use local manufactures and order in bulk to minimise packaging requirements.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 188 of 300

	• Plan material/equipment purchases to minimise excess product. • Where possible return unused material and containers to the supplier for reuse. • Identify other consumers of waste product (eg waste clean fill / topsoil) • Repurpose for beneficial purpose (logs for fauna habitat, mulch for cover / sediment control) • Consider using materials with a recycled content wherever cost and performance is competitive. • Where Surplus Material can be used for a higher-value reuse or recycling application, it shall be used for that purpose. Where a higher-value reuse or recycling application is not feasible, and the Surplus Material is considered low environmental risk, the Contractor may consider Deposition of Surplus Material in accordance with: o Clause 11 of MRTS04 General Earthworks and EP175 Deposition of Surplus Material – Assessment Methodology. Surplus Material that may be considered low environmental risk materials are: • clean earth material • natural and manufactured aggregate • recycled aggregates including crushed concrete, brick, pavers, glass • untreated timber; and • clear and grubbed material.
Waste Tracking	• Regulated waste must be collected and transported by certified regulated waste contractors

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 189 of 300

	• Waste Tracking certificates must be completed and kept for a minimum period of 5 years in accordance with the Waste Regulations • Records of waste volumes shall be maintained and segregated by waste streams • The Contractor shall record wastes generated, disposed, recycled and reused and Recycled Materials and Products utilised by the Work under the Contract in the Waste 2 Resource Calculator.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 190 of 300

Released under RTI - DTMR

APPENDIX A

ASPECTS AND IMPACTS REGISTER

RTI-5755 Release.pdf - Page Number: 191 of 300

Risk No.	Impacts	Potential Risk Assessment				Mitigated Risk Assessment			
		Likelihood	Consequence	Risk Level (Before)	Possible Consequences / Delivery Implications	Actions/Mitigation Strategy/Controls	Likelihood	Consequence	Risk Level (Before)
Environmental Aspect: Approvals									
E1	Permits for works: Initiating Construction without Approvals including Management Plan approvals	2	4	**High**	Impact on environment. Negative PR. Construction program delays. Financial impact. Possibility of prosecution.	Identify Permit requirements and lead times. Develop good relations with Stakeholders /Regulatory Authorities /Groups. Submit applications early with approval subject to tenure.	1	3	Medium
E2	Change of legislative / regulatory / policy requirements	2	3	Medium	Negative PR. Construction program delays. Financial impact. Possibility of prosecution.	Compile and Maintain Legal & Other Obligations Register. Develop good relations with Regulatory Authorities etc.	1	3	Medium
E3	Integrated Work Method Statements: Inadequate environmental controls included	2	3	Medium	Insufficient or incorrect environmental controls and measures included into work method statement	SSE Manager to review all Integrated Work Method Statements	1	3	Medium
E4	Subcontractor management, site behaviour and culture - Environmental Non-Compliance	4	3	**High**	Sub-contractor non compliance with reference to environmental policy, EMP(C), Heritage requirements, permit requirements or incident response	Key performance requirements identified within contract along with an accountability clause or similar. All contracts are to be finalised prior to mobilisation of crews. All contractors to undergo a Site Induction Required work method statements and emergency response plans in areas of works with high environmental or cultural heritage risk are to be stipulated within contract requirements.	2	3	Medium
Environmental Aspect: Water Quality									
E5	Contamination of local waterways during rain event - Erosion & Sediment Control	3	4	**Extreme**	Impact on waterway environment. Negative PR. Possible prosecution from the relevant agencies including clean up and remediation costs.	The development and implementation of erosion and sediment control as per Best Practice Guidelines. ESC Plans developed by CPESC qualified consultant. Controls to be monitored by Environment Team to ensure compliance and maintenance conforms.	2	3	Medium
E6	Contamination of local waterways - Significant natural event e.g flood	3	4	**Extreme**	Impact on waterway environment. Negative PR. Possible prosecution from the relevant agencies including clean up and remediation costs.	Ensuring the works are planned and staged to limit the risk to construction of having active areas during the rain season. All appropriate controls are to be installed as per developed erosion and sediment control plans.	2	3	Medium
E7	Contamination of local waterways – sewerage spill during the transition phase	3	4	**Extreme**	Impact to waterway environment. Negative PR. Possible prosecution from the relevant agencies including clean up and remediation costs.	Ensure sewerage flow is well managed and adequate supply of trucks are available.	2	3	Medium
E8	Degeneration of water quality in the surrounding waterways during construction in or adjacent to waterway	3	4	**Extreme**	Destruction of flora/fauna. Negative PR Possible prosecution from the relevant agencies including clean up and remediation costs.	Initial monitoring to establish background water quality parameters including continued monitoring throughout construction to enable the early identification of declining water quality. Management plans to identify this as a key risk and implement levels of controls within the field. Specific Integrated Work Method Statement for high risk activities.	2	3	Medium
E9	Degeneration of water quality in the surrounding waterways during concrete operations adjacent to waterway	3	3	**High**	Some contamination of soil and water interaction if washout in wrong location. Negative PR. Possible prosecution from the relevant agencies including clean up and remediation costs.	Supervision to ensure use of designated washout area. Induction to cover washout requirements. Maintenance check on plants to ensure it is regularly maintained.	1	3	Medium
E10	Availability and sourcing of a suitable class of recycled water for construction use	2	3	Medium	Contamination of natural water bodies with low class recycled waters, increasing the possibility of algal blooms or viral infections such as E. Coli resulting in prosecution by relevant agencies. Safety implications for operatives.	Identify alternate water sources for use as dust suppression and construction waters in key sensitive areas. Initial testing and continued monitoring to ensure adequate quality of sourced recycled waters. Use on site water storage dams.	1	3	Medium
E11	Construction delays due to wet weather	3	2	Medium	Delay construction program. Financial loss. Impact on critical path.	Plan construction to not coincide with wet season. Prepare and construct major items during the dry season and have adequate drainage and flood control measures in place at all times, as per Best Practice ESC guidelines.	1	2	Low
E12	Ground water delaying construction program	3	3	**High**	Encountering groundwater during excavations increasing the requirements for dewatering.	Follow dewatering procedures for treatment and discharge. Use water for dust suppression or construction water.	1	3	Medium

Released under RTI - DTMR

Environmental Aspect: Soil Management									
E13	Unavailability of suitable locations of water storage areas: e.g. sedimentation / treatment ponds during construction	3	3	**High**	Environmental impact. Negative PR. Pollution leading to prosecution. Financial loss, plus delays to construction program due to clean up and investigation time.	Ensure provision is made for treatment ponds during design and applied during construction. Treatment ponds should be constructed with guidance from the Environment Team and frequently maintained. Maintain sediment basins installed as part of previous package.	2	3	Medium
E14	Insufficient management of stockpile areas	3	3	**High**	Loss of Topsoil Loss of topsoil quality Impact on rehabilitation effectiveness	The development, implementation and monitoring of erosion and sediment control as per Best Practice ESC Guidelines. Controls to be monitored by Environment Team to ensure compliance and maintenance conform. Stockpile Management Plan to be prepared, implemented and monitored.	2	3	Medium
E15	Unavailability of suitable stockpile locations	3	2	Medium	Pollution leading to prosecution. Financial loss, plus delays to construction program due to clean up and investigation time. Negative PR.	Plan suitable stockpile areas prior to construction mobilisation.	1	2	Low
E16	Loss of Topsoil / Soil offsite	3	3	**High**	Loss of Topsoil Loss of soil offsite Pollution of downstream waterways	Development of Erosion and Sediment Control Plans Limit topsoil stockpiles to 2m in height If natural grass strike does not occur, hand seed stockpile and spray with soil binder in interim Protect downstream of topsoil stockpile with sediment fence 1m from toe of stockpile	1	2	Low
Environmental Aspect: Contaminated Land & Acid Sulphate Soils									
E17	Inadequate hazardous substance storage areas - e.g. lime, chemicals, and fuels	4	4	**Extreme**	Environmental impact. Negative PR. Pollution leading to prosecution. Financial loss, plus delays to construction program due to clean up and investigation time.	Install and maintain stormwater quality improvement devices including secondary bunding in high risk areas. Storage area to be bunded, secure, lockable container, on hard standing, away from drains/watercourse. Ensure correct storage of hazardous substances in accordance with SDS. Train operatives in emergency response. Minimise storage requirements on site.	1	3	Medium
E18	Environmental incidents with relevance to oil spills/ fuel spills/ chemical spills/ contaminant leaks/ refuelling	4	4	**Extreme**	Environmental impact. Negative PR. Pollution leading to prosecution. Financial loss, plus delays to construction program due to clean up and investigation time.	Communicate requirements via induction and toolbox talks. Ensure correct storage of hazardous substances. Complete ESWMS - GCE-SWMS-022 Hazardous Substances and Dangerous Goods Spill kits available during construction and operatives trained in their use. MWQ site vehicles and compounds have spill kits. Train operatives in emergency response. Conduct daily vehicle and plant inspections prior to task start. All refuelling to be conducted by approved refuelling personnel, in bunded area, or if on site at least 30m from any watercourse. Where possible fit dry-stop valves and use drip trays.	1	3	Medium
E19	Insufficient management during the treatment of contaminated lands	3	3	**High**	Further contamination of surrounding area. Delays in construction program. Assessment, quantification and remediation as a variation to Quarry. Pollution leading to prosecution and associated negative PR.	Identify site contamination issues via assessment. Implement control measures to prevent pollution. Environment Team to monitor compliance throughout construction and maintenance as required. Restrict movement of contaminated material out of known contaminated areas.	2	3	Medium
E20	Uncover unanticipated contaminated lands e.g. sewerage, buried historical fuel tanks, illegally dumped asbestos, rubbish etc.	4	3	**High**	Possible environmental impact. Delays in construction program. Assessment, quantification and remediation as a variation to Quarry - financial loss. Negative PR associated with pollution and prosecution.	Identify known site contamination issues, where possible prior to mobilising and develop site management plans in accordance with the current Qld Guidelines for Managing Contaminated Lands. Maintenance of controls during construction, overseen by the Environment Team. For sewerage spills, ensure sewerage flow is will managed and adequate supply of trucks are available.	2	3	Medium
Environmental Aspect: Cultural Heritage									
E21	Cultural Heritage: Inadequate Traditional Owner Consultation	3	4	**Extreme**	Negative PR. Construction program delays. Financial impact.	Develop good relations with Indigenous Groups. Assess requirement for Indigenous Monitoring prior to mobilisation. Prepare Cultural Heritage Agreements / Cultural Heritage Management Plans as applicable. Include Cultural Heritage understanding and management requirements within Site Induction	1	3	Medium

Released under RTI - DNRME

E22	Cultural heritage - Major cultural heritage find during construction	3	4	**Extreme**	Negative PR. Construction Program delays. Financial Impact. Possibility of Prosecution.	Induction to cover cultural heritage management requirements and training for procedures in the event of an artefact find. Toolbox talks on heritage find and response procedures. Cultural Heritage Monitor to be on site prior to and during clearing and stripping in areas shown on Environmental Constraint Maps. Assess requirement for indigenous monitoring prior to clear and grub. Minimise ground works around any identified Cultural Heritage Areas. Stop work and notify Cultural Heritage representative in the case of a find.	2	4	**High**
Environmental Aspect: Flora & Fauna									
E23	Negative impact upon surrounding environments through the transportation and dispersal of declared weed species	2	3	Medium	Environmental impact, further spread of weeds. Financial loss due to clean up. Possible prosecution and associated negative PR.	Identification of weeds prior to mobilisation and continued vigilance throughout construction. Weed wash down provided at entry and exit to weedy sites-specific to plant involved in clear and grub. Toolbox and training in weed management procedures. Demark no go zones. Weed removal by specialist contractor as required.	1	3	Medium
E24	Destruction of protected species fauna habitat &/or fauna	2	3	Medium	Environmental impact. Construction program impacted. Possible prosecution and associated negative PR.	Identification of protected areas prior to mobilisation and continued vigilance throughout construction. Demark no go zones. Brief during induction and toolbox talks. Spotter Catcher required during clearing works. Avoid using barbed wire on temporary fencing where possible.	1	3	Medium
E25	Destruction of riparian vegetation	3	3	**High**	Environmental impact to waterway flora and fauna. Construction program impacted. Possible prosecution and associated negative PR.	Identification of protected areas prior to mobilisation. Clear undertsanding of waterway offset zones Survey setout and Demark clearing front print. Demark no go zones. Brief during induction and toolbox talks. Train individuals where required. Works in waterways completed in accordance with guidelines No refueling outside of designated refueling zones	1	3	Medium
E26	Destruction of visual amenity through the removal of vegetation	3	2	Medium	Removal of vegetation at various locations along creek banks, the existing highway and close proximity to stakeholders properties.	Conduct relevant investigations and identify potential community concerns. Ensure adequate landscaping/rehabilitation plan in place. Develop good communications and relations with local stakeholders. Minimise clearing where possible, preserve high value visual amenity trees.	1	2	Low
E27	Impact on Fauna resulting injury or death	3	4	**Extreme**	Negative financial program and safety impacts, possible prosecution if found negligent. Impact on native fauna population. Negative PR with local community Reputation at risk	Fauna management included in Site Induction Reduce travel at dawn and dusk Maintain current list of local wildlife fauna carers / veterinarians	2	2	Low
E28	Impact on area required for activity offset zone	3	4	**Extreme**	Negative financial program and safety impacts, possible prosecution if found negligent. Impact on native fauna population. Negative PR with local community Reputation at risk	Site induction to discuss importance of not impacting offset area Development of an Approved Offset Management Plan Survey footprint of offset area Abidance of area improvement in accordance with approved offset management plan Regular management including weed management, stock movement control	2	2	Low
Environmental Aspect: Air Quality, Noise and Vibration									
E29	Subsequent third party damage caused through bulk earthworks and derived vibration	3	3	**High**	Financial and program impacts. Safety concerns.	Dilapidation surveys to be conducted prior to mobilisation, which will assess baseline data. Vibration monitoring to be conducted at high risk sites. Compliance with specialist subcontractor Blast Management Plan.	2	3	Medium
E30	Generation of noise pollution through construction activities	4	2	**High**	Negative financial and construction program impacts, possible prosecution if found negligent. Possible Safety concerns.	Monitor Community Consultation and Complaints register. Implement environmental management plan and maintain liaison with local residents during construction. Maintain works to construction hours. Implement noise monitoring if required. Noise barriers installed on site. Reduce truck movements where possible.	2	2	Low

Released under RTI - DTMR

E31	Generation of nuisance dust through construction activities, asphalt manufacture etc.	4	3	**High**	Environmental Impact from dust covered vegetation. Negative financial and construction program impacts, possible prosecution if found negligent. Possible Safety concerns from dust.	Brief all operatives including sub-contractors of the requirements. Cover all loads. Water down for dust suppression where required, work areas, stockpiles, aggregate feeder etc. Visually monitor dust levels during at risk times/areas. Implement dust monitoring if required.	3	2	Medium
E32	Generation of nuisance dust through material handling.	3	3	**High**	Environmental Impact from dust covered vegetation. Negative financial and construction program impacts, possible prosecution if found negligent. Possible Safety concerns from dust.	Dust suppression by water trucks regularly watering down work area and material. Install suitable watering devices such as sprinkler system to dampen down fine material. Supervisor to check regularly on weather conditions and visual dust levels.	2	3	Medium
E33	Generation of emissions from batch dryer during asphalt process	3	3	**High**	Possible environmental concerns from emissions. Negative financial and construction program impacts, possible prosecution if found negligent. Possible Safety concerns from emissions.	Regular maintenance of pollution control equipment, burners and operating procedures to ensure efficient operation	2	3	Medium
Environmental Aspect: Waste									
E34	Waste not managed on site	3	2	Medium	Attraction of vermin, pollution of local waterways, ecosystems. Negative PR and interaction with community.	Segregate materials for recycling or disposal. Provide adequate waste bins for the site and frequent collection of waste to avoid odours and attraction of vermin/pest birds, cover bins etc. Visual checks of site for poor house keeping/poor practices during weekly inspection. Order material according to schedule of quantities to minimise waste.	2	2	Low
E35	Waste minimisation and recycling	3	2	Medium	Generation of excessive waste to landfill	Use local manufactures and order in bulk to minimise packaging requirements. Plan material/equipment purchases to minimise excess product. Where possible return unused material and containers to the supplier for reuse. Consider using materials with a recycled content wherever cost and performance is competitive.	2	2	Low
E36	Generation of hazardous/controlled wastes (Workshop activities, asphalt manufacturing)	3	2	Medium	Contamination of adjoining soil and water environments. Pollution leading to prosecution and/or possible prosecution if found negligent.	Approval must be sought prior to controlled wastes being transported from site. Controlled or hazardous wasted must be removed from site by an approved waste transporter and must be disposed of at an approved disposal facility.	2	2	Low
Environmental Aspect: Climate Change									
E37	Non-conformance to Sustainable Construction Procedures leading to inefficiency and excess resource usage.	3	2	Medium	Negative environmental impact on resource and emissions. Associated negative PR due to unsustainable construction processes.	Seek to implement positive green innovations with respect to all aspects of the Quarry: use of renewable materials, certified FSC timber, use of bio-fuels. Recycling and reduction of both construction and office wastes, Limiting the use of power on sites, sensor switches. Ensuring site set up takes account of these items and meters are installed to monitor usage.	1	2	Low
E38	Construction coinciding within defined rain season: Flooding	4	3	**High**	Flooding of construction site. Prosecution possibility for local waterway pollution.	Plan vulnerable construction activities to not coincide with rain season. Prepare and construct major items during the dry season and have adequate drainage and flood control measures in place at all times, as per best practice ESC guidelines.	3	2	Medium
E39	Construction impacted by unforseen natural event i.e. bush fire, flood, cyclone	3	4	**Extreme**	Negative financial program and safety impacts, possible prosecution if found negligent. Loss of habitat/destruction of flora/fauna.	Good site management, emergency procedures in place and operatives fully briefed hazard reduction. Conduct awareness briefing during induction, toolbox talks, and poster campaigns.	1	4	Medium

Released under RTI - DNRME

Released under RTI - DTMR

APPENDIX B

LEGAL AND OTHER OBLIGATIONS REGISTER

RTI-5755 Release.pdf - Page Number: 196 of 300

Legal & Other Obligations Register

GCE Contractors

Statute	Regulation Application / Key Requirement	Administrator	Application
Environmental Protection and Biodiversity Conservation Act 1999 (EPBC)	It provides a framework for protecting and managing nationally and internationally significant flora, fauna, ecological communities, and heritage places. The EPBC Act also addresses the protection of threatened and migratory species, and heritage sites.	Department of Climate Change, Energy, the Environment and Water (DCCEEW)	Framework for matters of national environmental significance.
National Greenhouse and Energy Reporting Act 2007 & National Greenhouse and Energy Reporting Regulations 2008	National reporting framework for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy consumption and energy production of corporations. Sets the framework such that Net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility.	DCCEEW	Recording and reporting requirements in relation to National Greenhouse and Energy Reporting (NGER) for: • greenhouse gas emissions • energy production • energy consumption.
Environmental Protection Act 1994 (EP Act)	Provides the framework to manage the environment within the principles of ecologically sustainable development and outlines responsibility and the duty of care all persons have to the environment and the scope and content for preparing environmental protection policies (EPPs).	Department of Environment, Tourism, Science and Innovation (DETSI)	Strategic framework targeting the protection and enhancement of the environmental values identified in each EPP (Air, Water, Noise & Waste) It outlines obligations for individuals: • General Environmental Duty • Duty to Notify • Duty to restore
Environmental Protection Regulation 2008 (EP Regulation)	Subordinate legislation to the EP Act and provides for the licensing of environmentally relevant activities (ERAs) which are listed in Schedule 2 of the EP Regulation	DETSI	ERA's for Chemical Storage and General Duty of Care.
Environmental Protection (Powers and Penalties) and Other Legislation Amendment Act 2024 (EPOLA Act 2024)	Includes provisions for a duty to restore the environment, clarifies definitions of environmental harm, refines environmental policy principles, and creates an offense for breaching the general environmental duty.	DETSI	Businesses and individuals in Queensland must be aware of and comply with a range of environmental obligations, including those related to the general environmental duty, notification, and restoration.

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 197 of 300

Environmental Protection Policy (Air) 2008	The Environmental Protection (Air) Policy 2019 and the Environmental Protection (Air) Amendment Policy 2024 (Air EPP) establish long-term objectives for sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, particles, lead and a number of air toxics.	DETSI	Management of any plant and equipment that may impact the air quality through operation of the office building and fleet operations.
Environmental Protection Policy (Noise) 2008	The **Environmental Protection Noise** Regulation **2008** sets out clear guidelines for acceptable noise levels across various activities, including residential, commercial, and industrial operations.	DETSI	The purpose of this policy is achieved by— (a) identifying environmental values to be enhanced or protected; and (b) stating acoustic quality objectives for enhancing or protecting the environmental values; and (c) providing a framework for making consistent, equitable and informed decisions about the acoustic environment.
Environmental Protection Policy (Waste Management) 2000	This policy aims to **achieve the objectives of the EP Act in relation to waste management by providing the framework for minimising waste generation**, maximising the usage of waste, efficient use of resources and maintaining ecologically sustainable principles.	DETSI	Manage wastes in a manner which looks to apply the waste hierarchy to minimise waste generation and seeks to reuse / recycle as much as practicable.
Environmental Protection Policy (Water)2009	The purpose of this policy is achieved by **identifying environmental values and management goals for Queensland waters**; stating water quality guidelines and water quality objectives to enhance or protect the environmental values; providing a framework for making consistent, equitable and informed decisions about Queensland waters; and monitoring and reporting on the condition of Queensland waters.	DETSI	Ensure the activities undertaken as part of the administrative function of GC does not impact the adjacent waterway located near the office premises.
Aboriginal Cultural Heritage Act 2003	Provide effective recognition, protection and conservation of Aboriginal and Torres Strait Islander cultural heritage.	Department of Women, Aboriginal and Torres Strait	Awareness of the Cultural Heritage Duty of Care of all employees, including an understanding of when to cease works and notify appropriate authorities. Also seeks to improve understanding of the

Released under RTI - DTMR

		Islander Partnerships and Multiculturalism	significance of cultural heritage through training and awareness toolboxes.
Biosecurity Act 2014	There is an obligation to take all reasonable and practical steps to minimise the risks associated with invasive plants under their control. This is called a general biosecurity obligation (GBO).	DPI	Weed washdown practices for all vehicles and plant Management of WONS identified weed species Fire ant control management Management of Barrier Fences
Nature Conservation Act 1992	Framework for the creation and management of protected areas including national parks, conservation parks, resources reserves, nature refuges, coordinated conservation areas, wilderness areas, world heritage management areas, international agreement areas and protection of native species.	DETSI	Protection and classification of vegetation species listed as EVNT Protection for fauna/reptile species that are listed as threatened or endangered
Fisheries Act 1994	Framework for the regulation of commercial fishing, recreational fishing, indigenous fishing, coastal areas that are important as fisheries habitat and marine plants.	Department of Agriculture and Fisheries (DAF)	Defines requirements for Waterway Barrier Works and the manner in which construction must be completed.
Water Act 2000	Framework for the planning, allocation and use of surface water and groundwater in Queensland, including regulating major water impoundments (e.g. dams and weirs) and extraction through pumping for irrigation and other uses. It also: • prohibits quarrying or placing fill in a watercourse, lake or spring without a permit • regulates special works (e.g. watercourse diversion or reclamation works), dams, creation and management of irrigation areas, and water supply and drainage • prohibits diversion of water and construction of facilities for supply, drainage or flood mitigation	DETSI	An owner of land adjoining a watercourse, lake or spring may take water for stock or domestic purposes but this is subject to self-assessment under the Planning Act and the Water Act.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 199 of 300

Vegetation Management Act 1999 / Vegetation Management Regulation 2012	Regulatory framework for vegetation management	Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (DNRMMRRD)	Conservation of endangered species and permits which allow exempt clearing
Forestry Act 1959	Establishes a system of management for forest resources on Crown land such as state forests, timber reserves and forest entitlement areas, to ensure a continuous supply of timber and associated products, and to protect watersheds.	DPI	Where works occur within a State Forest, an Occupational Permit is to be obtained under which works may occur.
Queensland Heritage Act 1992	A framework to protect places or objects of cultural heritage significance for aesthetic, architectural, historic, scientific, social or technological reasons.	DETSI	The principal prohibitions imposed by the Act are not to: • carry out development affecting a place on the Queensland Heritage Register without approval • enter a designated landscape area except with permission • take, destroy, damage, deface, excavate, expose, conceal or interfere with an item of Queensland heritage.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 200 of 300

Released under RTI - DTMR

APPENDIX C

UNEXPECTED CONTAMINATED FINDS PROCEDURE

RTI-5755 Release.pdf - Page Number: 201 of 300

Released under RTI - DTMR

Unexpected Contaminated Land Finds

Procedure

RTI-5755 Release.pdf - Page Number: 202 of 300

Contents

1. Introduction and Purpose 3
2. Objectives 3
3. Unexpected Finds 3
3.1. Identification 3
3.2. Personal Protective Equipment 4
4. Unexpected Contaminated Finds Procedure 4
5. Responsibilities 7
5.1. Project Manager 7
5.2. Site Supervisor 7
5.3. Site Personnel 7
6. Record Keeping 7
7. Training 7

Version	Date	Revision Details	Complied by	HSE Manager	PM Line Manager
1	15/08/2024	Issue for Review	N/R		

Revision History

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 203 of 300

1. Introduction and Purpose

The purpose of this procedure is to provide guidance for the management of contaminated land or asbestos finds that may occur during project works. This will ensure compliance against the

2. Objectives

The key objective of this Procedure is to provide instruction on potential unexpected finds of contamination during design and construction to protect the environment. To achieve this objective, GCE will undertake the following:

- Ensure all activities which may potentially expose, impact on, or handle contamination have access to this procedure.
- Ensure all the management of unexpected finds is appropriately communicated to all personnel.

3. Unexpected Finds

3.1. Identification

In the event of any uncharacteristic material (e.g. soil, sediment, slurry, water or other foreign material) is discovered, this should be treated as a potential unexpected find, and works in the vicinity of the discovery should cease. Unexpected finds can include but not limited to as being:

- Distinctively different to other soils on-site – both in texture, colour, smell and moisture content
- Underground tanks and structures (e.g. former fuel tanks)
- Appear to be concentrated to a localised area (i.e.. waste burial pits)
- Stained, oil soaked or containing a petroleum sheen. • Includes other products such as batteries etc.
- May contain offensive odours, including sulphur-based leachate impacts or sewerage, including acid sulfate soils
- Buried building products and debris/waste or other anthropogenic materials
- May contain potential asbestos containing materials
- May contain buried animal carcasses or evidence of decomposition including potential remains.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 204 of 300

In the event of an Unexpected Find, following the immediate cessation of works in the vicinity, the steps in this Procedure should be followed to ensure effective management of the find.

The immediate area is to be flagged (within a reasonable estimate of the potential extent of contamination zone).

3.2. Personal Protective Equipment

Prior to any contamination investigation or management, appropriate personal protective equipment (PPE) must be worn. This may include but not limited to:

- Eye goggles
- Face mask
- Rubber boots
- Rubber gloves
- Work clothes.

Safety management requirements are detailed in Project safety documents and other documents such as Safety Data Sheets (SDS).

4. Unexpected Contaminated Finds Procedure

The HSE Manager will evaluate the situation and, if considered necessary, commission a suitably qualified contamination specialist to undertake a contamination investigation in the area of the find. A report of the investigation will be prepared to determine the nature, extent and degree of any contamination, assess the requirement to notify the Department of Environment, Tourism, Science and Innovation (DETSI) against the Duty to Notify of environmental harm under Chapter 7 Part 1 Division 2 , and advise on the need for remediation or other action in consultation with DETSI.

The level of reporting must be appropriate for the identified contamination in accordance with relevant General Environmental Duty (GED) guidelines, including:

- **nature of the harm or potential harm**—for example, how severe is the potential environmental harm?
- **sensitivity of the environment you are operating in**—for example, are you operating near a residential area, protected area, waterway or sensitive habitat?
- **current state of technical knowledge for the activity**—for example, what is the current best practice for the activity?
- **likelihood of possible measures being successful**—for example, how likely are different measures to successfully prevent or minimise environmental harm?

Released under RTI - DTMR

- **financial implications of taking different measures**—for example, will taking certain prevention measures rather than others mean your activity is not commercially viable?

The HSE Manager (in consultation with a contamination specialist and DETSI) will determine the appropriate management measures to be implemented and/or the requirement for an accredited contamination site auditor. This may include treatment or offsite disposal. If the material is to be disposed offsite, the waste facility must be appropriately licensed and transported using a licensed regulated waste contractor. Records must be completed in the form of Waste Tracking Certificates.

If required, contaminated soils will be treated and validated in accordance with an approved Remediation Action Plan (RAP) to be developed in consultation with DETSI and the qualified contamination specialist with consideration for the remediation hierarchy. The RAP must be prepared in accordance with DETSI guidelines on contaminated land management, and include the following:

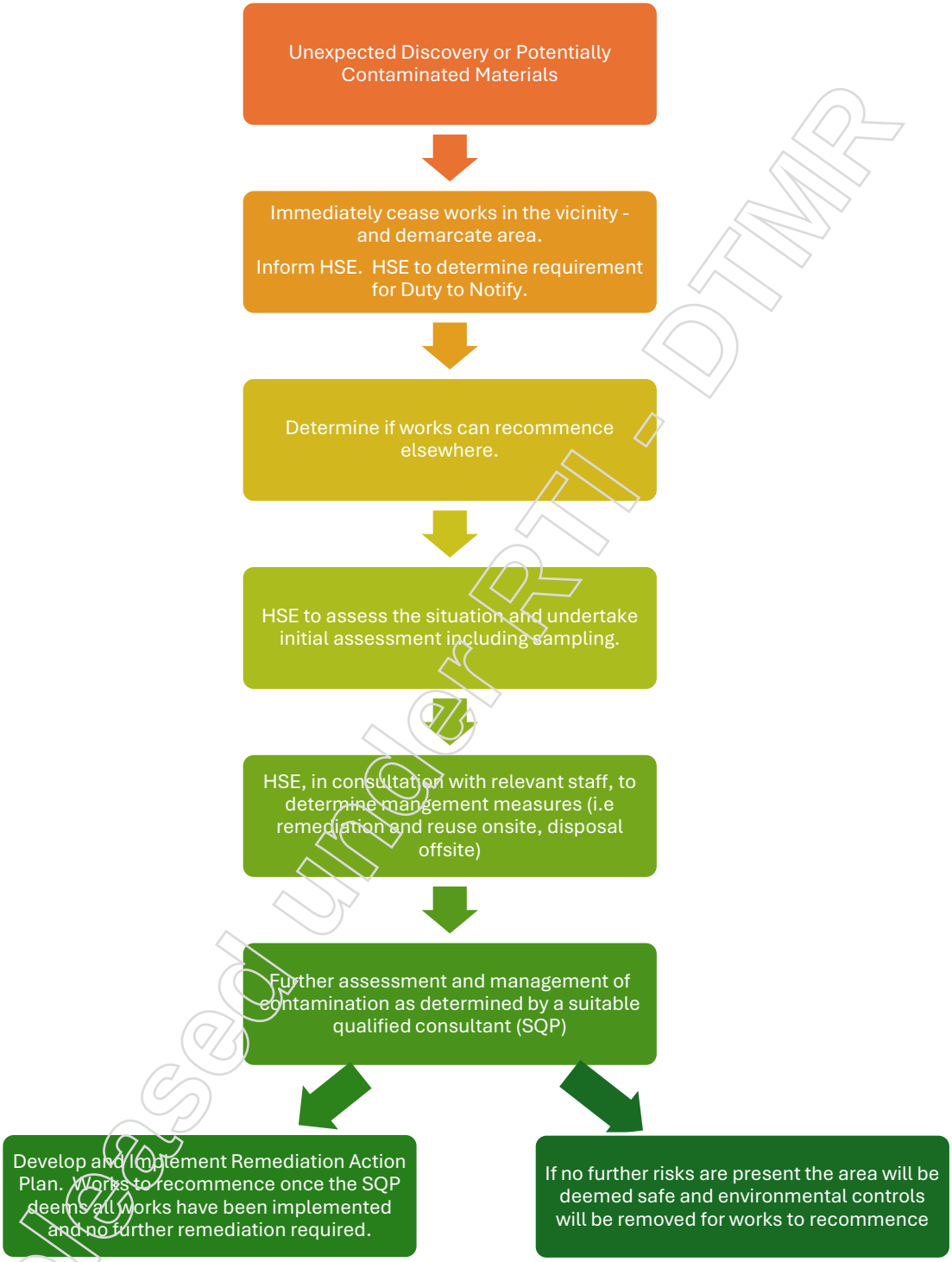
- Testing requirements for any contaminated material prior to its disposal off site
- Validation Plan, which must include the area in the immediate vicinity of (both below and adjacent to) the known contamination
- Implications of the validation results on the waste classification for material that may be excavated in the vicinity of the known contamination.

If the material is determined to contain asbestos or asbestos containing materials (ACM), an Asbestos Management Plan produced by the Project-appointed appropriately licenced asbestos removalist will be followed.

Recommencement of works will occur once remedial works have been implemented to the satisfaction of the HSE Manager or the Site Auditor (if applicable).

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 206 of 300



Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 207 of 300

5. Responsibilities

Responsibilities are as follows:

5.1. Project Manager

The Project Manager is responsible for:

- Ensure this procedure is followed;
- All records are documented and retained; and
- Provide training as required to ensure testing and sampling is correctly completed.

5.2. Site Supervisor

The site supervisor is responsible for:

- Ensure all site controls are insitu
- Ensure treatment pad is prepared appropriately and bunded
- Ensure all drainage paths are either pre-treated with Aglime or avoided by any runoff from the treatment pad.

5.3. Site Personnel

All personnel are responsible for:

- Understanding the requirements of this procedure in terms of installing preventative measures at all times throughout the treatment process
- Understanding the requirements of this procedure in terms of mixing in the Aglime into the soil
- Understanding the testing and verification requirements of this procedure prior to offsite disposal.

6. Record Keeping

7. Training

A toolbox is to be completed by the project manager or site supervisor at the commencement of the project to ensure all personnel are aware of their responsibilities under this procedure. A signed copy of the toolbox should be kept as part of the project records.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 208 of 300

Released under RTI - DTMR

APPENDIX D

TEMPLATE REPORT FORMS

RTI-5755 Release.pdf - Page Number: 209 of 300

Form A – Contractor's Monthly Environmental Reporting

Reporting of Contractor's environmental and cultural heritage management by exception.

Reporting Requirement (clause reference)		Month (total)	Notes from Contractor	
General				
Any revisions to EMP(C) this month? (Clause 6.1)			*Submitted to Administrator for suitability?*	
Have there been updates to ESCP this month? (MRTS52 *Erosion and Sediment Control*)			*Submitted to Administrator for suitability?*	
Any Independent audit of ESC completed this month? (MRTS52 *Erosion and Sediment Control*, Clause 9.1)			*Any non-conformances identified?*	
Non-Conformances, Incidents, Complaints				
Environment and Cultural Heritage-related complaints received? (Clause 7.3) Status of complaints		Month, (Total)	*Attach insert of Complaint register (GCC Clause 15.6.2)*	
Number of environment and cultural heritage-related non-conformances raised? (Clause 7.6) Status of non-conformances?		Month, (Total)	*Attach insert of non-conformance register*	
Number of Environmental and Cultural Heritage Incidents that have occurred or been identified this month?		Month, (Total)	*Provide summary of incidents identified this month:*	
Incident No.	Incident Description	Reportable incident: Y / N	Reported to Admin Authority? Y / N	Incident report submitted to Administrator?
Weekly Site Inspections				
Weekly Site Inspections have been completed? (Clause 7.1)		Number	*List issues identified and corrective actions undertaken?*	
Monitoring				
Water quality monitoring for Discharge and Waterways undertaken: 1. Weekly where potential impact to water? 2. During / after rainfall event? (Clause 8.2.3)				
Number of Water Quality (Discharge) results outside criteria?		Month, (Total)	Where exceedance occurs, provide spreadsheet showing exceedances, rainfall event, cause, corrective action	
Number of Water Quality (Waterway) results outside criteria?		Month, (Total)	*Where exceedance occurs, provide spreadsheet showing exceedances, rainfall event, cause, corrective action*	
Where required, Cultural Heritage Monitoring (Indigenous or Non-Indigenous) has been undertaken?			*As specified in Annexure.*	

Released under RTI - DTMR

Where required, construction noise monitoring undertaken? (Clause 8.5.3) Number of exceedances of criteria?	Month, (Total)	*Where exceedance occurs, provide spreadsheet showing exceedances, location, cause, corrective action*
Where required, construction vibration monitoring undertaken? (Clause 8.6.3) Number of exceedances of criteria?	Month, (Total)	*Where exceedance occurs, provide spreadsheet showing exceedances, location, cause, corrective action*
Air quality monitoring undertaken? (Clause 8.7.3) Number of exceedances of criteria?	Month, (Total)	*Where exceedance occurs, provide spreadsheet showing exceedances, location, cause, corrective action*
Number of animal breeding places identified and avoided during Work under the Contract (Clause 8.10.3)	Month, (Total)	
Number of animal breeding places tampered with under a SMP? (Clause 8.10.3)	Month, (Total)	*Where SMP held by Principal, provide register monthly.*
Number of animals / eggs destroyed under a Damage Mitigation Permit	Month, (Total)	
Number of injuries or death to native fauna within the Site (Clause 8.10.3)	Month, (Total)	*Provide details*
Where required, Waste Register is being recorded (Clause 8.13.2)		
Where sourcing Non-Potable Water (Section 8.15.2): 1. Water extraction logs recorded? 2. For non-flowing sources, what % of full capacity is the source at the end of the month? 3. For flowing source, is the source maintaining flow?	% of full	
Transport and Main Roads Quarry Protocol and Environmental Authority - Quarry extraction volume(s) (8.15.2)	Month, (Total)	*Provide volume per extraction Site.*
Compliance Testing (where applicable provide details)		

Comments to Administrator regarding Environment and Cultural Heritage:

Positive Environmental and Cultural Heritage Outcomes

[Positive environmental outcome is an improvement to the existing environmental values on site or a reduction in the environmental impact to that allowed in the EMP(C). Examples, water quality of Discharge better than 50 mg / or minimise vegetation clearing to less than the Contractual maximum Limits of Clearing]

Achieved:

Future Opportunities:

Report Completed by:	**Signature:**	**Date:**
Name:		

Released under RTI - DTMR

Form B – Contractor's Environment and Heritage Incident Form

Environment and Heritage Incident Report Form		Date:
SECTION 1 – Incident Details		
Project Name / Site Name:		
Location (road name, number and chainage or GPS or property description or address)		
Report completed by Name, Position		
Signature:		
Contact Phone Number		
Contracting Company		
Date / Time Occurred:	**Date / Time Identified:**	
Has the Contractor already reported this incident to the Administering Authority?	☐ **YES**	☐ **NO**
Has an infringement notice or warning been received from an Administering Authority?	☐ **YES** from Reference No. ☐ **NO**	
Has a complaint been received regarding the Incident?	☐ **YES**	☐ **NO**
SECTION 2 – Incident Description (Attach photos or reports or evidence where possible)		
Where? *(Location within the project site)* **What occurred?** *(For example, 300 m² was cleared by the contractor which was outside of the limits specified in the contract)* **What was impacted or potentially could have been impacted?** *(For example, the area cleared had not been assessed for potential cultural heritage harm. The vegetation wrongly cleared was regional ecosystem 11.4.5 and was considered to be in good condition with minimal disturbance. The vegetation was listed under the EPBC Act.)* **What are potential on-going impacts from the incident?** *(For example, the soils are dispersive and have high erosion potential and this was the habitat for the endangered BullTree Butterfly).* **What was the scale of the incident?** *(For example, 300 m² cleared over 500 m of road*		

Released under RTI - DTMR

reserve. This represents 30% of the RE in the immediate area > 10 km radius). **Temporary controls implemented?** **Other Comments?**	

SECTION 3 – Immediate Remedial Actions and Corrective Actions

Responsible Officer(s)		**Date actions completed by**	
The actions should reduce or eliminate the direct and indirect impacts of the incident.	***Immediate remedial actions and controls implemented.***		

SECTION 4 – Administrator Deemed Suitability for Course of Action

☐ **Deemed Suitable** for implementation
☐ **Deemed Suitable WITH FOLLOWING CHANGES** to recommendations Click here to enter text.
☐ **Not Deemed Suitable** for following reasons: Click here to enter text.

Name and Position:	**Signature:**	**Date:**

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 213 of 300

Form C – Contractor's Declaration for Deposition of Surplus Material

SECTION 1	**Project Information**
Project Name / Site Name:	
Company name and ACN:	
SECTION 2	**Details of Agreement (Attach a copy of agreement)**
I/We declare that I/we have entered into a legally binding agreement with the registered owner of the land (address and/or lot on plan): to accept the following materials (type(s) and volume(s)): on their land at location (GPS coordinates of the boundary of Deposition Area): for the purposes of: **Note:** If the Owner is a lessee of the Land (including State Lease lessee), the Owner must obtain the registered proprietor's consent to this Agreement, as evidenced by the registered proprietor's execution of any agreement.	
SECTION 3	**Assessment Methodology**
I/We declare that the Deposition Area has been identified and assessed by the Contractor.	☐ YES (complete Section 4 to 9) OR ☐ Not Applicable, the Deposition Area has been identified and assessed by the Principal (go to Section 10).
SECTION 4	**Contamination (Attach Suitability Report by SQP if applicable)**
I/We declare that where Surplus Material has been sourced from: • land listed on the Environmental Management Register or Contaminated Land Register, or • Commonwealth land (i.e., defence), or • any other known source of potential contamination, or • land on or adjacent to any other source of potential mobile contaminants, an assessment has been undertaken by a Suitably Qualified Person (SQP) in accordance with the *National Environmental Protection (Assessment of Site Contamination) Measure* and a report prepared confirming the suitability of the material for Deposition at the intended Deposition Area.	☐ A copy of the SQPs report has been provided to the registered owner of the land and is included as an attachment to this declaration OR ☐ **Not applicable, the materials have not been sourced from or adjacent to potential or actual contaminated land.**
SECTION 5	**Existing Approval**
I/We declare that acceptance of the Surplus Material at the Deposition Area is lawful under the conditions of an existing Approval for the property. A copy of the Approval may be requested by Transport and Main Roads.	☐ **YES (go to Section 10)** ☐ **NO**

Released under RTI - DTMR

SECTION 6	Environment	
I/We declare that an environmental assessment has been undertaken for the Surplus Material and the Deposition Area and the appropriate Approvals under relevant legislation have been obtained for deposition and associated activities.		☐ **YES** ☐ **NO**
SECTION 7	**Hydraulics (Attach statement of no worsening / actionable nuisance by RPEQ)**	
I/We declare that the activity has been assessed in accordance with Engineering Policy EP175 *Deposition of Surplus Material – Assessment Methodology*, **Transport and Main Roads' *Road Planning and Design Manual* – 2nd Edition, Volume 3: *Guide to Road Design* supplements Part 5, Part5A and Part 5B, and the Technical Guideline *Hydrologic and Hydraulic Modelling*.** **I/We declare that the hydrologic / hydraulic assessment undertaken by** a Registered Professional Engineer Queensland **(RPEQ) confirms that no worsening will be caused to other properties by the Deposition, and that where adverse impacts cannot be avoided, that no actionable nuisance will be caused.** **Note that where Deposition (filling) does not exceed the relevant council planning scheme operational work (filling) threshold, no hydrologic / hydraulic assessment is required.**		☐ **NA – the works do not trigger hydrologic / hydraulic assessment (would not trigger code assessment under the relevant planning scheme.** **OR** ☐ **A statement of no worsening / actionable nuisance has been prepared and signed by** a Registered Professional Engineer Queensland (RPEQ) and is included as an attachment to this declaration.
SECTION 8	**Cultural Heritage**	
I/We declare that the Deposition Area has been assessed in accordance with all relevant laws in relation to cultural heritage. **The category the Deposition Area has been designated as, as per the *Aboriginal Cultural Heritage Act* 2003 or the *Torres Strait Islander Cultural Heritage Act* 2003 is:** **Consultation with the Aboriginal or Torres Strait Islander Party(ies) for the area is required (Yes / No):** **Historical discoveries were made under the *Queensland Heritage Act* 1992 (Yes / No):** **Approvals or exemptions required for the Works:**		☐ **Transport and Main Roads has been notified of and invited to attend any required consultation with Aboriginal or Torres Strait Islander Party(ies)** **OR** ☐ **Not applicable** **AND** ☐ **Historical discoveries have been reported to the Transport and Main Roads Cultural Heritage Officer** **OR** ☐ **Not applicable**
SECTION 9	**Native Title**	

Released under RTI DTMR

I/We declare that the Deposition Area has been assessed in accordance with all relevant laws and policies in relation to native title. **1. Where native title has been extinguished over the site, the extinguishing act being relied upon (for example, a deed of grant, lease or public work) is:** **2. The section of the *Native Title Act* 1993 *(Cth)* and the module of the *Queensland Government Native Title Work Procedures* that the assessment falls under:** **3. Where native title has not been extinguished, the method by which native title has been or will be addressed (for example, the provision of procedural rights) is:**	☐ **The native title assessment has been completed in accordance with the** *Native Title Act* 1993 (Cth) AND ☐ **The native title assessment has been completed in accordance with the *Queensland Government Native Title Work Procedures***
SECTION 10	**Planning Approvals**
I/We declare the deposition of material is development that cannot be assessed under a local government planning instrument pursuant to Schedule 6 Part 5 item 26 (Development local categorising instrument is prohibited from stating is assessable development) of the Planning Regulation 2017 and that the relevant local council has been informed the work will be occurring.	☐ **YES** ☐ **NO** ☐ **N/A (the local planning instrument does not categorise this deposition as assessable)**
SECTION 11	**Records**
I/We declare that a copy of all assessment reports, approvals and agreements will be made available to the department upon request, and that the volume and type of material will be included in the Project's Waste 2 Resource Calculator submitted to Transport and Main Roads.	☐ **YES** ☐ **NO**
SECTION 12	**Declarant Signature**
I/We declare the information on this form to be true and correct. I/We indemnify that the Department of Transport and Main Roads or its officers will not be held liable for the physical, chemical and/or biological condition of the material accepted on the property, or for the assessment of the Deposition Area where not Principal identified and assessed. I/We acknowledge that under Clause 17.1(a) of the *General Conditions of Contract*, the Contractor indemnifies the State of Queensland, acting through the Department of Transport and Main Roads against any claims by any person and that this includes any claims by the owner or occupier of the Deposition Area, in respect of personal injury, death or loss of or damage to any property arising out of or as a consequence of the Deposition of Surplus Material on the Deposition Area.	

Signature of the declarant to be the Contractor's project manager	Name, Position and Company:	Signature:	Date:
Signature by witness			
Signature of the witness to be a Director of the Contracting Company	Name, Position and Company:	Signature:	Date:

Released under RTI-QTMR

RTI-5755 Release.pdf - Page Number: 216 of 300

Queensland Government

Principal Contractor's Details and Bond Estimate

Application details

Department of Transport and Main Roads reference number

TMR 24-042833

Pursuant to the conditional approval of the subject application, I nominate the following as the principal contractor for the works. I request that you deal with the principal contractor for all matters relating to the construction works.

Applicant's name

N/R

Appli

N/R

Date

24 / 09 / 2025

Principal contractor's details

Legal name

GCE CONTRACTORS PTY LTD

Australian Business Number (ABN)

25 163 406 853

Registered address

104 KITCHENER ROAD

KEDRON Postcode 4031

Physical address

13A / 191 HEDLEY AVENUE

HENDRA, QLD Postcode 4011

Telephone number (work hours)

07 3357 7430

Telephone number (after hours)

Mobile number

N/R

Email address

admin@gcecontractors.com

Primary contact person (overseer)

N/R

Position

MANAGING DIRECTOR

Telephone number (work hours)

07 3357 7430

Telephone number (after hours)

Mobile number

N/R

Prequalification status (please check one)

Department of Transport and Main Roads prequalified ☑ Prequalified number

Q21126 / 0382

Not Department of Transport and Main Roads prequalified ☐ Attach evidence of:

i. previous construction works (preferably on a State-controlled road)
ii. ability to carry out the works in accordance with the approved plans, standards and specifications
iii. qualifications and experience of the primary contact person (overseer), including the Registered Professional Engineer of Queensland number.

Principal contractor's insurance and indemnity (please check if attached)

☑ Attached is the *Deed of Indemnity for road works on a State-controlled road* (form F5109) signed by the principal contractor.

☑ Attached is evidence of the principal contractor's public liability insurance policy of no less than $20 million that notes the Department of Transport and Main Roads interest on the policy.

Construction works costs

Estimated cost of the works Bond amount

N/R

☑ Attached are details supporting the estimation of costs of works (for example, bill of quantities).

Privacy statement: The Department of Transport and Main Roads is collecting the information on this form for the purpose of managing the **road works** (under s33 of the *Transport Infrastructure Act 1994*) that are being undertaken by a third party with respect to an application for such works. The details will not be disclosed to any other third party without your consent unless required by law.

Released under RTI - DTMR

Queensland Government

Deed of Indemnity for construction of road works on a State-controlled road

(section 33 of the *Transport Infrastructure Act 1994*)

Department of Transport and Main Roads reference number

TMR 24-042833

Contractor (insert name of contractor carrying out works, as shown on public liability insurance)

GCE Contractors Pty Ltd

Road works (insert description of works and location)

Rosewood Warrill View Road intersection (Christensen Road) upgrade for Mt Walker Quarries

I/We the contractor named above:

a. indemnify the State of Queensland (represented by the department), its officers, employees and agents (the **Indemnified**) against any or all Losses suffered or incurred (except to the extent that any Losses are caused through the negligent act or omission of the Indemnified) in connection with the construction of the **road works**

b. acknowledge that provision of this indemnity is a condition of approval of the **road works** under section 33 of the *Transport Infrastructure Act*.

In this deed, '**Losses**' include liabilities, losses, damages, expenses and costs (including, legal costs on a full indemnity basis and whether incurred or awarded) of any kind or nature whether arising in contract or tort (including, but not limited to negligence) or under a statute, and also includes:

a. loss of profits, loss of revenue, loss of anticipated savings, loss of opportunity, pure economic loss and loss of data

b. any other consequential, special or indirect loss or damage.

Executed as a deed

For company:
Signed, sealed and delivered

on th N/R September 20 25 in

acco *Corporations Act 2001* (Cth).

Sign N/R

Full name of director

Signature of company secretary/director

Full name of company secretary/director

For individual:
Signed, sealed and delivered by

on the _____ day of _____ 20 ____ in the presence of:

Signature of witness

Full name of witness

Signature

Released under RTI - DTMR

Underwriting Agencies of Australia Pty Ltd

AFSL: 238517 ABN: 86 003 565 302

Industrial Special Plant "ISP" Certificate of Currency

Section 7

This certificate acknowledges that the Policy referred to is in force for the period shown, the summary of cover is listed below.

Date:	Monday, 31 March 2025
Policy Number:	12TI045937ISP
Insured:	GCE CONTRACTORS PTY LTD; TUNNEL ENGINEERING SERVICES PTY LTD; MT WALKER QUARRIES (QLD) PTY LTD
Period of Insurance:	**31/03/2025 to 31/03/2026** at 4:00pm Local Standard Time
Policy Wording:	QM2003-1224 Industrial Special Plant (ISP)
Insurer:	QBE Insurance (Australia) Limited

Policy Details:

Section 7 – *"Broadform Liability"*

Insured's Business Activities:	CIVIL CONSTRUCTION, EXCAVATION, PIPELAYING, TRUCK HIRE, DRY HIRE, UNDERPINNING, TUNNEL BORING, DEMOLITION, PLATFORM WORK, PILING, CRUSHING SERVICES, CARTAGE OF EQUIPMENT.
Limit of Liability:	$50,000,000 (Public Liability) any one Occurrence; and $50,000,000 (Products Liability) any one Occurrence and in the Aggregate any one Period of Insurance.
Excess:	as per Policy Schedule

This policy includes a Principals Indemnity provision; refer to Section 7.C Additional Benefits, 3.(e) "Cover for Others" of the Policy Wording for full details.

Released under RTI - DTMR

Subject at all times to the Terms, Conditions, Definitions, Exclusions & Endorsements of the Policy.

This certificate of currency was generated with compliments from:
Name: Alex Brouff

Quality

Management Plan

	Site Details
Principal:	GCE Contractors
Site Name:	Christensen Road – Rosewood Warill View Road Intersection
Project Number:	1007/ TMR24-042833
Project Commencement Date:	December 2025
Issue Date:	19/09/2025

© 2024 GCE Contractors Pty Ltd

Reproduction of this document, in whole or in part, in any format or media is prohibited without express permission from the authorised Quality Representative of GCE Contractors.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 220 of 300

Revision History

Version	Date	Revision Details	Complied by	Project Manager
1	19/09/2025	Issue for Submission	N/R	N/R

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 221 of 300

Contents

1 Introduction and Purpose 6
1.1 Scope of the Quality Management Plan 6
1.2 Project Quality Commitments 6
1.3 Policy 6
1.4 Project Quality Objectives 6
1.5 Abbreviations and Definitions 8
1.6 References 8
2 Project Description 8
2.1 Description of works 9
2.2 Stakeholders 10
3 Project Organisation 11
3.1 Supervisory Personnel: 11
4 Management Responsibility and Authority 11
4.1 Responsibility Statements 11
4.2 Project Quality Manager 12
4.3 Verification 12
4.4 Management Systems Documentation 12
4.5 Quality Management System Inputs 13
4.6 Quality Management System Documents 13
4.6.1 Management Plans 13
4.6.2 Specific Project Procedures 13
4.6.3 Quality Plan 13
4.6.4 Monitoring and Verification 13
4.7 Conformance to Requirements 14
4.8 Management Review and Reporting 14
4.8.1 Formal Review 15
4.8.2 Ad Hoc Review 16
4.9 Quality Management System Changes 16
5 Document Data & Record Control 17

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 222 of 300

5.1 Document Data Control 17
5.1.1 Internal Documents 17
5.1.2 External Documents 17
5.1.3 Controlled Copies 18
5.1.4 Amendments 18
5.2 Quality Records & Data Control 18
5.2.1 Records Control 18
5.2.2 Data Control 19
5.3 Product Requirements 19
6 Resource Management 20
6.1 Human Resources 20
6.2 Competence, Awareness & Training 20
6.3 Infrastructure 21
6.4 Work Environment 21
6.5 Communication 21
7 Design Control 22
7.1 Design Plan 22
7.2 Design Management 22
7.3 Shop Drawings ..... Error! Bookmark not defined.
7.4 Safety in Design 23
7.5 Validation 23
7.6 Design Changes 23
7.7 As-Built information Control 23
8 Procurement 24
8.1 Subcontracts 24
8.2 Purchasing 24
8.3 Process Flowchart 25
8.4 Preservation of Product 25
9 Control Of Construction 26
9.1 Operation Control 26
9.2 Hold & Witness Points 26

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 223 of 300

9.3 Compliance Inspection and Testing 27
9.4 Process Flowchart – Subcontractors and Suppliers Quality Systems 27
9.5 Survey Control 28
9.6 Cultural Heritage Management Control 29
10 Identification & Traceability 30
10.1 Lot Management 30
10.2 Lot Numbering & Registration 31
10.3 Lot Status Record 32
10.4 Traceability 32
11 Control of Non-Conforming Product 33
11.1 Conformances 33
11.2 Non-Conformances 33
12 Measurement & Analysis 34
12.1 Customer Satisfaction 34
12.2 Internal Audit 34
12.3 Product Monitoring & Measurement 35
12.4 Control of Monitoring & Measurement Devices 35
12.5 Analysis of Data 35
13 Control of Customer Property 36
14 Audit Process & Control 36
14.1 External Audits 36
14.2 Internal Compliance Audits 36
14.3 Customer Audits 37
14.4 Safety Audits 37
14.5 Construction Methodology & Product Compliance Audits 38
14.6 Subcontractor/Supplier Audits 38
14.7 Environmental Audits 38
14.8 Corrective & Preventative Action 39

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 224 of 300

1 Introduction and Purpose

1.1 Scope of the Quality Management Plan

The scope of the Quality Management Plan has been defined by the works detailed in the Project Management Plan and requirements under MRTS50 – Specific Quality System Requirements.

1.2 Project Quality Commitments

GCE Contractors Pty Ltd (GCE) is a dynamic civil engineering construction firm, dedicated to delivering high-quality work, on time and budget, and committed to providing a level of quality work beyond all expectations.

GCE is committed to the implementation of a Quality Management System, including a Quality Management Plan and management and employees are responsible for Quality Control through the Quality Management System seeking improvement by the constant review, with suppliers and sub-contractors being encouraged to co-operate.

As a part of our continuing commitment to Quality improvement, control, and performance GCE have incorporated in this Quality Management Plan test plans and checklist to ensure that all correct processes are followed and always implemented throughout the works operation this ensure that the client requirement is always achieved or exceeded, ensuring maintenance of a good working relationship and repeat business from customer's satisfaction.

1.3 Policy

The Project team, including all employees and subcontractors, will be bound by this policy, which will be expressed in all Management System Documents.

Updates to this corporate policy and accreditation are notified through the GCE Drobox as described in section 5.2. The GCE Drobox provides automated access to internal policies and procedures, as well as access to external sources such as Standards Australia Online. This resource will be utilised by the project to maintain updated versions of the policies, procedures and standards noted within this plan.

1.4 Project Quality Objectives

Project Objectives and the strategies implemented to manage them are defined by the Project Manager and communicated to the project team the objective to deliver a product that complies with the Contract.

Reviews of progress against Project Objectives will be discussed weekly at Foreman meetings and conducted monthly by the Project Manager.

Our objectives in Quality include:

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 225 of 300

1. Comply with requirements and continually improve the effectiveness of the Quality Management System (QMS).
2. Maintain an accredited integrated QMS.
3. Continuously improving the QMS and ensuring communication regarding QMS processes and their effectiveness between all levels of our organisation through documented training and regular formal and informal communication methods.
4. Deliver projects with Quality and Safety by ensuring adherence to the Safe Work Method Statement (SWMS) and Inspection and Test Plans (ITPs).
5. Ensure customer satisfaction by:
   - Delivering project in the agreed initial deadline.
   - Delivering project within technical specification and budget; and
   - Safely deliver projects by inspecting and testing prior delivery.
6. Deliver projects without injuries or illness by monitoring on a weekly basis the safety performance indicators:
   - Medical Treatment Injuries (MIT) <= 0
   - Recorded No. of Lost Time Injuries (LTI) <= 0
7. Deliver projects with zero environmental complaints, with performance indicator being monitored on weekly basis in Foreman's meetings: and
8. Comply with all specifications and relevant codes of practice.

GCE will monitor and measure the work we do so as we can evaluate it in our annual internal audits. We will need to measure job specific measurables. For example, on a water main job, we will measure how much pipe we can lay on one day. The Foreman will have a measure of this in his timesheet, and in the weekly meetings, we will discuss if this rate of progress can be improved.

In the meetings, we will analyse the progress and evaluate if we can increase the rate of pipe, we can lay in one day.

One annual internal audit will take place to monitor the results of the quality management throughout the year. During the annual internal audit, a managerial review is organised to discuss Quality matters such as:

- Any internal issues of quality that can be improved or alleviated.
- Any non-conforming work that was noted during the year, how can we avoid this in the future.
- Previous year audit results and follow up progress on the implementation of preventive and corrective measurement.
- Communication of any changes in the Quality Policy and Quality Objectives.

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 226 of 300

1.5 Abbreviations and Definitions

Definitions are listed in ISO 9001:2015, Quality Management Systems – Fundamentals and Vocabulary; and the Contract Document.

1.6 References

The following documents were considered in the preparation of this plan:

- ISO 9001:2015, Quality Management Systems.
- Queensland Public Records Act (2002).
- Council Specifications

2 Project Description

Scope as defined by PMP, and drawing numbers:

Table 1 - Approved Project Design Drawings

Dwg No.	Drawing / Report Title	Date	Version
C800	Cover Sheet and Location Plan	13.08.25	E
C801	Standard Notes	13.08.25	E
C820	Demolition Layout Plan	13.08.25	C
C825	25m B-Double Swept Path Layout Plan	13.08.25	D
C835	Intersection Erosion and Sediment Plan	13.08.25	D
C836	Intersection Erosion and Sediment Control Plan	13.08.25	D
C840	Intersection Earthworks Layout Plan	13.08.25	C
C860	Road Intersection Overall Layout Plan	13.08.25	E
C861	Road Intersection Layout Plan – Sheet 1 of 2	13.08.25	E
C862	Road Intersection Layout Plan – Sheet 2 of 2	13.08.25	E
C863	Rosewood – Warrill View Road Details	13.08.25	C
C864	Rosewood – Warrill View Road Longitudinal Sections	13.08.25	E
C865	Rosewood – Warrill View Road Cross Sections – Sheet 1 of 3	13.08.25	E
C866	Rosewood – Warrill View Road Cross Sections – Sheet 2 of 3	13.08.25	E
C867	Rosewood – Warrill View Road Cross Sections – Sheet 3 of 3	13.08.25	E
C868	Christensen Road Longitudinal Section	13.08.25	E

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 227 of 300

C869	Christensen Road Cross Sections	13.08.25	C
C870	Intersection Signage Layout Plan – Sheet 1 of 2	13.08.25	E
C871	Intersection Signage Layout Plan – Sheet 2 of 2	13.08.25	E
C875	Intersection Pavement Layout Plan – Sheet 1 of 2	13.08.25	D
C876	Intersection Pavement Layout Plan – Sheet 2 of 2	13.08.25	C
C880	Intersection Sight Line Plan	13.08.25	A
C890	Catchment Layout Plan	13.08.25	D
C891	Stormwater Layout Plan – Sheet 1 of 2	13.08.25	C
C892	Stormwater Layout Plan – Sheet 2 of 2	13.08.25	C
C895	Stormwater Sections – Sheet 1 of 2	13.08.25	E
C896	Stormwater Sections – Sheet 2 of 2	13.08.25	E
C897	Stormwater Longitudinal Sections	13.08.25	C
C898	Stormwater Calculation Table	13.08.25	C
C899	Stormwater Details	13.08.25	B

The Project Works and Temporary Works comprise all works up until the Date of Practical Completion. Any maintenance or defects correction during this period will be classified as Temporary Works.

The Maintenance Works includes all work necessary to maintain the Project Works after the Date of Practical Completion, and up to the end of the Maintenance Period.

The Quality Management System applies to all works and activities conducted for the benefit of the Project.

2.1 Description of works

The scope of works is as follow:

- Upgrade the intersection of Christensen Road and Rosewood Warill Road intersection to meet Department of Main Roads specifications (DTMR) comprising of:
- Clearing and grubbing of vegetation;
- Removal of existing surface seal and waste fill;
- Earthworks, including shaping and compaction of formation;
- Import of gravel materials and pavement shaping and compaction;
- Installation of stormwater infrastructure;

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 228 of 300

- Sealing of surface with asphalt;
- Line marking and signage installation;
- All temporary and ongoing erosion and sediment controls; and
- Stabilisation of all surfaces.

2.2 Stakeholders

As the quality of the products and services is the key to the successful delivery of the project, it is vital for GCE personnel to understand and utilise the quality system to meet or exceed the expectations of the following stakeholders:

- Department of Main Roads (asset owner).
- Community Members, Residents and Businesses surrounding the Project Site.
- Motorists and pedestrian users of the Project Site.
- Public Utility Owners, namely Urban Utilities.
- (Owners may also include without limitation: Telstra, Optus, NBN Co, DTMR Traffic).
- GCE Employees.
- Government Authorities.
- Suppliers/Subcontractors and their Employees.
- Environmental Groups.
- General Community

Community relations

GCE has implemented a Stakeholder Management Plan within the Construction Management Plan (CMP) which details communication and information processes for dealing with the community. GCE Contractors will implement and follow this Stakeholder Management Plan for the duration of the project.

Role of Customer's name: DTMR

a) DTMR shall be responsible for relations with property owners and community groups and will lead all such interactions.

Role of GCE Contractors:

a) Where required, GCE, as the Principal Contractor, shall assist DTMR to undertake liaison with property owners and community groups as necessary or as directed.
b) The Contractor shall provide a 24-hour contact service for the duration of the works.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 229 of 300

c) The Contractor shall keep Council informed of local community group issues and concerns that they become aware of.

d) When a complaint is received by the Contractor, the Contractor must:

i. Notify DTMR.

ii. In conjunction with DTMR, contact the complainant within the same day of receiving the complaint.

iii. Document the discussion with the complainant and the actions resulting; and

iv. Advise DTMR in writing if the complaint cannot be resolved within seven (7) days from the time of receiving the complaint, giving reasons and the expected date of resolution.

3 Project Organisation

3.1 Supervisory Personnel:

The responsible persons for the project are detailed below.

Table 2 - Supervisory Personnel

Role	Name
Project Manager	N/R
Project Engineer(s)	
Contractor's Quality Representative	
Environmental Representative	
Surveyor(s)	
Works Supervisor(s).	

4 Management Responsibility and Authority

All participants in the project are responsible for implementing the Quality Management Plan and contributing to its improvement. Senior Management commitment will drive the implementation and maintenance of the Quality Management Plan throughout the project.

4.1 Responsibility Statements

Responsibility Statements, verified by individual employees and their managers, will be developed for all GCE personnel on the project. They detail the responsibilities and authorities applicable to the position including responsibilities and authorities related to quality management. In particular, the Project Quality Manager is responsible for verifying the

Released under RTI - DTMR
RTI-5755 Release.pdf - Page Number: 230 of 300

implementation of the management system and the Construction team is responsible for ensuring that the works comply with the requirements and for providing evidence of compliance.

4.2 Project Quality Manager

As shown in Table 2, the Project Manager will be N/R The Project Manager is responsible for ensuring the quality, schedule, budget, scope of the project. As the project manager is responsible for the quality of the project, he will also be accumulating the role of Project Quality Manager.

The Project Quality Manager acts as the Management Representative for the Quality Management System, and is responsible for:

- Ensure that the processes identified in the Quality Plan are effectively implemented and maintained.
- Report to DTMR and the project team on the performance of the Quality Management System and any need for improvement.
- Ensure the promotion of awareness of DTMR requirements throughout the organisation.

The Project Quality Manager holds formal qualifications in Civil Engineering related fields and has more than the minimum four years practical experience in civil engineering as required by the Contract documents.

4.3 Verification

The Project Quality Manager is responsible for confirming by examination and provision of objective evidence that the specified requirements have of the Quality Management Plan has been fulfilled.

4.4 Management Systems Documentation

The Project Quality Management System comprises three parallel management systems for Quality (ISO 9001), Safety (AS/NZS 4801 and OHSAS 18001) and Environment (ISO 14001) which are integrated where there are consistent procedures. Elements of the Quality Management System will operate continuously throughout the Project.

To the extent they are relevant to the Maintenance Works; all Management System Documents including Project Plans will be incorporated into the Operation, Inspection and Maintenance Manual. This Quality Management Plan will form the basis for all quality assured processes within the Operation, Inspection and Maintenance Plan and Manual.

All documentation produced under this system, including audits, procedures, monitoring and verification, will be stored within GCE Project File, irrespective of the document type.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 231 of 300

Compliance with this Quality Management System, the Contract, and ISO9001 will ensure GCE compliance with all contractual requirements for the Project.

4.5 Quality Management System Inputs

The Quality Management System has been developed to meet the requirements of the Contract document's part 2 Specification. The GCE Quality Management System has been developed to meet the requirements of AS/NZS ISO 9001:2015.

4.6 Quality Management System Documents

4.6.1 Management Plans

Quality Management System document requirements are defined in Part 2 Specification of the Contract, and the GCE Corporate Procedures. These Corporate Procedures are documented within the GCE Drobox which provides real-time access from all workstations at all offices and via iPads on all projects. The procedures are contained with links to separate directories, which contain relevant forms, guidelines, and examples.

4.6.2 Specific Project Procedures

The specific project procedures reference specific project plans written to address issues requiring greater detail for implementation at Project level.

Each of these procedures references relevant documentation and other administrative controls such as Instructions, Method Statements, Forms, and checklists. Individual checklists will be prepared for each construction activity, or group of activities, reflecting the safe work method statement for the works.

These specific project procedures are documented within the GCE Drobox which provides real-time access from all workstations at all offices and via iPads on all projects.

4.6.3 Quality Plan

Any requirements in ISO 9001 relating to the content of a quality manual will be addressed within this Plan. The structure of this plan is based on the arrangements in ISO 10005.

Reviews specifically of the Quality Management System, and the Quality Plan, will be conducted as set out in section 5.4, or through the internal audit schedule for the project, detailed within section 15.2 and attachment 6 of this plan.

4.6.4 Monitoring and Verification

All Quality Management System documents will be filed and accessible to all project participants within the GCE Drobox filing system.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 232 of 300

There will remain free and unfettered access to all updated documents throughout the review and improvement process, to ensure all project participants can access the latest information, and to allow continuous monitoring of the integrity and efficiency of the Quality Management System.

Project participants will maintain access to the GCE Drobox system for the duration of their association with the project. Access will be provided upon Project commencement up until the expiry of the Defects Liability Period. Being a cloud-based system; Drobox is accessible at any time, and from any web-enabled workstation throughout the world.

4.7 Conformance to Requirements

Conformance to Contract requirements is prescribed within the individual sections of this Plan and is verified through internal audits.

Conformance to ISO 9001 is verified by internal audits and GCE 3rd party certification by an independent body. The method by which GCE maintains this certification is defined in Section 15.1 of this plan.

The following internal audit processes will apply to the project:

1. Self-assessment audit. To be completed by the Project Manager and reviewed by Senior GCE Management at the Project Start-up meeting. This will identify the Quality Risk Register for the Contractor's Works, including the Maintenance Works.
2. Internal Quality Audits. Scheduled/ coordinated, according to the Internal Audit Schedule detailed in section 15.2. This audit will cover the system, processes and procedures which give effect to and coordinate the implementation of each Project Plan and the Operation, Inspection and Maintenance Manual.
3. Monthly Safety Audit. Scheduled/coordinated by the GCE Safety Manager and will cover all aspects of the Contractor's Works including the Maintenance Works as prescribed within the OHS&R Management and Traffic Management Plans.
4. Weekly Environmental Audit. To be performed by the Project Environmental Management Representative as prescribed within the Environmental Management Plan.
5. Weekly Safety Walk. To be performed by the Safety Manager, Project Manager and Foremen.
6. Daily Signage and Traffic Control Check.

4.8 Management Review and Reporting

The management system documentation and its implementation will be continuously assessed and improved through the processes of review and audit.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 233 of 300

Project Actions or decision	SWMS Review	Forms Review	Safety Management Review	Procedures	Training Competency	Site Safety Rules	Incident Reports
Director	R/A	C	R/A	A	C	C	R/A
Project Manager	R	R	R/A	R	R	R	C
Foreman	C	C	C	R	R	C	R/A
Accountant	C	C	C	C	I	I	I
Staff	I	I	I	I	C	C	C
Revision Frequency	As below then every 6 months	As below then every 6 months	As below then every 6 months	As below then every 6 months	As below then every 6 months	As below then every 6 months	As below then every 6 months

Next Review Date	Date Reviewed	By	Date Reviewed	By	Date Reviewed	By
SWMS Review	Wk 4 -					
Forms Review	Wk 2 -					
Safety Management Review	Wk 6 -					
Procedures	Wk 5 -					
Training Competency	Wk 3 -					
Site Safety Rules	Wk 1 -					
Incident Reports	Wk 8 -					

4.8.1 Formal Review

Formal review of the Quality Management System documents takes place at the Management System Review meeting and other meetings as defined in the table below.

The Management System Reviews are performed periodically to assess the degree of implementation and the effectiveness of the system, project performance, and whether existing Policy requirements and/or objectives and targets are still appropriate.

Management System Reviews are conducted by the Management Review Team (MRT) comprising the Project Manager, Project Quality Manager, and direct reporting Managers for each discipline.

Management System reviews will be conducted in accordance with a documented schedule, initially at three monthly intervals. The review frequency may be revised by the MRT.

Activity	Responsibility	Frequency	Quality Review Activity	Record
1. Project Start-up Meeting	PM/QSEM	Once. Approximately 6-8 weeks after award	Quality risks and mitigation measures	Start-up manual Review minutes
2. Team meetings	All	Weekly	Upcoming quality risk activities and surveillance requirements	Minutes
3. Project Quality System Start-up reviews	PM/QSEM	2 weeks after project commencement	Verify establishment of quality systems and effective implementation	Memo note issued by QM

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 234 of 300

4. Project Performance Reporting	PM/QSEM	Monthly	Details of any quality non-conformances and/or audit non-conformances	Project monthly report
5. Quality Management System Review	PM/QSM	6 Monthly Alternating every 3 months with Internal Audit	Effectiveness of quality system and its implementation. Adequacy of resources. Review of Code of Maintenance Standards	Minutes Code of Maintenance Standards
6. Reviews following Practical Completion	PM/QSM	Annually	Review of Code of Maintenance Standards throughout Maintenance period Review of completion status and outstanding documentation	Code of Maintenance Standards

Responsibility

PM – Project Manager

QSEM – Quality, Safety and Environment Manager

These formal reviews will continue throughout the duration of the Contractor's Works and the Maintenance Works, up until the date of final completion.

All documentation raised by these reviews will be made available within GCE Drobox.

4.8.2 Ad Hoc Review

The adequacy of the Quality Management System is reviewed on an ad hoc basis in response to:

- Monthly Project reports.
- Audit Reports.
- Nonconformance reports and identify trends.
- Changes to specifications or legislation requirements.
- Changing Client expectations.
- Changes in the project organisational structure.
- Advances in science and technology; and
- Feedback from employees, subcontractors, or DTMR.

4.9 Quality Management System Changes

As part of the process of continual improvement of the system, changes to Quality Management System documents will be implemented throughout the project. Documents will be under continual development to minimise the recurrence of any nonconformances. Circumstances necessitating plan revisions include:

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 235 of 300

- non-compliance with the requirements of the Contract.
- variations.
- changes in law or within Codes of Practice.
- the commencement of new phases or stages of design and construction; and
- any other events or circumstances which occur throughout the Contractors Works and the Maintenance Works, which demand an improvement to the Quality Management System.

Revised Quality Management System documents will be reviewed by the Project Quality Manager to ensure the integrity of the system, and all revised and updated documents will be uploaded and stored on the GCE Drobox Collaboration System for access to all project participants.

5 Document Data & Record Control

5.1 Document Data Control

5.1.1 Internal Documents

Documents that are subject to control and include without limitation:

- Project Plans, Procedures and Forms.
- Drawings.
- Specifications and Specification Annexures.
- Requests for Information and Correspondence from Designers.
- Site Diaries

A daily site diary is to be maintained by the General Superintendent and each Foreman. The diary is to include a record of daily events, works completed, site weather conditions, the number of personnel on site, and other information relating to quality conformance. The site diary will only be used as a record of dates and times. Reports from will be provided to GCE admin staff on a weekly basis for record keeping purposes.

All formal project correspondence including any instructions or directives affecting the works, except for minor correspondence shall be transmitted using email, with copies filed in GCE Project File.

5.1.2 External Documents

External documents, (including the Contract documents) will be managed as controlled documents within GCE Project File. Changes to external documents maintained by GCE will be notified to the project team should they occur.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 236 of 300

Documents may also be accessed from the websites of suppliers, government agencies etc. These documents are maintained by the service provider. Project staff that access these documents are responsible for ensuring that they are using the correct version.

5.1.3 Controlled Copies

All Management System documents are available to all project members within GCE Project File. These are the controlled copies.

GCE Project File is also used to notify staff of changes to the system.

Note that final controlled records will always be loaded and distributed using GCE Project File.

5.1.4 Amendments

Amendments to contract plan documents will be managed by transmittal of amended documents to all concerned parties, and documented changes provided upon request. Revision will be noted and dated on the document.

5.2 Quality Records & Data Control

5.2.1 Records Control

GCE Contractors will maintain, in a readily accessible manner, all documentation and records as are necessary to provide objective information or evidence in support of the Works meeting the various requirements of the Contract and shall upon request or within an agreed period, make them immediately available for inspection by DTMR. Such records include, but are not limited to:

- Training records.
- Audit Schedule/Audit Reports.
- Registers (e.g., Nonconformance (NCR) register, Lot register, Risk register, Design Document register).
- Preventative and Corrective Action records.
- Management Review records.
- Project Monthly Reports.
- Certifications of verification and compliance as required by the Contract.
- Records of product conformance.
- Design Process records.
- Nonconformance (NCR's)/Improvements/Complaints.

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 237 of 300

- Inspection and Testing records/Lot records.
- Measuring and testing equipment calibrations records.
- Certificates of Conformance (Design and Construction).
- Audits of Lot records; and
- Correspondence

On completion of the Works, GCE Contractor shall supply all or such portion as may otherwise be directed, of the documentation and records to DTMR.

5.2.2 Data Control

The Local Area Network is maintained on the Project servers, which are backed up on a regular basis.

The data stared in GCE Project File is backed up by the service provider, and the retrieval process is subject to verification by the Project Quality Manager.

It is GCE policy to retain all project data as this information may be required later for reference to similar future projects or 'lessons learnt' exercises.

5.3 Product Requirements

The product requirements including any document deliverables including As-Built Drawings and Operation, Inspection and Maintenance Manuals, are defined within the Contract Documents. Design requirements are identified in the Contract Documents.

Detailed requirements for the construction works are defined on drawings and other design documents. The acceptance standards for the works are defined in the Specifications, particularly with regard to product durability.

Drawings and specification requirements are reviewed by the Construction Team and translated into process control documents including Construction Method Statements and Process Control Plans.

All issue of documentation to tenderers for pricing purposes is to list applicable drawings and specifications including applicable revisions. All subcontract documents are to include a reference to applicable drawings and specifications including applicable revisions.

An up-to-date Document Register is being maintained in the GCE Drobox system onsite, listing all project-controlled documents, including drawings, specifications, schedules, and management documents. Current revisions of controlled documents will be specified in all cases.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 238 of 300

Requirements for the Quality Management System are identified in Section 5 of the Plan.

6 Resource Management

6.1 Human Resources

Senior Managers shall ensure that all personnel whose duties influence the execution of the work in accordance with time, conformance or cost requirements are selected based on qualifications and competencies with due regard being given to:

- Skill levels and appropriate site experience.
- Attitude towards and awareness of Quality, Safety, Health and Environmental protection requirements.
- Ability to follow procedures and instructions.
- Ability to work as a team member achieving common goals.
- Initiative and capacity to recognise and accept responsibility; and
- Attitude toward adding value to the project.

6.2 Competence, Awareness & Training

Training requirements are to be identified and implemented by Senior Management and the Training Coordinator, to ensure the required levels of safety, quality, and personnel expertise are developed and maintained.

The Foreman will have the sufficient team leading skills and will be fully aware of the Quality Management System to ensure its implementation on each project.

Quality related training will be carried out in the following areas:

- Project and Site Induction Training.
- Quality System and/or Procedure Training; and
- Training for special or task-specific skills.

Induction training programmes will be developed prior to the commencement of construction activities. These programmes will be developed in consultation with Authorities, with regard to including:

1. Quality Management Systems, procedures, and obligations.
2. Safety and Environment procedures and obligations of all personnel; and
3. Obligations and procedures pertinent to the Cultural Heritage Management Plan.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 239 of 300

Records from all training sessions will be maintained and filed on the GCE Drobox system. This will be the responsibility of the Contract Administrator.

All workers will have sufficient training on machines to achieve full tickets per machine to ensure the quality of work will be in keeping with our Quality Management System.

6.3 Infrastructure

Senior Managers shall ensure that all infrastructure requirements are determined and available. This includes:

- Basic facilities, services, and installations needed for the functioning of the Project, such as transportation, communications and emergency response systems, water, and power services.
- Administration and support resources (e.g., computers, software, printers, faxes, and photocopiers, etc.); and
- Transport to and from the Project, and between, on and around the site.

All infrastructure items shall be properly maintained. Deficiencies shall be reported and rectified, and in a timely manner.

6.4 Work Environment

Senior Managers shall develop and implement strategies to enhance the working environment by having clear organisational requirements. This includes:

- Implementation of clear reporting lines.
- Identification of individual responsibilities and authorities.
- Implementation of clear guidelines and instructions relating to process, quality, safety, health, and environment; and
- Specific policies are detailed within the relevant Management Plan, i.e., OHS&R or Environmental Management Plan.

6.5 Communication

The exchange of information between managers, employees, customers, and other stakeholders are detailed in the following paragraphs:

- Internal Communication
- GCE recognises the importance of including of all company employees through regular information and communication and we compromise to brief the employees on:
    - new policies.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 240 of 300

- new or amended objectives.
- new clients.
- new or amended technology.
- new products.
- issues with suppliers; and / or
- anything that will have an impact on them.

The following instruments are used for internal communication:

- meetings within and across areas and sections, presentations etc.
- trainings, qualifications, consultations
- internal handing-over of external information.
- External communication

The sales representative is the primary contact for customers. In the case of further consulting (pre- or after-sales) or technical discussions, information is addressed to the Project Manager.

Concerning questions relating to approvals and certifications, the QSE Manager or the Project Manager is responsible for the communication with the certification and approval bodies. He/she is the contact person for all external audits relating to the IMS.

7 Design Control

7.1 Design Plan

Design of the project is carried out by suitably qualified designers (RPEQ) under the supervision and direction of GCE Contractors.

7.2 Design Management

This is a design and construct contract that GCE Contractors as the Principal Contractor has sought RPEQ certified constructions plans as detailed in Table 1.

GCE Contractors are responsible for:

- The review of all existing information provided about the site conditions and known services.
- Constructing the road and stormwater and associated infrastructure in accordance with the approved drawings;
- Where alternative design is required, changes are managed in accordance with Section 7.6.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 241 of 300

7.3 Safety in Design

Safety in Design requirements is an integral part of the design process.

All designs will be assessed for safety risk and developed to control the risks during the full life cycle of the works. A Safety in Design Report will be prepared in accordance with the Contract and the Design Plan.

7.4 Validation

Any requirements for validation of design assumptions are defined by the Designer. These requirements are prescribed in the Design Plan.

7.5 Design Changes

Queries relating to the design or documentation from the field shall be processed and controlled within Project Centre utilising the Request for Information and Nonconformance Report procedures.

Procedures for progressing Design and Construction activities in parallel with Design Changes and Queries are detailed in the Design Plan. Design and Construction shall not proceed until any major issues raised during the review process are substantially resolved.

Minor changes relating to the design or documentation from the designers shall be processed and controlled in accordance with the Designers Correspondence processes and incorporated into the as-built drawings.

7.6 As-Built information Control

“As Constructed” details shall be compiled by a Licensed Surveyor, including the following:

- In accordance with Customer’s name Development Manual – name of the file.

The above “As Constructed” information is for the purposes of auditing of construction only. It is GCE Contractors responsibility to ensure that the “As Constructed” levels and offsets comply with the design within the tolerances specified.

The cost of the measurement of "As Constructed" details shall be borne by GCE Contractors.

No work shall be covered up until accurate "As Constructed" details have been recorded.

Council reserves the right to require GCE Contractors to expose, at no cost to Council, any pipelines or fittings which have been laid and backfilled without first obtaining all the relevant "As Constructed" information. The cost of uncovering any service shall be paid for by GCE Contractors.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 242 of 300

GCE Contractors shall supply 'As Constructed' information to Council. This shall be in the form of a single full set of clearly marked up latest revision of the Drawings.

The 'As Constructed' information shall show every deviation from the "For Construction" drawings. The marked-up 'As Constructed' drawings shall be kept up to date throughout the duration of the Contract and shall be available to Council at all reasonable times.

All 'As Constructed' drawings and other information must be signed as checked by GCE Contractors, and clearly marked 'As Constructed'.

Upon receipt of the complete "As Constructed" drawings from GCE Contractors, Council will review and confirm satisfaction,and consequently issue a notice to GCE Contractors to state acceptance/compliance of the "As Constructed" Drawings.

8 Procurement

Materials and services may be procured by several methods as described in the Project Management Plan.

8.1 Subcontracts

Subcontractors will be subject to assessment of their formal quality systems and/or general history of quality and ability to meet the standards required for the project.

Subcontractors shall be selected from:

- Contractors with 3rd party certified quality systems, with a minimum standard being compliance with the GCE quality management system; or
- Assessed through the Pre-Qualification process.

Initial visits to contractor's premises may be necessary to enable proper assessment. Performance of the subcontract work is managed by the Project Manager.

8.2 Purchasing

All purchases of goods that form part of the contract works or otherwise influence the quality of the contract works are to be subject to documented supply specifications. The supply specification must incorporate all relevant requirements of the Contract specifications. Selection, Engagement and control of Suppliers will be managed by the Project Manager.

Suppliers will be subject to assessment of their history of performance and ability to meet the standard required for the project.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 243 of 300

Suppliers shall be selected from:

- Contractors with 3rd party certified quality systems, with a minimum standard being compliance with the GCE quality management system; or
- Suppliers assessed through the Pre-Qualification process

The project may inspect the work of suppliers at their premises. These inspection activities shall be formally assigned and reported, and the works released.

Performance of the contract is managed by the Construction Manager.

Materials and equipment forming part of the Permanent Works shall be new and of a quality at least equal to that specified. Wherever practicable, materials and equipment shall be of Australian manufacture.

Whenever any materials or equipment is specified in the Contract by patent, proprietary or trade name or by the name of a manufacturer, such specification shall be considered as used for the purpose of describing the material or equipment desired and implies that such material or equipment automatically complies with any further requirements of the Contract. Such name shall be considered as if followed by the words "or approved equal" whether such words appear.

8.3 Process Flowchart

Verification of conformance will be directly undertaken by GCE in any instance where the subcontractor does not have the necessary capacity and/or systems.

GCE will establish and maintain a register of subcontracts and all significant material suppliers with a description of the respective subcontracts including the scope of works of each subcontract or supply agreement, the specified quality system, the capability statement, and the subcontractor's Quality Representative.

8.4 Preservation of Product

Receipt, handling, storage, preservation, and transport of products to the site will be handled as per manufacturer's recommendations to prevent damage and deterioration. All completed and conforming works that make up the project will be protected from any damage or change caused by inclement weather or during construction of other elements.

Detailed procedures for these measures are prescribed in the Project Management and Construction Plans.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 244 of 300

9 Control Of Construction

9.1 Operation Control

The construction teams develop method statements to define the method of work and the controls that will be implemented based on a standard template. Each Method Statement (WMS) is associated with a Process Control Plan (PCP) which assists personnel to identify and comply with the requirements. They are developed in accordance with the Contract Specifications, with the objective of using and applying materials and workmanship which, as a minimum, comply with Specifications and current Australian Standards.

WMS's and PCP's will be developed by the Quality Manager. Once finalised, the Quality Manager will seek input from the designer, discipline manager and foremen for the respective work, to ensure that all requirements of the specifications, design intent and legislative requirements are met. The final documents will be approved by the Project Manager.

PCPs always include an Inspection and Test Plan and may include Checklists, and/or a Process Flowchart. ITP's detail the steps required to construct the work, including references to the specifications, nominated Hold and Witness Points, acceptance tests and criteria, and the records to be maintained. Each ITP is linked to specific checklists to provide evidence that the conformance checks have been carried out and that the work complies with requirements.

Individual PCP's and ITPs shall be prepared, reviewed, and approved prior to the commencement of the relevant works.

9.2 Hold & Witness Points

The Inspection and Test Plans contain the Hold Point & Witness Points (HPWP's) identified for the Project. The ITPs also identify the Nominated Authority responsible for releasing the HPWP's and the records that will be generated to demonstrate that the HPWP has been released.

The Project Manager is responsible for the release of HPWP's where GCE is the Nominated Authority. The Project Manager may delegate responsibility for the release of HPWP's to identified Foremen.

Hold Points are to be nominated as specified by the Contract, or on issue of a Non-conformance report or the issue of a corrective action request by the Administrator. Work will not proceed beyond a Hold Point without release by the Nominated Authority. No work shall commence on any section of the project until all Hold Points required to be released prior to the commencement of work upon the Project Site have been released in accordance with the requirements of the Contract or the Quality Plan.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 245 of 300

9.3 Compliance Inspection and Testing

All compliance assessment, inspections, sampling and testing shall be based on lots. Compliance testing shall be performed on a lot at the time when the lot has been processed.

All compliance testing shall be carried out by laboratories accredited by NATA and certified for the relevant tests. Laboratories will also be certified for the appropriate tests and registered as Construction Materials Testing (CMT) Suppliers at Level 2 unless exempted by the CMTSRS or allowed to be subcontracted by the CMTSRS.

Assessment of compliance will be completed by a responsible person at least one person removed from the person performing the works.

Results from compliance testing will be submitted to the Principal Contractor (GCE) and DTMR at the same time. Where a non-conformance occurs, no further testing shall be allowed until a non-conformance report is submitted and corrective action has been approved by the Administrator.

Two business days' notice shall be allowed to enable the Administrator to attend sampling and testing activities for the compliance tests.

9.4 Process Flowchart – Subcontractors and Suppliers Quality Systems

All subcontractors and suppliers will be subject to the requirements of this Quality Management Plan.

Each trade scope will be assessed, and the extent of quality control planning documentation prescribed to the subcontractor/supplier according to the Quality Management System.

Upon confirmation of a subcontract with a subcontractor, and before any works commence, the subcontractor will be briefed on GCE's Quality Management System and requirements. This briefing is to form part of the pre-award meeting. The briefing is to include:

- Planning documentation submission requirements.
- Inspection/testing/hold points/witness points.
- Prototypes, samples required.
- Manufacturers inspection reports.
- Submission of Certifications and test results.
- Punch listing and defects.
- Warranties

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 246 of 300

Each subcontractor, when at or near completion of their subcontract works, will be required document, and submit to GCE a punch list detailing all outstanding work and other obligations remaining to be resolved.

The punch list is to be reviewed by GCE and continuously updated by the subcontractor as necessary. The punch list will be used as a tool to manage the completion of works.

The final system process will comprise the handover to GCE of the subcontractor's works. Final closeout of subcontracts will not occur until after any issues with the works have been resolved to the satisfaction of DTMR.

9.5 Survey Control

The minimum standard for qualified surveyors to take responsibility for all survey for the Contract Work shall be eligible for membership of the Spatial Sciences Institute, with general certification, or the Institution of Engineering and Mining Surveyors, Australia to the category of Member. The survey team will be managed by the Construction Manager who will be responsible for survey conformance to the Contract and specifications.

All survey levels will refer to Australian Height Datum (AHD). All survey plan coordinates will refer to the Map Grid of Australia (MGA), based on the Geocentric Datum of Australia (GDA).

GCE Contractors shall set out the works in accordance with information given on the Drawings. Survey information issued by Council shall be checked by GCE Contractors and discrepancies reported.

GCE Contractors shall be responsible for driving the micro-tunnels and positioning linings and other structures within the specified tolerances.

All are setting out, and alignment control shall be carried out by suitably qualified and experienced persons.

Throughout the tunnel, any changes in gradient or alignment, including correction of errors, are to be affected by circular or transition curves, unless otherwise provided for in the design, or agreed with Council.

GCE Contractors shall submit a method statement for setting out and controlling the alignment of the tunnels for agreement by Council prior to the commencement of work. Adequate opportunity for checking of the survey and setting out shall be given to Council.

Details of all setting out readings and calculations shall be maintained at the Site and be set out in a clear and orderly fashion to allow for ease of checking.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 247 of 300

GCE Contractors shall provide all necessary lines and levels together with all necessary equipment to enable the Works to be constructed to the required tolerances. The setting out lines and levels shall be carefully preserved, and where necessary replaced, throughout the period for which they are required.

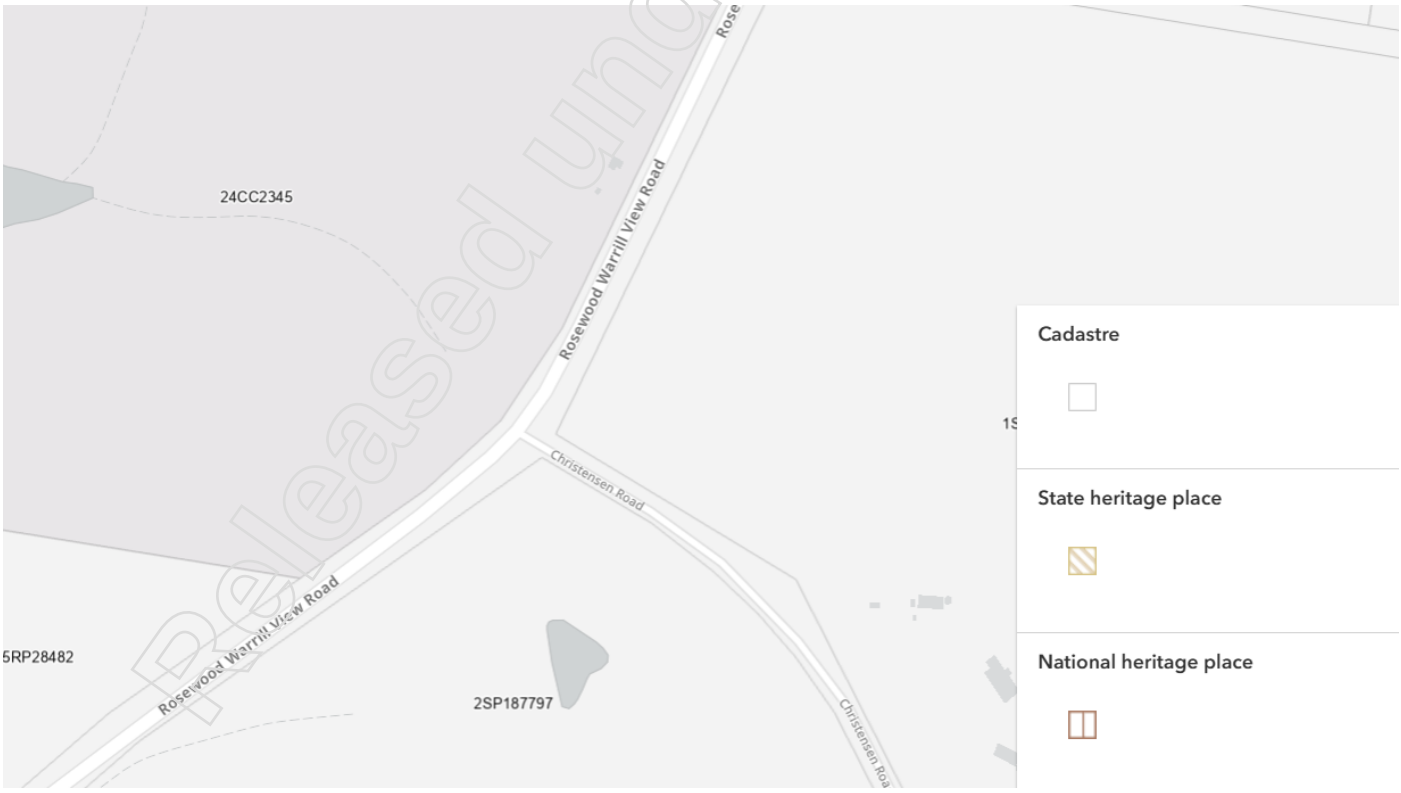
The primary setting out system shall be used for the main control of the excavation, tunnel linings, including checking and recording of the as-built position of the linings at intervals.

As the Works progress GCE Contractors shall notify DTMR of the actual position of the tunnel linings as erected. GCE Contractors shall make such alterations to the setting out as Council may direct consequently.

9.6 Cultural Heritage Management Control

Cultural Heritage Management comprises Aboriginal and Historical cultural heritage. The Aboriginal Cultural Heritage Act 2003 requires persons involved in an activity to "take all reasonable and practical measures to ensure the activity does not harm Aboriginal Cultural Heritage". This is the Cultural Heritage "duty of care".

There are no known aboriginal cultural heritage sites near the proposed development site (Figure 6). The site of the proposed project has been highly disturbed in the past during previous excavation work. There is little chance of discovering items of cultural heritage significance.



Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 248 of 300

Figure 6. Showing that there are no cultural heritage data for the site.

10 Identification & Traceability

GCE will number all lots and NCR's. All Controlled lot records and registers will be maintained for accessibility within GCE Project File.

10.1 Lot Management

A Lot Record contains all documentary evidence for the compliance with requirements pertaining to a section of the works. Lots, as in scope and works included, are nominated by the Project Manager taking into consideration the logical breakdown of construction activities. When nominating the Lots, the Project Manager should take into consideration:

- The timeframe for construction; and
- The scope of the works

The Project Manager in charge of the process shall review the Process Control Plans (PCPs) covering the work. These PCPs will dictate what records are required to enable auditable compliance of the Lot. Every Lot will include compliance records as defined within the approved PCP (approval is as per section 10.1). Each Lot will include relevant nonconformance reports and verification of dimension control (i.e., *As-Built* survey data). The Project Manager will collect and submit these records with the construction lot.

A Lot is considered 'Open' until all necessary records for the Lot have been obtained and are considered satisfactory.

The Lot is considered 'Closed' when the Project Quality Manager has audited the records for compliance with the management system, generated and attached a Conformance report, uploaded them to GCE Project File and provided as-constructed information to DTMR as per the Contract requirements.

Conformance Reports will be prepared for each Lot, and shall be accompanied by the following:

a) inspection and test records.
b) analysis of the results to demonstrate compliance with the relevant Specification.
c) as constructed drawings (where applicable).
d) as constructed surveys; and
e) any other 'As Constructed' documents as required by DTMR.

Lots are closed promptly upon receipt of test results and closure of NCRs to demonstrate compliance before substantial progress is made on subsequent work.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 249 of 300

GCE Contractors shall provide the as-constructed information to DTMR as per the Conditions of Approval.

10.2 Lot Numbering & Registration

For each Lot Record created, the following information will be recorded.

Lot Definition	
Lot Number	A unique identifier created from the work type, area code and an automatically generated chronological index.
Work Type	Two letter codes describing the main work described by the lot
Area Code	Unique code identifying where the lot is located.
Description	A text description of the work included in the lot
Raised By	The person who raised the lot
Status	The lot status (Conformed/Indicative Conformance).
Geometry	
Control Line	The control line to which the chainage and offsets refer
Chainage Start/Chainage End	The longitudinal reference of distance along the control line where the lot begins/ends
Start Left OS/Start Right OS	The lateral distance from the control line to each edge of the lot at the start of the chainage
End Left OS/End Right OS	The lateral distance from the control line to each edge of the lot at the end of the chainage
Key Dates	
Date Opened/Date Closed	The date the lot was opened/closed
Date Work Start/Date Work End	The date work physically started/ended on a lot
Date Guaranteed	If a lot complies with the specification but is waiting on some results of testing (such as 28-day concrete tests) or other information, then it can be given the status 'guaranteed' by assigning a Guaranteed Date.
Date Conformed	A conforming lot can be given a 'Conformed Date'. Lots with a conformed date are given the status conformed.
Conformed By	The person who conformed the lot.

All this information will be generated on the Lot Conformance Report when the Lot is eventually closed, and the Lot Conformance Report will be used as the cover sheet to closeout each Lot Record.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 250 of 300

In addition, each NCR generated on the project will be assigned to an existing Lot Record. When each NCR is closed, the final record will be uploaded to Drobox, with a closure report including references to the "parent" Lot Record.

Thus, each NCR is traceable to a Lot Record, and each Lot Record will be traceable to an Area Code, a Work Type, and a geometric position.

To complete the full circle of project traceability, it thus remains to maintain traceability between Lot Records, QA Records, *As-Built* Drawings, Shop Drawings and final Certifications and Warranties at the completion of each piece of the works. This is achieved using the Project Handover Number as the reference for the Work Area. Thus, all documents created will include a traceable reference back to the eventual Completion and Handover record.

10.3 Lot Status Record

GCE will establish a record of the status of each defined lot. The Project will maintain a status register for all construction lots within GCE Drobox. The data will be kept up to date, with the revised status of a lot entered in the record at the completion of work or other change in lot status. The status record for each completed lot will conclude with the preparation of a conformance report for that lot, and the loading of the final closed document into GCE Drobox.

The register of Open and Closed lots shall be maintained by document control and monitored on a weekly basis by the Project Quality Manager. Although it is recognised that certain testing will require time to complete, a further register of lots open greater than 30 days will be maintained. The status of this 30-day register, in addition to the progress of lot closures, will be reported weekly to the Project Manager and Foreman.

10.4 Traceability

Product identification shall be maintained during all phases of receipt, storage, installation, testing and commissioning; by traceability to a drawing number, delivery docket and/or equipment number as applicable to the nature of the product. These documents will be included within the relevant Lot records.

Quality Records identification shall be maintained during all phases of completion and closeout by traceability to a Project Handover Number, as described in Section 11.2.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 251 of 300

11 Control of Non-Conforming Product

11.1 Conformances

A conformance report is raised at the completion of each lot of work confirming that each lot conforms in all respects with the requirements of the Specifications. The conformance report also includes the result of all tests, inspections, measurements, and observations carried out on the lot.

The completed lot record, including the Conformance Report, signoffs, and as constructed surveys, will be filed, and distributed as a controlled document within the GCE Project File.

11.2 Non-Conformances

The Contractor shall, throughout the duration of the Contract carry out sampling, monitoring, and testing in accordance with the approved Quality System and the Specification. In the event of any non-conformance to the requirements of this Specification, the Contractor shall immediately advise DTMR of the details of such non-conformance, including its location in the Works, and proposed corrective actions prior to such corrective actions being taken.

Nonconformance is a failure to comply with a stated requirement, and the method of dealing with nonconforming works needs to be controlled by authorised personnel through the raising of a non-conformance report. These reports will be recorded within project systems and notified within one day of their identification.

It must be noted that a conforming lot record cannot be closed unless all formal inspection points are signed off, or without an NCR to allow the signoff of all inspection points.

Any apparent nonconformances advised by DTMR shall be treated as non-conformances, with an NCR raised and resolved.

These principles also apply to non-conformance in works prepared offsite by suppliers.

All non-conformances are recorded within GCE Project File. The non-conformance will be raised within one working day of detection. Any items that do not conform to specified requirements will be identified and prevented from subsequent inadvertent or unauthorised use, installation, or other incorporation into the works. The procedure for identification, segregation (when practical), classification, documentation, disposition, and reinspection of the nonconforming product is detailed in the Nonconformance Report Procedure.

Nonconformance Reports describe the problem and propose a remedial action, which is either replace, reclassify, repair or use-as-is. Where appropriate the NCR may also nominate corrective action to prevent reoccurrence.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 252 of 300

The proposed remedial action must be approved by the Construction Manager and the designer (except for "replace" which is done under the Construction Manager's authority only) and reviewed by DTMR. The proposed remedial and corrective action shall be endorsed by the Project Quality Manager and must take all durability objectives and performance requirements into account.

The Foreman will ensure that all repaired and reworked items are reinspected and verified. A Hold Point will be applied for "making good, rectified work".

The NCR is closed by the Project Quality Manager when evidence of implementation has been collected, and all closed NCR's will be filed and notified to DTMR. The closure status of NCR's will be continuously monitored utilising the NCR Register and reported within the quality KPI's. Any NCR that has not been closed after 30 days shall be reported to the Project Manager for review and prioritising for resolution.

Any outputs by our workers that do not conform will be rectified on site by either reworking or scraping the current work and starting again. Any such non-conformities will be documented emailed to both the client and foreman for records.

Once we have found a non-conformity we will review it at our audit, discuss and review it until we can be sure that the root cause is found to reduce the chance of this happening again.

12 Measurement & Analysis

Project performance is compared against the Project Outcomes defined in the Corporate Policy Statement. Achievement of outcomes is reviewed by the Project Management Team.

12.1 Customer Satisfaction

Customer satisfaction will be monitored through the Project Liaison Group at the Senior Management level. In addition, the Project Quality Manager shall attend regular communication meetings with DTMR when requested.

12.2 Internal Audit

An audit programme will be implemented in accordance with Section 15 of this plan.

System audits will be carried out to verify compliance with ISO 9001 ad technical audits will be carried out to verify compliance with project system requirements.

Identified system non-conformance will be reported as Corrective Action Requests for follow up.

Quality Management System Process Measurement.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 253 of 300

The following quality management processes are monitored and measured by the Project Quality Manager:

- Product compliance via lot management.
- Nonconformance Reports.
- Audit programme.
- Corrective Actions; and
- Management System Reviews.

12.3 Product Monitoring & Measurement

The requirement for inspections and tests is defined in the Specifications and developed into Process Control Plans and Inspection and Test Plans which identify the records that will be prepared for inclusion in the lot records.

12.4 Control of Monitoring & Measurement Devices

Inspection, measuring and test equipment shall be maintained in accordance with the manufacturer's specification. All calibrated equipment shall be suitably used and protected from damage.

All inspection, measuring and test equipment used for conformance testing shall be:

a) Calibrated prior to use.
b) Calibrated at regular nominated intervals; and
c) Calibration shall be by a registered NATA laboratory or suitably qualified organisation/person, i.e., Registered Surveyor.

Records of calibration shall be retained as part of the Lot Records, stored within GCE Drobox.

All Suppliers shall provide and maintain records of calibration of their equipment.

12.5 Analysis of Data

Data collected by the Project Quality team is analysed and reported on the GCE Drobox system. Analysed data includes:

- Lot Closure.
- Nonconformance Reports and closure status.
- Audit performance

The data will be analysed to report key performance indices such as the number of days to close lots and NCR's, disciplines resulting in large numbers of NCR's and CAR's and numbers of lots not being closed within set targets. The

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 254 of 300

data within GCE Drobox will be monitored continuously by document control, with weekly reporting available for construction meetings. Resulting KPI's for quality performance will be reported in the monthly reports.

Identified trends and implemented corrective actions are reported in the Management System Review.

Other disciplines collect data related to the achievement of project objectives. Identified trends and the implemented corrective actions are included in the monthly report.

13 Control of Customer Property

The land that comprises the Contractor's Work, including the Maintenance Works, has been identified as Road Parcel identified as Rosewood – Warrill View Road between Ch. 34.56 and Ch. 392.37 and Road Parcel identified Christensen Road between Ch.0 and Ch. 80 (per Drawing C840).

The land is taken over from DTMR following written confirmation of handover. The impact of the construction work on the property is monitored through the Construction and Survey Plans.

Handover of the land back to DTMR occurs upon Practical Completion of the Works.

14 Audit Process & Control

Auditing forms an integral component of the Quality Management System, and as such a variety of internal and external audits will be conducted throughout the project. The strategy behind the auditing process is detailed below. The Project Quality Manager is responsible for maintaining Audit Plans and Audit Schedules, based on the guidelines for each audit type set out below.

All audit documentation and records for the project required under this Section 15, or under section 5 of this plan, will be maintained within the GCE Drobox document management system

14.1 External Audits

Conformance to standards for Quality (ISO 9001), Safety (AS/NZS 4801 and OHSAS 18001) and Environment (ISO 14001) is verified by internal audits party certification by an independent body. This certification is maintained through external audits by an independent body.

14.2 Internal Compliance Audits

Conformance to D&C requirements is prescribed within the individual sections of this Plan and is verified through internal audits. These audits are managed within each Operating Unit by the Project Quality Manager.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 255 of 300

An Internal Audit Schedule has been prepared by the Project Quality Manager for the project. As a schedule based on GCE Internal policies and procedures, the audits are based around the Corporate Quality Management System detailed in section 5.2.1, and the Quality Management Plan. The schedule will be updated as necessary to reflect completed and planned audits, throughout the project lifecycle.

All non-conformances identified during the audit will be documented. Non-Conformances (NCR's) are registered and loaded to GCE

GCE Drobox for project access, to capture system corrective actions resulting from deficiencies in management systems. The auditee will document on the NCR form how the non-compliance will be dealt with (remedial action) and how assurance will be provided that it will not re-occur (corrective action). These responses are to be forwarded to the GCE Branch Quality Manager as soon as possible (and no later than 1 month) after the audit is completed. Closeout of NCR's will be contingent upon evidence of completion of the proposed actions and may be confirmed, by follow-up audit, or by the sighting of appropriate documentation.

14.3 Customer Audits

During the project, the Council or Council or Council's authorised representative will carry out such quality audits, as they deem necessary to ensure that GCE Contractors is conforming to the approved quality plan and the various requirements of the Contract. GCE will provide all relevant information, documentation, access, and assistance necessary for the completion of Council audits.

Filing of the audits and resulting NCRs will be handled in the same manner as Internal Audits.

14.4 Safety Audits

Internal safety audits are conducted on three levels:

Type	By	Frequency	Report Format
Weekly Safety Inspection	Project Safety Committee and Site Safety Supervisor	Weekly	Site Safety Committee Weekly Inspection Sheet – Refer to Project Safety Plan
Internal Procedure Audit	Project Quality Manager	Each element/Section at minimum once during the project. With an audit on an individual section every 6 months.	Audit Summary Report – Refer to Project Quality Plan

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 256 of 300

Each audit is to follow-up any issues (deficiencies, recommended improvements) which were identified in the previous audit.

Additionally, items identified in Weekly Safety Audits are actioned by the identified parties, the Inspection sheet signed and dated by the recipient and returned to GCE for filing. All Safety Audits and Inspections will be filed within the GCE Drobox system for access by all project participants.

External safety audits will also be performed as prescribed by the Traffic Management Plan.

14.5 Construction Methodology & Product Compliance Audits

The Project Quality Manager will maintain a schedule of audits for construction methodology and product compliance. All progress control activities shall be audited at least once during the project. These audits will be based on contract specifications, ITP's, construction method statements, Standards and Codes of Practice.

The audit schedule is progressively revised to reflect the construction programme and for the following conditions:

- when results of previous audits indicate the need for a higher (or lower) audit frequency.
- when significant changes are made to functional areas of the quality system, including reorganisations and revisions to procedures.
- when safety, performance or reliability of the product is in jeopardy or suspected to be in jeopardy, due to non-conformity in the quality system.
- when it is necessary to verify that the required corrective/preventive action has been taken; and
- when required due to changes in the construction programme

Any nonconformance arising out of these audits, along with the audits themselves, will be documented in the same manner as for Internal Audits. The Project Quality Manager is to monitor the timely closeout of any NCR's raised at these audits.

14.6 Subcontractor/Supplier Audits

Audits will be conducted on all major Subcontractors and Suppliers, as identified by the Construction Manager and Quality Manager, or as specified in the contract. The Project Quality Manager will maintain a schedule of audits for subcontractors.

14.7 Environmental Audits

Environmental audits will be conducted monthly, or where it is identified that further auditing for compliance is required. These audits are managed within each Operating Unit by the Operating Unit Environmental Engineer.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 257 of 300

Full details are defined within the Environmental Management Plan. All documentation arising from the audits will be filed and accessible as per the system for Internal Audits.

14.8 Corrective & Preventative Action

Corrective and Preventative Action requirements will generally be identified through an audit process. The process for handling Corrective and Preventative Action involves a change to the management system and is prescribed in Section 5.5 of this plan.

Corrective Action is aimed at rectifying the cause of the non-conformance – i.e., where the action is taken to prevent recurrence.

Preventative Action is aimed at preventing the occurrence. That is by eliminating the potential causes of non-conformances, the chance of occurrence is removed.

Appropriate Corrective and Preventative Action shall be determined by the most appropriate person. It shall be reviewed by the Project Quality Manager (if appropriate) and approved by the Project Manager before implementation.

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 258 of 300

INSPECTION AND TEST PLAN
Stormwater Culvert Construction

Inspection and Test Plan		**ITP No.**	GCE-ITP-01	**Final Sign Off**			**Rev0 10/12/2024**	
Stormwater Culvert Construction		**Job No:**	1007	**GCE Rep**				
Proposed Works:	Stormwater Drainage	**Principal:**	GCE		(Name)	(Signed)	(Date)	
Activity:	Stormwater Culvert Construction	**Contract:**		**Client Rep**				
Location:	Mt Walker Quarry, Christensen Road.				(Name)	(Signed)	(Date)	

Preliminaries												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR.	Client Approval	Pre-establishment	W							
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	GCE	Pre-establishment	W							

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Approved Management Plans in place	GCE SMP, GCE WMS, GCE EMP, GCE IWMS Docs, Pre-Start MRTS03 – Hold Point 3	Documents reviewed & relevant to this lot. All preconstruction checks and authorisations completed: Safety Plan, Quality Plan, Environmental Plan (Prepared and Tool boxed)		H							Pre Start documentation to be maintained each morning and filed within the project data log
4	Work Area and Test Lot Identified	Design Drawings	Lot Registered prior to start of work		W							
5	Set out / Survey Works: Installation of Survey Pegs, Physical	Design Drawings	Surveyor to install centre pegs with sufficient offset so as to square or plum accurately									Set out co-ordinates are to be confirmed by the project surveyor

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 259 of 300

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
	Mark out of Pit, Locations											
6	Permit to Excavate	DBYD, GCE Excavation Permit Form	All Existing services and structures within and adjacent to the site have been identified and located	Physical Mark Out of Existing Services. All Crew to be made aware of existing services, exclusion zones and permit requirements.	Prior to Excavation, W							Excavation Permit

Installation of Culvert												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
7	Supply pipe/culvert	GCE WMS, Design Drawings	Incoming inspection of pipe materials and fittings completed (correct size, material type, Correct qty and handled / stacked appropriately to avoid damage)		W							Pipe delivery dockets
8	Excavation for pipe/culvert installation	GCE WMS, Design Drawings	○ Excavation of Unsuitable material if required ○ Material required for special purposes identified and separated ○ Cuttings free draining.		W							Test Results
9	Bedding / Haunch zone	GCE WMS, Design Drawings, Culvert specification	○ Imported crushed rock bedding material single size aggregate be used for bedding and haunch zones ○ Bedding to be compacted to TMR specification. ○ Correct Trench construction type		W							
10	Laying Pipe/culvert	GCE WMS, Design Drawings, Culvert specification	o Ends cleaned of foreign matter prior to placing o Grade (if any) of pipes/culvert correct o Laid to correct vertical level tolerance		W							

Released under RTI - DTMR

Installation of Culvert												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
			o Laid to correct horizontal tolerance o Inspection carried out prior to backfill									
	Manhole	GCE WMS, Design Drawings	Approval of Pit/Chamber		H							
11	Backfilling Trench	GCE WMS, Design Drawings, Culvert specification. MRTS03 – Hold Point 5	o Backfill material as per specification installed to RSSC standard drawing dimensions o Material to be compacted in layers	Visual	H							

Restoration of Site												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
12	Demobilisation of plant	WMS	All mobile plant, containers, site sheds, toilet facilities etc removed from the site	Visual	W							Site Diary Note
13	Establish mobile traffic management.	WMS, standard drawings	All barriers etc removed from road and site prepared for milling & resealing as necessary	Visual	W							Site Diary Note

Supply of "As Constructed" records												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
14	Supply of test results	WMS, Design drawings	Supply of concrete batch testing records Supply records of approved design concrete mix delivered to site		W							
15	Supply as constructed data as per contract	WMS, Design drawings	GCE to supply		W							
16	Supply of test results	WMS, Design drawings	Supply of concrete batch testing records Supply records of approved design concrete mix delivered to site		W							Letter of acceptance

Released under RTI - DTMR

Responsibility Legend		Responsibility Legend		Verification Req'd legend		Revisions shall be shown in italics					
C	Client	PM	Project Manager	H	Mandatory Hold Point	Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
A	Authority	QA	QA Rep	W	Witness Point						
X	Sub-Contractor	IN	Inspector	V	Verification	0	Initial Issue				
S	Surveyor	PE	Site/Project Engineer	R	Review						
D	Design	F	Foreman/ Supervisor	SO	Set Out						
		LH	Leading Hand	M	Monitor						

Released under RTI - DTMR

INSPECTION AND TEST PLAN
Bulk Earthworks

Inspection and Test Plan		**ITP No.**	GCE-ITP-02	**Final Sign Off**			**Rev0 10/12/2024**	
Bulk Earthworks		**Job No:**	1007	**GCE Rep**				
Proposed Works:	Bulk Earthworks	**Principal:**	GCE		(Name)	(Signed)	(Date)	
Activity:	Bulk Earthworks	**Contract:**		**Client Rep**				
Location:	Mt Walker Quarry, Christensen Road.				(Name)	(Signed)	(Date)	

Preliminaries												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR.	Client Approval – 7 days prior to the commencement of works.	Pre-establishment	H							
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	GCE to Provide	Pre-establishment								

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Approved Management Plans in place with all pre construction checks and authorisations completed: Safety Plan, Quality Plan, Environmental Plan (Prepared and Tool boxed)	GCE SMP, GCE WMS, GCE EMP, GCE WMS Docs, Pre-Start	Documents reviewed & relevant to this lot									Pre Start documentation to be maintained each morning and filed within the project data log

Released under RTI DTMR

RTI-5755 Release.pdf - Page Number: 263 of 300

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
4	Work Area and Test Lot Identified	GCE WMS, Design Drawings	Lot Registered prior to start of work									
5	Set out / Survey Works: Installation of Survey Pegs, Physical Mark out of Pit, Locations	GCE WMS, Design Drawings	Surveyor to install centre pegs with sufficient offset to square or plum accurately	Physical Mark Out	Prior to Commencement							Set out co-ordinates are to be confirmed by the project surveyor
6	Marking undisturbed vegetation	MRTS04	Any tree, shrubs and overhanging branches to be left undisturbed shall be clearly marked by the Contractor.	Prior to excavation, and permit.	H							Document marked 'no-clear' vegetation
7	Trees Required By Administrator	MRTS04	Any trees required by the administrator for use as marketable timber shall be nominated in clause 1.3 of MRTS04. Trees shall be clearly marked.		H							
8	Permit to Excavate	DBYD, GCE Excavation Permit Form	All Existing services and structures within and adjacent to the site have been identified and located.	Physical Mark Out of Existing Services. All Crew to be made aware of existing services, exclusion zones and permit requirements.	Prior to Excavation							Excavation Permit

Released under RTI - DTMR

Excavation												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
9	Excavation for Site clearing & grubbing	GCE WMS, DYBD, MRTS04	Excavation to be carried out to ensure all debris is removed		W							Pipe delivery dockets
10	Excavation for Topsoil stripping	GCE WMS, DBYD, MRTS04	Excavation of topsoil to be carried out and unsuitable material removed. Unsuitable material is the sole responsibility of the Contractor to prove. If unsuitable material is found, a mandatory hold point must occur and notify the administrator.		M							Test Results
11	Foundation Test		Foundation to pass MRTS04 standards, review requirements for embankment layers.		H							Test Results
12	Cut and Fill	GCE WMS, DBYD, MRTS 04	Excavation for base of subgrade to be carried out as per MRTS04 specifications ○ < 300 mm below Subgrade Level at 97% standard compaction ○ > 300 mm below Subgrade Level at 94% standard compaction	1/4000 t								
13	Embankment	GCE WMS, DBYD, MRTS 04	○ < 300 mm below Subgrade Level at 97% standard compaction ○ > 300 mm below Subgrade Level at 94% standard compaction ○ Fill layer thickness to be 150mm to 300mm	1/4000 t								
14	Pavement Layer	GCE WMS, DBYD, MRTS 04	○ Subgrade Treatment – specified layer thickness up to maximum 300 mm below Subgrade at 97% standard compaction	1/4000 t	W							
15	Unbound Pavements	MRTS04 – 14	○ Ameliorant agent applied to batter slope surface		W							

Released under RTI - DTMR

Supply of "As Constructed" records												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
16	Supply of test results	GCE WMS, Design drawings, MRTS04	Supply of Compaction testing		H							
17	Supply as constructed data as per contract	GCE WMS, Design drawings	GCE to supply									

Responsibility Legend		Responsibility Legend		Verification Req'd legend	
C	Client	PM	Project Manager	H	Mandatory Hold Point
A	Authority	QA	QA Rep	W	Witness Point
X	Sub-Contractor	IN	Inspector	V	Verification
S	Surveyor	PE	Site/Project Engineer	R	Review
D	Design	F	Foreman/ Supervisor	SO	Set Out
		LH	Leading Hand	M	Monitor

Revisions shall be shown in italics					
Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
0	Initial Issue				

Released under RTI - DTMR

INSPECTION AND TEST PLAN
Unbound Pavements

Inspection and Test Plan		**ITP No.**	GCE-ITP-005	**Final Sign Off**			**Rev0 10/12/2024**	
Unbound Pavements		**Job No:**	1007	**GCE Rep**				
Proposed Works:	Chainage 0-100	**Principal:**	GCE		(Name)	(Signed)	(Date)	
Activity:	Pavement	**Contract:**		**Client Rep**				
Location:	Mt Walker Quarry, Christensen Road.				(Name)	(Signed)	(Date)	

Preliminaries

Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR. MRTS 05 (Hold Point 1)	Client Approval	Pre-establishment	H							
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	GCE	Pre-establishment	W							

Pre-Construction Activities

Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Conformance of underlying structure / foundation	Work lot Records	Validate conformance of underlying work lot		W							Underlying lot number:
4	Submission of Quarry Certification for Type 2.1 & Type 2.3 material prior to delivery or placement of material.	MRTS 05 – Hold Point 2 (6.3)	Current copies of Quarry Certificates to be forwarded.		M							Attach Quarry Test Certificates
5	Subsoils	MRTS 03/04	Verify if installed.		W							

Released under RTI - DTMR

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
6	Check the material compliance prior to incorporation into the pavement. Type 2.1 and 2.3 material - Coarse Component - Fines Component - Particle Size Distribution - Repeat Load Triaxial & California Bearing Ratio test	MRTS 05 – Hold Point 5	Verify & validate the test results in accordance with design requirement for materials. Material to comply fully. Construction of Trial Pavement		H							

Construction												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
7	Check the necessary equipment for the construction	MRTS 05	Equipment capable of performing efficiently as described in the Construction Method Statement.		W							
8	Layer Thicknesses	MRTS 05	Compacted layer thicknesses shall be: 75-200mm for layers other than base & sub- base. 100-150mm for base or sub-base.		W							
9	Transverse Construction Joint Placement		Cut back to a vertical sound face prior to next layer		W							
10	Check the compaction requirement.	GCE Drawings	CBR15		W							
11	Check and verify the horizontal tolerance.		Horizontal -For Pavement Not adjacent to any other structure / road, transverse tolerance shall be - 50 mm to +250 mm (+ mean increase width) -For pavement adjoining with an		W							

Released under RTI - DTMR

Construction												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
			existing pavement / structure the new work shall be joined neatly with to the existing pavement.									
12	Check and verify vertical tolerances		Primary tolerance shall be ± 15 mm		W							
13	Check the deviation from straight edge		The deviation from 3 m long straight edge placed anywhere on the surface of the layer shall not exceed 5 mm.		W							
14	Cross fall		Not depart from design cross fall by 3.0% absolute.		W							

Construction Compliance Testing												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
15	Check visible deflection by proof rolling of 20 Tonne compactor.	MRTS05 – 9.4.7	If there is any visible deflection/ movement additional test may require.		W							
16	Final acceptance of the lot (Upon placement and completion of all the pavement layers for a specific location)	Construction Environmental & Quality Management Plans	Records attached all works within tolerance, NCR's disposition (if any). Required Environmental controls still in place		W							Complete Test records for all layers placed and compacted prior to lot close out.

Responsibility Legend		Responsibility Legend		Verification Req'd legend	
C	Client	PM	Project Manager	H	Mandatory Hold Point
A	Authority	QA	QA Rep	W	Witness Point
X	Sub-Contractor	IN	Inspector	V	Verification
S	Surveyor	PE	Site/Project Engineer	R	Review
D	Design	F	Foreman/ Supervisor	SO	Set Out
		LH	Leading Hand	M	Monitor

Revisions shall be shown in italics					
Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
0	Initial Issue				

Released under RTI - DTMR

INSPECTION AND TEST PLAN
Asphalt Placement

Inspection and Test Plan		**ITP No.**	GCE-ITP-04	**Final Sign Off**			**Rev0 10/12/2024**	
Asphalt		**Job No:**	1007	**GCE Rep**				
Proposed Works:	Asphalt	**Principal:**	GCE		(Name)	(Signed)	(Date)	
Activity:	Asphalt	**Contract:**		**Client Rep**				
Location:					(Name)	(Signed)	(Date)	

Preliminaries

Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR.	Client Approval	Pre-establishment								
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	GCE	Pre-establishment								

Requirements

Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Asphalt Quality Plan Accepted	GCE SMP, GCE WMS, GCE EMP, GCE IWMS Docs, Pre-Start	* MRTS30 Clause 5.2 Written approval of Asphalt Quality Plan.	Each Project								
4	Site verification survey	Design drawings	* Survey within tolerances	Prior to placing asphalt	> GPS / Dumpy Level / Laser Level							
5	Asphalt Mix Design Accepted	GCE WMS, Design Drawings, MRTS30	* MRTS30 Clause 7.3.3 Supplier and mix design approval certificate from Main Roads, as defined in Technical Note 148 *Asphalt Mix Design Registration.*	Each design								

Released under RTI DTMR

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
6	Incorporation of Asphalt into works	GCE WMS, Design Drawings, MRTS30	* MRTS30 Clause 7.4.1 * Asphalt shall be produced by a registered manufacturer from nominated plant. Non-conforming mix designs, shall not be incorporated unless accepted by Administrator prior to commencement.	Each Design								
7	Authority to Proceed		* Underlying lot closed. Time SMC arrive on site.	Each Lot								
8	Preparation of Existing Surface	GCE WMS, Design Drawings, MRTS30	* MRTS30 Clause 8.2.2 Surface shall not be wet and swept using rotary broom to remove loose or deleterious material present.	Each lot								
			* MRTS30 Clause 8.2.3 – Crack Filling Contractor shall mark out, the extent of crack filling to be carried out in the presence of Administrator prior to placement of any aspha	Each lot								
			* MRTS30 Clause 8.2.4 – Strain Alleviating Fabric Contractor shall mark out, the extent of strain alleviating fabric strips to be applied in the presence of Administrator	Each lot								

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
9	Tack coat	GCE WMS Design Drawings, MRTS30	* MRTS30 Clause 8.9 * Tack coat will be applied at an application rate given in Clause 8.9 of MRTS30 * Bitumen Emulsion tack coat, unless approved by the Administrator must comply with AS1160. AP-PWT51 provides guidance on the asphalt tack coating.	Each lot								
10	Surface Pavement Temperature	GCE WMS,	* MRTS30 Clause 8.7	Each lot								

Released under RTI - DTMR

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
		Design Drawings, MRTS30	* Pavement surface temperature be above minimum surface temperature as outlined in the AQP. Unless accepted by Administrator, placement shall not commence, unless surface temperature is above _____ ^{O}C – Outlined in approved AQP.									
11	Corrector Course		* MRTS30 Clause 8.6.2 * Area to be satisfactory to superintendent. If required, work methods are to be detailed in AQP and approved by administrator prior to commencement of works.	Each Lot								
12	Loading and delivery of Asphalt	GCE WMS, Design Drawings, MRTS30, AS/NZS 2150.	* MRTS30 Clauses 7.4.5 and 7.5 * The transport of asphalt must be in accordance with the requirements in AS/NZS 2150. Copy of all dockets shall be provided to the administrator.	Frequency to be nominated by contractor.								* Test Records Asphalt Dockets
13	Laying of Asphalt	GCE WMS, Design Drawings, MRTS30	* MRTS30 Clause 8.3 - *Method of Placement*. * Layer thickness acceptable to superintendent within the limits outlined in MRTS30 Table 8.6.1. * Laying of asphalt shall not continue when the pavement surface is wet, or rain is imminent. Laying of asphalt will be in accordance to MRTS30 Clause 8.7 to 8.8.	Each Lot								Test Records

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
14	Discharge and first rolling Temperatures	GCE WMS, Design Drawings, MRTS30	* Asphalt delivery, paving and compaction temperatures shall be measured and recorded in accordance with MRTS30 Clause 8.8 Reheating of the delivered asphalt shall not be permitted.	Each delivered load.								Test Records

Released under RTI - DTMR

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
15	***Compliance Testing:*** Geometrics/Surface Shape	GCE WMS, Design Drawings, MRTS30	* MRTS30 Clause 9.6 * Surface shape shall be tested and reported in accordance with Test Method Q712 (Three Meter Straightedge) Requirements outlined in MRTS30 Table 9.6.2	MRTS30 Table 5.4.1-D.								Test Results
16	***Compliance Testing:*** Course Position	GCE WMS, Design Drawings, MRTS30	* MRTS Clause 9.5 * Vertical level – Where surfacing surface is required to tie-in with existing, the pavement to be construct as to drain surface water. Horizontal location – where alignment of pavement with existing, new work to be joined in smooth manner.	Each lot								
17	Clean up and open to traffic	GCE WMS	* Clean road off of all lose materials, and temporary works in a manner which complies with environmental requirements at the time. Field work complete to the satisfaction of the Principal's Representative, subject to any outstanding test results being within allowed tolerance.	Each Lot	* ITP							
18	***Compliance Testing:*** Compaction (% insitu air voids)	MRTS30, AS/NZS 1891.9.2, Q306E or Q306C	* MRTS30 Clause 9.2 * Core samples testing were completed in accordance to AS/NZS 1891.9.2, Q306E or Q306C * Nuclear Gauge testing were completed in accordance to Q306E. Submission of results to contractor, in accordance to MRTS30 Clause 5.6		MRTS30 Table 5.4.1-D.							Test records

Released under RTI - DTMR

Requirements												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
19	Surface corrections	GCE WMS, Design Drawings, MRTS30	* Finished pavement must conform with MRTS30 Table 9.4.2 (Layer thickness), Clause 9.4.3 (Course thickness tolerances) and Clause 9.6 (Surface Shape). * Determination of actual layer thickness will be in accordance to Clause 9.4.4 (a) and (b). Administrator will determine if surface corrections are required if there are lot non-conformances.	Each Lot								* Test records * JHA
20	Lot Closed	GCE WMS	Lot conforms to specifications	Each lot	* ITP							Test Records

Responsibility Legend		Responsibility Legend		Verification Req'd legend		Revisions shall be shown in italics					
C	Client	PM	Project Manager	H	Mandatory Hold Point	Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
A	Authority	QA	QA Rep	W	Witness Point						
X	Sub-Contractor	IN	Inspector	V	Verification	0	Initial Issue				
S	Surveyor	PE	Site/Project Engineer	R	Review						
D	Design	F	Foreman/ Supervisor	SO	Set Out						
		LH	Leading Hand	M	Monitor						

Released under RTI - DTMR

INSPECTION AND TEST PLAN
Kerb Prep and Installation

Inspection and Test Plan		**ITP No.**	GCE-ITP-011	**Final Sign Off**			**Rev0 10/12/2024**	
		Job No:		**GCE Rep**				
Proposed Works:		**Principal:**			(Name)	(Signed)	(Date)	
Activity:		**Contract:**		**Client Rep**				
Location:					(Name)	(Signed)	(Date)	

Preliminaries												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR. MRTS 30 – Hold Point 7	Client Approval	Pre-establishment								
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	Client to provide	Pre-establishment								

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Site inspection Existing services		Inspect for hazards and site conditions. Locate and define existing services	Prior to commencing works	Visual							
4	Survey confirmation		Confirm Kerb set out and location including Finish Heights with offset pegs. Kerb Heights allow correct fall and drainage	Prior to commencing works	Plans / Surveyor							
5	Confirm Kerb Type & Profiles		Correct kerb profile being used. Correct council standard Correct Kerb for Location	Prior to commencing works	Plans / Specifications							

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 275 of 300

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
6	Subsoils Installed if required		Sub soil drains installed as per plan and requirements	Prior to commencing works	Visual							
7	Prep and trim kerb pad	SD-1033	Kerb pad is correct CBR Material Kerb pad is correct thickness. Kerb pad is trimmed to correct height. Kerb pad trimmed to allow kerb machine. Kerb pad is compacted and tested. Site measure for correct alignment for line marking and Parking spaces	Prior to placement of Kerb	Visual Site measure Compaction test							**Witness point** **Level 1 Inspection and testing**
8	Kerb Placement		Kerb Pegging and stringline are in correct line & Height. Correct mould being used. Correct MPA concrete being used. Concrete testing at correct intervals Correct Tool & Expansion joints installed. Kerb finish neat and Correct.	During Kerb placement	Visual Site measure							Witness point
9	Kerb Backfill		Kerb has received minimum curing time.	Prior to Backfilling	Visual							Witness point

Responsibility Legend		Responsibility Legend		Verification Req'd legend		Revisions shall be shown in italics					
C	Client	PM	Project Manager	H	Mandatory Hold Point	Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
A	Authority	QA	QA Rep	W	Witness Point						
X	Sub-Contractor	IN	Inspector	V	Verification	0	Initial Issue				
S	Surveyor	PE	Site/Project Engineer	R	Review						
D	Design	F	Foreman/ Supervisor	SO	Set Out						
		LH	Leading Hand	M	Monitor						

Released under RTI - DTMR

INSPECTION AND TEST PLAN
Stormwater Construction

Inspection and Test Plan		**ITP No.**		**Final Sign Off**			**Rev0 10/12/2024**	
Stormwater Construction		**Job No:**		**GCE Rep**				
Proposed Works:	Stormwater Drainage	**Principal:**			(Name)	(Signed)	(Date)	
Activity:	Stormwater Construction	**Contract:**		**Client Rep**				
Location:					(Name)	(Signed)	(Date)	

Preliminaries												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/ Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
1	Documentation, ITP's, insurances, SWMS, etc	In accordance with PPR.	Client Approval	Pre-establishment	(W)							
2	Traffic plan	Specification Traffic Control Plan to be prepared by approved traffic control company.	Client to provide	Pre-establishment	(W)							

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
3	Approved Management Plans in place	GCE SMP, GCE WMS, GCE EMP, GCE IWMS Docs, Pre-Start	Documents reviewed & relevant to this lot. All preconstruction checks and authorisations completed: Safety Plan, Quality Plan, Environmental Plan (Prepared and Tool boxed)		(W)							Pre Start documentation to be maintained each morning and filed within the project data log
4	Work Area and Test Lot Identified	Design Drawings	Lot Registered prior to start of work		(W)							
5	Set out / Survey Works: Installation of Survey Pegs, Physical	Design Drawings	Surveyor to install centre pegs with sufficient offset so as to square or plum accurately									Set out co-ordinates are to be confirmed by the project surveyor

Released Under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 277 of 300

Pre-Construction Activities												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
	Mark out of Pit, Locations											
6	Permit to Excavate	DBYD, GCE Excavation Permit Form	All Existing services and structures within and adjacent to the site have been identified and located	Physical Mark Out of Existing Services. All Crew to be made aware of existing services, exclusion zones and permit requirements.	Prior to Excavation, (W)							Excavation Permit

Installation of Pipework												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
7	Supply pipe and fittings	GCE WMS, Design Drawings	Incoming inspection of pipe materials and fittings completed (correct size, material type, Correct qty and handled / stacked appropriately to avoid damage)		(W)							Pipe delivery dockets
8	Excavation for pipe installation	GCE WMS, Design Drawings	Excavation of Unsuitable material if required o Material required for special purposes identified and separated o Cuttings free draining.		(W)							Test Results
9	Bedding / Haunch zone	GCE WMS, Design Drawings, pipeline specification	o Imported crushed rock bedding material single size aggregate be used for bedding and haunch zones o Bedding Zone 1 (under pipe) to be compacted with two passes of a vibrating plate o Bedding Zone 2 (haunch zone) to be compacted by hand tamping or mechanical compaction in layers. o Bedding Zone 3 (above pipe) bedding material compacted in layers using two passes of a vibrating plate o Correct Trench construction type		(W)							

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 278 of 300

Installation of Pipework												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
10	Laying Pipe	GCE WMS, Design Drawings, pipeline specification	o Ends cleaned of foreign matter prior to placing o Grade (if any) of pipes correct o Laid to correct vertical level tolerance o Laid to correct horizontal tolerance o Inspection carried out prior to backfill		(W)							
11	Backfilling Trench	GCE WMS, Design Drawings, pipeline specification	o Backfill material as per specification installed to standard drawing dimensions o Material to be compacted in layers	Visual	(W)							

Restoration of Site												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
21	Disestablishment of plant	WMS	All mobile plant, containers, site sheds, toilet facilities etc removed from the site	Visual	(W)							Site Diary Note
22	Establish mobile traffic management.	WMS, standard drawings	All barriers etc removed from road and site prepared for milling & resealing as necessary	Visual	(W)							Site Diary Note
23	Restoration of Road Surface	WMS, standard drawings	Road surface restored to Standards	Visual	(W)							Site Diary Note
24	Disestablishment of Contra-Flow	WMS, standard drawings	Traffic island reconstructed and line markings replaced to IPWEA Standards	Visual	(W)							Site Diary Note

Supply of "As Constructed" records												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
25	Supply of test results	WMS, Design drawings	Supply of concrete batch testing records Supply records of approved design concrete mix delivered to site		(W)							
26	Supply as constructed data as per contract	WMS, Design drawings	GCE to supply		(W)							

Released under RTI - DTMR

RTI-5755 Release.pdf - Page Number: 279 of 300

Supply of "As Constructed" records												
Item No.	Activity or Description	Spec/Doc Ref No	Acceptance Criteria	Test/ Inspection Frequency	Test/Inspection Method	GCE		Client		Asset Owner		Comments & Records
						Signed	Date	Signed	Date	Signed	Date	
27	Supply of test results	WMS, Design drawings	Supply of concrete batch testing records Supply records of approved design concrete mix delivered to site		(W)							Letter of acceptance

Responsibility Legend		Responsibility Legend		Verification Req'd legend		Revisions shall be shown in italics					
C	Client	PM	Project Manager	H	Mandatory Hold Point	Rev.	Amendment	Approved/ Authorised	Date	Client Review	Date
A	Authority	QA	QA Rep	W	Witness Point						
X	Sub-Contractor	IN	Inspector	V	Verification	0	Initial Issue				
S	Surveyor	PE	Site/Project Engineer	R	Review						
D	Design	F	Foreman/ Supervisor	SO	Set Out						
		LH	Leading Hand	M	Monitor						

Released under RTI - DTMR

From: N/R
To: SCR Corridor and Land Management Inbox; Ken W Jensen
Cc: N/R
Subject: GCE TMR24-042933
Date: Thursday, 16 October 2025 10:52:32 AM
Attachments: Outlook-qha4vs0q.png
Outlook-r5doo1v5.png
Outlook-rnsqh3mq.png
Outlook-vtr4q4u2.png
Outlook-r0iz5xfq.png
Outlook-pi04hlqu.png

Good Moring Ken

Following the submission of documents on September 24 2025 and additional items on October 3 2025 in accordance with the conditional approval for the Rosewood Warrill View Road - Christensen Road intersection upgrade, could you please inform us:

- If you have all of the required information to proceed with the review - final approval; and
- Potential date that the prestart meeting can likely be scheduled?

Please don't hesitate in contacting me if you have any further queries.

Thanks

N/R **Environmental Engineer | GCE Contractors Pty Ltd**

Mobil N/R
Email: N/R @gcecontractors.com
Website: www.gcecontractors.com.au
Address: 55 McDonald Road, Windsor, QLD 4030

Released under RTI - DTMR

Queensland Government

Traffic Control Permit

(*Transport Infrastructure Act 1994, section 33(1)*)

Permit holder details

Permit holder	Number
Traffex Australia Pty Ltd	0317

Permit holder's postal address	
49 Chetwynd St	
Loganholme, QLD	Postcode 4129

Contact person	Phone number
N/R	+617 3821 4522

Email address
design@civforce.com.au

Applicant
GCE CONTRACTORS

Applicant contact name	Phone number
N/R	

Emergency Site Contact	Mobile Phone
N/R	

Permit approval details

Permit number	Commencement date	Expiry date
TCP2025-50316	29/09/2025	31/10/2025

Work Project Number

Structure or activity
Traffic Control – Road upgrade works In accordance with TMR approval (TMR24-042833) Works performed by GCE Contractors (Application ID: 2025-62447)

Approved location
Rosewood-Warrill View Road (305), MOUNT WALKER between Murry Rd and Local Rd

Important information:

The decision of the Department of Transport and Main Roads (DTMR) to issue a permit is NOT an endorsement or approval of the safety or effectiveness of the traffic guidance scheme (TGS) and does NOT imply that the TGS complies with any or all applicable laws, regulations, by-laws, codes, standards, guidelines or manuals. DTMR disclaims any responsibility or liability that may arise from or in connection with the TGS submitted by the applicant. DTMR will conduct site audits of the TGS periodically, at the discretion of the department.

RTI - DTMR

Authorising officer
Delegate's name
Ali Soltani
Position
Principal Advisor
Date Works Agreement Authorised
18/09/2025
TMR office
Gold Coast Office, 36 - 38 Cotton Street, Nerang, Qld 4211
TMR office phone number
(07) 5563 6600

Conditions applying to this permit	
Works proposal documents – attached	
Conditions applying to all works (including standard conditions)	
A1	The permit holder must be registered with the TMRs' Traffic Management Registration Scheme, with appropriate scope of registration.
A2	**The Permit Holder must notify TMR South Coast Region Traffic Management Centre (STMC) by calling 1800 131940 at the following times:** • **Minimum One (1) hour prior to implementation of the Traffic Management Plan** • **Immediately in the event of any unexpected disruption to traffic or a traffic incident at or near the site** • **Immediately prior to departure of site after all traffic control devices are removed** **A contact name and phone number of the responsible person on site must be supplied**
A3	**It is the responsibility of the permit holder to make sure the TGSs to be implemented are suitable to the existing road and traffic condition and a proper Risk Assessment is undertaken prior to the implementation, in terms of safety and efficiency on the road network and comply with the current version of Queensland MUTCD, Part 3 and QGTTM requirements.** **Any significant changes to the TGSs covered under this permit must be submitted to the department for acceptance, prior to the implementation.**
A4	**Approval from the Scenic Rim Regional Council must be obtained for signage and traffic management on council controlled local roads, prior to the implementation.**
A5	**Traffic must not be held for more than 2 minutes at any given time.** **During intermittent stoppage (Hold/Release setup), traffic queue must be monitored regularly to ensure the delay to traffic and the queue length is within the acceptable limit, in accordance with the latest version of Queensland MUTCD, Part 3 & QGTTM requirements.**

Released under RTI DTMR

	End of Queue must be managed in accordance with the latest version of Queensland MUTCD, Part 3 & QGTTM requirements, to ensure safety of road workers and vehicles on the road at all times.
A6	**Maintain lane width plus edge clearance to delineation in accordance with the current version of QGTTM Part3, Section 2.5.8 (Table 2.5) at all times.**
A7	Traffic control, including the implementation of traffic control devices, shall only be performed by suitably accredited employees of the permit holder. Proof of accreditation must be carried at all times while on work site / event area for the duration of works / event.
A8	This permit is only valid for the times, dates and locations specified and is not transferrable. The permit holder must contact TMR to discuss any changes and obtain written approval of changes to the permit prior to conducting any works and/or event.
A9	This permit only grants permission for the installation of temporary traffic control for the nominated work and/or event site and does not negate the need for the permit holder to have all other necessary approvals required by another authority, occupier or owner. Examples include (but are not limited to) a Special Event Permit from Queensland Police Service; a Road Corridor or Public Utility Permit from TMR; appropriate instruments from Local Government, private property owner or lease holder. Failure to obtain such approvals and/or meet the conditions of such approvals will result in the immediate cancellation of this Traffic Control Permit (TCP).
A10	On receipt of this TCP, the permit holder must advise all impacted Public Transport Service authorities of any lane or road closures or the need to relocate services such as a designated bus stop.
A11	On receipt of this TCP, the permit holder must contact and advise all Emergency Service Authorities of any lane or road closures.
A12	A copy of this TCP is on site and available for inspection.
A13	In the event of excessive traffic disruptions or other unforeseen events (including but not limited to extreme weather), TMR reserves the right to direct the Permit holder to cease work and return the road to normal operation.
A14	TMR may direct the permit holder to take immediate action to safely return the lane or road to normal operation and then cancel the permit if the permit holder fails to comply with the TCP or causes a safety hazard.
A15	Signage must be erected in locations that do not impede pedestrians & cyclists, and do not block sight lines.
A16	All works to be carried out in accordance with the Traffic Management Plan and Traffic Guidance Scheme(s) associated with this Permit.
A17	The permit holder must keep current the "Emergency Site Contact" details associated with this TCP.

Schedule applying to these Works

Start date	End date	Start time	End time	Days of the week

Released Under RTI by TMR

Traffic Control - Northbound single lane closure with intermittent stoppage (hold and release), speed reduction and advanced warning signage in both directions on Rosewood-Warrill View Road (305), MOUNT WALKER between Murry Rd and Local Rd.				
29/09/2025	31/10/2025	12:00 AM	12:00 AM	Mon,Tue,Wed,Thur,Fri,Sat,Sun

Enquiries:

Position title:	South Coast Region - Corridor and Land Management Team
District name:	South Coast Region
Contact email:	scr.calm@tmr.qld.gov.au
Telephone number:	(07) 5563 6600

Released under RTI - DTMR

Document Transmittal Register

NIGEL FLETCHER & ASSOCIATES
ENGINEERS & PROJECT MANAGERS

Project: Mt Walker Quarry Christensen Road Upgrade Works
Client: GCE Contractors

Christensen Road Intersection IFC

Project No 210173C
Doc Trans_Rev_018

| Project Team | Issued by: | | |

From: N/R
To: N/R SCR Corridor and Land Management Inbox; Ken W Jensen
Subject: RE: GCE TMR24-042833 Documentation Submission
Date: Friday, 3 October 2025 10:34:24 AM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png
image010.png
image011.png
image012.png
image013.png
image014.png
210173C NFA Doc Trans 018.pdf
210173C-LET 03.pdf

Ken,

We have uploaded additional items to the link below. I have also attached to this email for ease of reference.

Let me know if you need anything else.

Kind Regards,

N/R | **GCE Contractors Pty Ltd**
Operations Manager

Mobile N/R
Email N/R gcecontractors.com
Website: www.gcecontractors.com.au

IMPORTANT NOTICE:
This e-mail and any attachments to it is intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. If you receive this e-mail in error, please immediately delete it from your system and notify the sender. You must not disclose copy or use any part of this e-mail if you are not the intended recipient. The sender is not responsible for any unauthorised alterations to this e-mail or attachments to it.

From N/R @gcecontractors.com>
Sent: Wednesday, 24 September 2025 5:42 PM
To: scr.calm@tmr.qld.gov.au; ken.w.jensen@tmr.qld.gov.au

Released under RTI - DTMR

Cc: N/R @gcecontractors.com>
Subject: GCE TMR24-042833 Documentation Submission

Hi Department of Transport and Main Roads and Ken,

Please use this email as GCE Contractors formal submission for TMR24-042833 Section D-21 Prestart Meeting documentation.

Please review the attached documents in the shared folder below to confirm bond amount and continue with progression to a prestart meeting.

N/R

Kind regards,

N/R **GCE Contractors Pty Ltd**
Undergraduate Civil Engineer
Office Address: 13A/191 Hedley Ave, Hendra, Brisbane
Workshop Address: 55 McDonald Road, Windsor, Brisbane
Mobile: N/R
Office: (07) 3357 7430
Email N/R @gcecontractors.com
Website: www.gcecontractors.com.au

IMPORTANT NOTICE:
This e-mail and any attachments to it is intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. If you receive this e-mail in error, please immediately delete it from your system and notify the sender. You must not disclose copy or use any part of this e-mail if you are not the intended recipient. The sender is not responsible for any unauthorised alterations to this e-mail or attachments to it.

Released under RTI - DTMR

Document Transmittal Register

NIGEL FLETCHER & ASSOCIATES
ENGINEERS & PROJECT MANAGERS

Project: Mt Walker Quarry Christensen Road Upgrade Works
Client: GCE Contractors

Blundells Bridge Approval

Project No 210173C
Doc Trans_Rev_021

Project Team: N/R

SRRC
TMR

A- Approval P- Prelim R- Revision X- Info T- Tender C- Construct
P- Print C- CD F- File
E- Email

Issued by:

Document Ref. No.	Document Title	Date & Drawing Revision Issued:
Project Drawings		
Detail Design Drawings		
C000	Christensen Road Cover Sheet	B C C D F
C001	Christensen Road General Notes Sheet 1 of 2	D F
C002	Christensen Road General Notes Sheet 1 of 2	A
C003	Christensen Road Site Layout Plan	D F
C004	Christensen Road Typical Cross Section	B C C D D F
C200	Christensen Road Earthworks Plan Sheet 1 of 7	A C
C201	Christensen Road Earthworks Plan Sheet 2 of 7	A C
C202	Christensen Road Earthworks Plan Sheet 3 of 7	A C
C203	Christensen Road Earthworks Plan Sheet 4 of 7	A C
C204	Christensen Road Earthworks Plan Sheet 5 of 7	A C
C205	Christensen Road Earthworks Plan Sheet 6 of 7	A C
C206	Christensen Road Earthworks Plan Sheet 7 of 7	A C
C220	Christensen Road Sediment and Erosion Plan Sheet 1 of 7	A C
C221	Christensen Road Sediment and Erosion Plan Sheet 2 of 7	A C
C222	Christensen Road Sediment and Erosion Plan Sheet 3 of 7	A C
C223	Christensen Road Sediment and Erosion Plan Sheet 4 of 7	A C
C224	Christensen Road Sediment and Erosion Plan Sheet 5 of 7	A C
C225	Christensen Road Sediment and Erosion Plan Sheet 6 of 7	A C
C226	Christensen Road Sediment and Erosion Plan Sheet 7 of 7	A C
C227	Christensen Road Sediment and Erosion Details	A C
C301	Christensen Road Roadworks Plan & Longitudinal Section Sheet 1 of 15	A B C C D D F
C302	Christensen Road Roadworks Plan & Longitudinal Section Sheet 2 of 15	A B C C D D F
C303	Christensen Road Roadworks Plan & Longitudinal Section Sheet 3 of 15	A B C C D D F
C304	Christensen Road Roadworks Plan & Longitudinal Section Sheet 4 of 15	A B C C D D F
C305	Christensen Road Roadworks Plan & Longitudinal Section Sheet 5 of 15	A B C C D D F
C306	Christensen Road Roadworks Plan & Longitudinal Section Sheet 6 of 15	A B C C D D F
C307	Christensen Road Roadworks Plan & Longitudinal Section Sheet 7 of 15	A B C C D F
C308	Christensen Road Roadworks Plan & Longitudinal Section Sheet 8 of 15	A B C D D F
C309	Christensen Road Roadworks Plan & Longitudinal Section Sheet 9 of 15	A B C C D F
C310	Christensen Road Roadworks Plan & Longitudinal Section Sheet 10 of 15	A B C C D F
C311	Christensen Road Roadworks Plan & Longitudinal Section Sheet 11 of 15	A B C D D F
C312	Christensen Road Roadworks Plan & Longitudinal Section Sheet 12 of 15	A B C D D F
C313	Christensen Road Roadworks Plan & Longitudinal Section Sheet 13 of 15	A B C D D F
C314	Christensen Road Roadworks Plan & Longitudinal Section Sheet 14 of 15	A B C D D F
C315	Christensen Road Roadworks Plan & Longitudinal Section Sheet 15 of 15	A B C C D F
C318	Christensen Road Roadworks Layout Plan - Interim Bend	A
C319	Christensen Road Longitudinal Sections - Interim Bend	A
C320	Christensen Road Roadworks Cross Sections Sheet 1 of 15	A B C C D F
C321	Christensen Road Roadworks Cross Sections Sheet 2 of 15	A B C C D F
C322	Christensen Road Roadworks Cross Sections Sheet 3 of 15	A B C C D F
C323	Christensen Road Roadworks Cross Sections Sheet 4 of 15	A B C C D F
C324	Christensen Road Roadworks Cross Sections Sheet 5 of 15	A B C C D F
C325	Christensen Road Roadworks Cross Sections Sheet 6 of 15	A B C C D F
C326	Christensen Road Roadworks Cross Sections Sheet 7 of 15	A B C C D F
C327	Christensen Road Roadworks Cross Sections Sheet 8 of 15	A B C C D F
C328	Christensen Road Roadworks Cross Sections Sheet 9 of 15	A B C C D F
C329	Christensen Road Roadworks Cross Sections Sheet 10 of 15	A B C C D F
C330	Christensen Road Roadworks Cross Sections Sheet 11 of 15	A B C C D F
C331	Christensen Road Roadworks Cross Sections Sheet 12 of 15	A B C C D F
C332	Christensen Road Roadworks Cross Sections Sheet 13 of 15	C C D F
C333	Christensen Road Roadworks Cross Sections Sheet 14 of 15	C C D F
C334	Christensen Road Roadworks Cross Sections Sheet 15 of 15	C C D F
C900	Catchment Layout Plan	A
C340	Christensen Road Catchment Layout Plan Sheet 1 of 12	C D D F
C341	Christensen Road Culvert Sections and Plan Sheet 2 of 12	C D D F
C342	Christensen Road Culvert Sections and Plan Sheet 3 of 12	C D D F
C343	Christensen Road Culvert Sections and Plan Sheet 4 of 12	C D D F
C344	Christensen Road Culvert Sections and Plan Sheet 5 of 12	C D D F
C345	Christensen Road Culvert Sections and Plan Sheet 6 of 12	C D D F
C346	Christensen Road Culvert Sections and Plan Sheet 7 of 12	C D D F
C347	Christensen Road Culvert Sections and Plan Sheet 8 of 12	C D D F
C348	Christensen Road Culvert Sections and Plan Sheet 9 of 12	C D D F
C349	Christensen Road Culvert Sections and Plan Sheet 10 of 12	D D F
C350	Christensen Road Culvert Sections and Plan Sheet 11 of 12	D D F
C351	Christensen Road Culvert Sections and Plan Sheet 12 of 12	D F
C352	High Impact (Red) Waterway Culvert Details	A
C353	Stormwater Details	A
C360	Christensen Road Driveway Plan and Long Section Sheet 1 of 10	A C C D F
C361	Christensen Road Driveway Plan and Long Section Sheet 2 of 10	A C C D F
C362	Christensen Road Driveway Plan and Long Section Sheet 3 of 10	A C C D F
C363	Christensen Road Driveway Plan and Long Section Sheet 4 of 10	C C D F
C364	Christensen Road Driveway Plan and Long Section Sheet 5 of 10	C C D F
C365	Christensen Road Driveway Plan and Long Section Sheet 6 of 10	C D F
C366	Christensen Road Driveway Plan and Long Section Sheet 7 of 10	C D F
C367	Christensen Road Driveway Plan and Long Section Sheet 8 of 10	C D F
C368	Christensen Road Driveway Plan and Long Section Sheet 9 of 10	C D F
C369	Christensen Road Driveway Plan and Long Section Sheet 10 of 10	D F
C400	Swept Path Layout Plan Sheet 1 of 10	C C -
C401	Swept Path Layout Plan Sheet 2 of 10	C C D F
C402	Swept Path Layout Plan Sheet 3 of 10	C C D F
C403	Swept Path Layout Plan Sheet 4 of 10	C C D F
C404	Swept Path Layout Plan Sheet 5 of 10	C C D F
C405	Swept Path Layout Plan Sheet 6 of 10	C C D F
C406	Swept Path Layout Plan Sheet 7 of 10	C D F
C407	Swept Path Layout Plan Sheet 8 of 10	C D F
C408	Swept Path Layout Plan Sheet 9 of 10	C D F
C409	Swept Path Layout Plan Sheet 10 of 10	C D F
C430	Christensen Road Signage and Linemarking Plan Sheet 1 of 8	A C
C431	Christensen Road Signage and Linemarking Plan Sheet 2 of 8	A C
C432	Christensen Road Signage and Linemarking Plan Sheet 3 of 8	A C
C433	Christensen Road Signage and Linemarking Plan Sheet 4 of 8	A C
C434	Christensen Road Signage and Linemarking Plan Sheet 5 of 8	A C
C435	Christensen Road Signage and Linemarking Plan Sheet 6 of 8	A C
C436	Christensen Road Signage and Linemarking Plan Sheet 7 of 8	A C
C437	Christensen Road Signage and Linemarking Plan Sheet 8 of 8	A C
C450	Christensen Road Pavement Plan Sheet 1 of 8	A C
C451	Christensen Road Pavement Plan Sheet 2 of 8	A C
C452	Christensen Road Pavement Plan Sheet 3 of 8	A C
C453	Christensen Road Pavement Plan Sheet 4 of 8	A C
C454	Christensen Road Pavement Plan Sheet 5 of 8	A C
C455	Christensen Road Pavement Plan Sheet 6 of 8	A C
C456	Christensen Road Pavement Plan Sheet 7 of 8	A C
C457	Christensen Road Pavement Plan Sheet 8 of 8	A C
C458	Christensen Road Pavement Details	A
SKC231-1	Roadworks Layout Plan Option 1 Sheet 1 of 4	A
SKC232-1	Roadworks Layout Plan Option 1 Sheet 2 of 4	A
SKC233-1	Roadworks Layout Plan Option 1 Sheet 3 of 4	A
SKC234-1	Roadworks Layout Plan Option 1 Sheet 4 of 4	A
SKC232-2	Roadworks Layout Plan Option 2 Sheet 1 of 4	A
SKC232-2	Roadworks Layout Plan Option 2 Sheet 2 of 4	A
SKC233-2	Roadworks Layout Plan Option 2 Sheet 3 of 4	A
SKC234-2	Roadworks Layout Plan Option 2 Sheet 4 of 4	A
	TMR ROADWORKS	
	Christensen Road Intersection	
C800	Rosewood-Warrill Road Intersection Cover Sheet and Location Plan	A B C C D D E E 0
C801	Rosewood-Warrill Road Intersection Standard Notes	B C D D E E E 0
C820	Demolition Layout Plan	B C C D D E E 0
C825	25 m B Double Swept Path Plan	A C C C D D D 0
C835	Rosewood-Warrill Road Erosion and Sedimentation Control Plan	C C C D D D 0
C836	Rosewood-Warrill Road Erosion and Sedimentation Control Details	B C C C D D D 0
B840	Rosewood-Warrill Road Intersection Earthworks Plan	A B B C C C 0
C860	Rosewood-Warrill Road Intersection Overall Layout Plan	C D D E E E 0
C861	Rosewood-Warrill Road Intersection Layout Plan Sheet 1 of 2	D D E E E 0
C862	Rosewood-Warrill Road Intersection Layout Plan Sheet 2 of 2	A D D E E E 0
C863	Rosewood-Warrill Road Sections	A B B C C C 0
C864	Rosewood-Warrill Road Longitudinal Sections	C D D E E E 0
C865	Rosewood-Warrill Road Cross Sections Sheet 1 of 3	A C D D E E E 0
C866	Rosewood-Warrill Road Cross Sections Sheet 2 of 3	C D D E E E 0
C867	Rosewood-Warrill Road Cross Sections Sheet 3 of 3	C D D E E E 0
C868	Christensen Road Longitudinal Sections	A D D E E E 0
C869	Christensen Road Cross Sections Sheet	A B B C C C 0
C870	Rosewood-Warrill Road Intersection Signage and Linemarking Plan Sheet 1 of 2	C D D E E E 0
C871	Rosewood-Warrill Road Intersection Signage and Linemarking Plan Sheet 2 of 2	C D D E E E 0
C875	Rosewood-Warrill Road Pavement Layout Plan Sheet 1 of 2	A B B C C C 0
C876	Rosewood-Warrill Road Pavement Layout Plan Sheet 2 of 2	A B B C C C 0
C880	Rosewood-Warrill Road Catchment Layout Plan	A A 0
C890	Rosewood-Warrill Road Intersection Site Line Plan	B C C D D D 0
C891	Rosewood-Warrill Road Stormwater Layout Plan Sheet 1 of 2	A B B C C C 0
C892	Rosewood-Warrill Road Stormwater Layout Plan Sheet 2 of 2	A B B C C C 0
C895	Rosewood-Warrill Road Stormwater Culvert Sections Sheet 1 of 2	C D D E E E 0
C896	Rosewood-Warrill Road Stormwater Culvert Sections Sheet 2 of 2	C D D E E E 0
C897	Rosewood-Warrill Road Stormwater Longitudinal Sections	A B B C C C 0
C898	Rosewood-Warrill Road Stormwater Calculations Sheet	A B B C C C 0
C899	Rosewood-Warrill Road Stormwater Details	A A B B C 0
	Blundells Bridge One Way Arrangement	
C900	Blundells Bridge Locality Plan	A B B
C901	Blundells Bridge Existing Layout Plan	A B B
C910	Blundells Bridge Signage and Linemarking Plan	A B B
C911	Blundells Bridge Detail Signage and Linemarking Plan	A B B
C920	Blundells Bridge 26 m B-Double Swept Path	A B B
C930	Blundells Bridge Safe Site Distance Layout Plan (Cars)	A B B
C931	Blundells Bridge Safe Site Distance Layout Plan (Trucks)	A B B
C935	Blundells Bridge Safe Site Distance Longitudinal Section (Cars)	A B B
C936	Blundells Bridge Safe Site Distance Longitudinal Section (Trucks)	A B B
Electronic Files		
Reports		

Under RTI - DTMR

MT WALKER QUARRY HAUL ROAD
ROSEWOOD WARRILL VALLEY VIEW ROAD
BLUNDELLS BRIDGE ONE WAY ARRANGEMENT

SCHEDULE OF DRAWINGS

C900	LOCALITY PLAN & NOTES
C901	EXISTING LAYOUT PLAN
C910	SIGNAGE AND LINEMARKING LAYOUT PLAN
C911	DETAIL SIGNAGE & LINEMARKING PLAN
C920	26m B-DOUBLE SWEPT PATHS
C930	SAFE SIGHT DISTANCE LAYOUT PLAN - PASSENGER CARS
C931	SAFE SIGHT DISTANCE LAYOUT PLAN - TRUCKS
C935	SAFE SIGHT DISTANCE LONGITUDINAL SECTIONS - PASSENGER CARS
C936	SAFE SIGHT DISTANCE LONGITUDINAL SECTIONS - TRUCKS

N

LOCALITY PLAN
N.T.S.

GENERAL NOTES

1. CONTRACT DOCUMENTATION
ALL DRAWINGS UNDER THIS CONTRACT ARE TO BE READ IN CONJUNCTION WITH THE TMR'S SPECIFICATION RELEVANT TO THE WORKS.

2. SURVEY INFORMATION
CONTROL SURVEY INFORMATION WILL BE ESTABLISHED ON SITE BY THE CONTRACTOR'S SURVEYOR. SETOUT INFORMATION SHALL NOT BE OBTAINED BY SCALING FROM THESE DRAWINGS.

3. DATUM
DATUM AS SUPPLIED BY THE PRINCIPAL'S SURVEYOR.

4. EXISTING SURVEY CONTROL STATIONS
THE CONTRACTOR IS TO ENSURE THAT SURVEY CONTROL STATIONS ARE NOT DAMAGED OR DISTURBED IN ANY WAY BY CONSTRUCTION ACTIVITIES.

5. EXISTING SERVICES
EXISTING SERVICES LOCATIONS WHERE SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CONTACT THE RELEVANT AUTHORITIES TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING SERVICES. WHERE PROPOSED SERVICES CROSS ANY EXISTING SERVICES THE CONTRACTOR SHALL POT HOLE AND RECORD THE SIZE LOCATION AND DEPTH OF THE EXISTING SERVICES. ALL PRIVATE SERVICES SHALL BE LOCATED IN LINE AND DEPTH PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ARRANGE FOR ANY DEVIATION OF SERVICES TO BE CARRIED OUT BY THE ASSET OWNER OR THEIR NOMINATED REPRESENTATIVE.

6. SITE ACCESS
THE CONTRACTOR SHALL GAIN ACCESS TO THE WORK SITES AT LOCATIONS APPROVED BY THE SITE MANAGER. FREEDOM OF ACCESS TO PRIVATE PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. ALL SUBCONTRACTORS SHALL WORK WITHIN THE APPROVED CONSTRUCTION MANAGEMENT PLAN.

7. PROVISION FOR TRAFFIC
PROVISION FOR TRAFFIC ON EXISTING LOCAL ROADS IS TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LOCAL AUTHORITY REQUIREMENTS.
THE CONTRACTOR IS TO TAKE PARTICULAR CARE TO ENSURE THAT VEHICULAR AND PEDESTRIAN ACCESS TO EXISTING PROPERTIES IN LOCAL STREETS IS MAINTAINED AT ALL TIMES THROUGHOUT THE COURSE OF THE WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING ALL TRAFFIC MANAGEMENT PLANS AND REPORTS TRAFFIC GUIDANCE SCHEMES FOR THE APPROVAL OF TMR AND ARRANGING, MAINTAINING AND COMPLYING WITH THE REQUIREMENTS OF ALL ROAD CORRIDOR ACCESS PERMITS REQUIRED BY TMR TO CARRY OUT THE WORKS. COUNCIL SHALL BE NOTIFIED OF ALL CORRESPONDENCE AND SUBMISSIONS TO TMR.

8. WORK BOUNDARIES
THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS WORK AREAS UNDER THIS CONTRACT. AT NO TIME SHALL THE CONTRACTOR ENTER ADJOINING PROPERTIES OR CONTRACT WORK AREAS ON THE SITE WITHOUT WRITTEN AUTHORISATION FROM THE SITE MANAGER.

9. SITE CLEARING
CLEARING AND GRUBBING SHALL BE CARRIED OUT TO ALL WORK AREAS AS SPECIFIED AND SHALL INCLUDE THE REMOVAL OF ALL REMAINING TREES AND TREE ROOTS (UNLESS NOMINATED TO BE PRESERVED), EXISTING VEGETATION, SURFACE MULCH, TIMBER, FENCES AND ANY OTHER DEBRIS. TRESS SHALL ONLY BE REMOVED IN ACCORDANCE WITH AN APPROVED VEGETATION MANAGEMENT PLAN.

10. TOPSOIL STRIPPING
ALL TOPSOIL STRIPPED FROM WORK AREAS SHALL BE REMOVED FROM SITE.

11. EARTHWORKS (GENERAL)
a) ALL FILL MATERIAL PLACED SHALL BE COMPACTED AND TRIMMED TO FINAL EARTHWORKS LEVELS AND PROFILES SHOWN ON THE CONTRACT DRAWINGS AND TESTED IN ACCORDANCE WITH THE TMR SPECIFICATION MRTS 04.
b) LOCATION & LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
c) EARTHWORKS DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE EROSION AND SEDIMENT CONTROL LAYOUT PLANS AND THE EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.
d) ALL EARTHWORKS TO BE CARRIED OUT IN ACCORDANCE WITH LOCAL AUTHORITIES STANDARD EARTHWORKS SPECIFICATION MRTS 04 AND AS3798.
e) EXCESS CUT TO BE REMOVED FROM SITE.
f) ALL BATTERS ARE 1 IN 4 UNLESS SHOWN OTHERWISE.
g) THE SUPERINTENDENT MAY ORDER ADDITIONAL TESTS. REFER TO THE TMR SPECIFICATION FOR STANDARDS OF COMPACTION AND MATERIAL STANDARDS.
h) QUALITY TESTS
QUALITY TESTS OF IMPORTED MATERIAL ARE REQUIRED AS SET OUT BY TMR.

12. TOPSOIL REPLACEMENT AND GRASSING
FOLLOWING COMPLETION OF ROADWORKS CONSTRUCTION AND BULK EARTHWORKS OPERATIONS, THE FULL EXTENT OF VERGES, BATTERS AND DISTURBED ARE TO BE RE-TOPSOILED TO A MINIMUM DEPTH OF 150mm AND TURFED.

13. TESTING
ALL TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. TESTING AUTHORITY IN ACCORDANCE WITH THE TMR'S STANDARD SPECIFICATIONS.

14. "AS CONSTRUCTED" SURVEY
"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE CONTRACTOR'S REGISTERED SURVEYOR. AS WORK PROCEEDS AS CONSTRUCTED SURVEY SHALL BE PROVIDED FOR ALL FINISHED SURFACE LEVELS, STORMWATER PIPES AND PITS, ALL PAVEMENT AND SUBGRADE LAYERS AND ALL OTHERS ROAD IMPROVEMENTS TO MEET THE REQUIREMENTS OF THE TMR MRTS 56.
THE CONTRACTOR SHALL SUPPLY ALL AS CONSTRUCTED DOCUMENTS INCLUDING MATERIAL SUPPLY CERTIFICATES, MATERIAL COMPACTION CERTIFICATES, PIPE AND CULVERT SUPPLY DOCKETS, CONCRETE COMPRESSIVE STRENGTH TESTS RESULTS (ALL CONCRETE WORKS), TWO COAT SEAL SEAL DESIGN CERTIFICATES, AS CONSTRUCTED DOCUMENTS IN PDF, CAD AND ADAC FORMAT, STORMWATER CULVERT AND PIPELINE CCTV REPORTS SUFFICIENT FOR THE CERTIFYING ENGINEER TO PREPARE CERTIFICATION OF THE WORKS PRIOR TO THE WORKS BEING SUBMITTED FOR ON-MAINTENANCE WITH TMR.

15. MAINTENANCE OF SITE CONDITION
AT THE COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.

16. DUST
a) NO VISIBLE DUST EMISSIONS MUST OCCUR AT THE BOUNDARIES OF THE SITE DURING EARTHWORKS AND CONSTRUCTION ACTIVITIES ON THE SITE.
b) THE CONTRACTOR TO PROVIDE A WATER TRUCK AS REQUIRED TO MINIMISE THE DUST PROBLEM CAUSED BY SITE TRAFFIC.

Copyright RTI - DTMR

TMR DESIGN APPROVAL

DIAL BEFORE YOU DIG www.1100.com.au

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT ©
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN : 671 139 843
M N/R
E N/R nigelfletcherassociates.com.au

PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
LOCALITY PLAN & NOTES

DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF

APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.

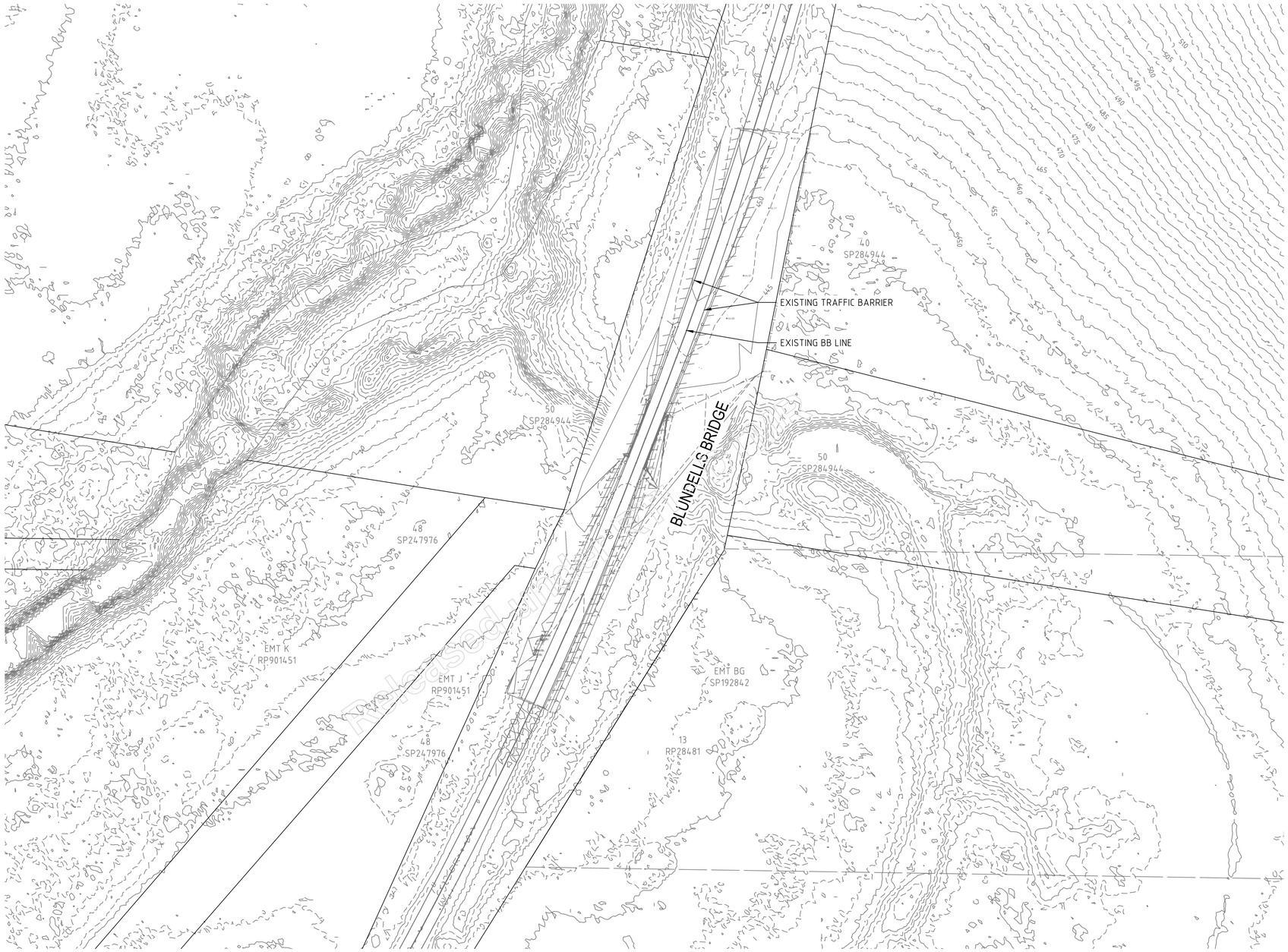
RPEQ No. :

SCALE : AS SHOWN	DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C900	VERSION: B

N

LEGEND

- ADJACENT BOUNDARY
- 45.0 EXISTING CONTOUR
- EXISTING CENTRE LINE
- EXISTING LINE MARKING
- EXISTING FENCE
- EXISTING EDGE OF BITUMEN
- EXISTING EASEMENT
- EXISTING TRAFFIC BARRIER



Released under RTI

SCALE 10 0 5 10 15 20 25 30 35 (metres)
1 : 750 AT A1

TMR DESIGN APPROVAL

DIAL BEFORE YOU DIG www.1100.com.au

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN 474 430 843
M N/R
E N/R nigelfletcherassociates.com.au

PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
EXISTING LAYOUT PLAN

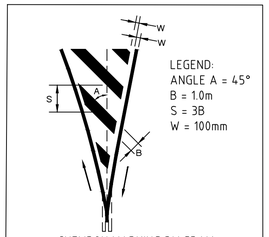
DEVEL. APPLIC. No. :		DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.	
DRAFTSPERSON : D.B.	CHECKED : NF	
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.		
RPEQ No. :		
SCALE : AS SHOWN	DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C901	VERSION: B

LEGEND

ADJACENT BOUNDARY
EXISTING CONTOUR
EXISTING CENTRE LINE
EXISTING LINE MARKING
EXISTING FENCE
EXISTING EDGE OF BITUMEN
EXISTING EASEMENT
EXISTING TRAFFIC BARRIER
EXISTING LINE TO BE REMOVED

LEGEND:

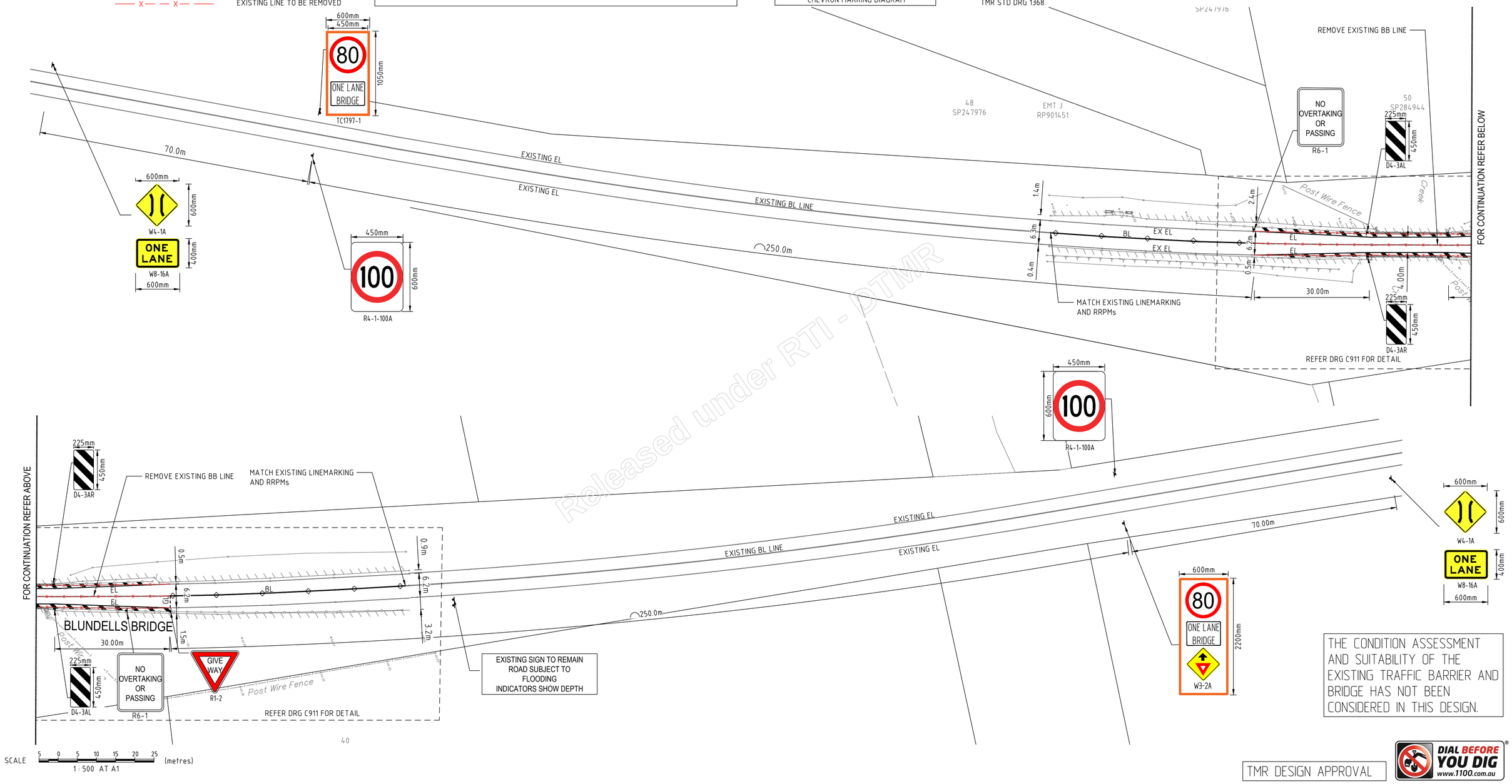
BL BARRIER LINES (TWO-WAY) — 80 / 80 / 80
EL EDGE LINE — 150
BI-DIRECTIONAL RAISED RETROREFLECTIVE PAVEMENT MARKER (RRPM) — 600 600 600 600 600 600 600 600 600
GL GIVE WAY LINE — 300
CHEVRON MARKING



LEGEND:
ANGLE A = 45°
B = 1.0m
S = 3B
W = 100mm
CHEVRON MARKING DIAGRAM

NOTES:

1. LINE-MARKING AND SIGNAGE IS TO BE INSTALLED IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. ALL SIGNAGE TO BE SIZE "A" UNLESS NOTED.
3. EXTENT OF LINE-MARKING IS TO BE VERIFIED ON SITE WITH THE CERTIFYING ENGINEER PRIOR TO INSTALLATION.
4. EXACT LOCATION OF ALL SIGNS IS TO BE VERIFIED ON SITE WITH THE CERTIFYING ENGINEER PRIOR TO INSTALLATION.
5. ALL MARKINGS TO BE INSTALLED WITH HIGH SKID RESISTANCE MATERIAL (e.g. CALCINE BAUXITE).
6. ALL LINEMARKING THAT IS DAMAGED BY THE CONTRACTORS WORKS SHALL BE REMOVED AND PLACED AT THE COST OF THE CONTRACTOR.
7. SINGLE SIGN SUPPORT SHALL BE INSTALLED IN ACCORDANCE WITH TMR STD DRG 1368.



THE CONDITION ASSESSMENT AND SUITABILITY OF THE EXISTING TRAFFIC BARRIER AND BRIDGE HAS NOT BEEN CONSIDERED IN THIS DESIGN.

TMR DESIGN APPROVAL

DIAL BEFORE YOU DIG www.1100.com.au

Released under RTI - DTMR

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT ©
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN 671 130 843
M N/R
E N/R
engineers@nfassociates.com.au

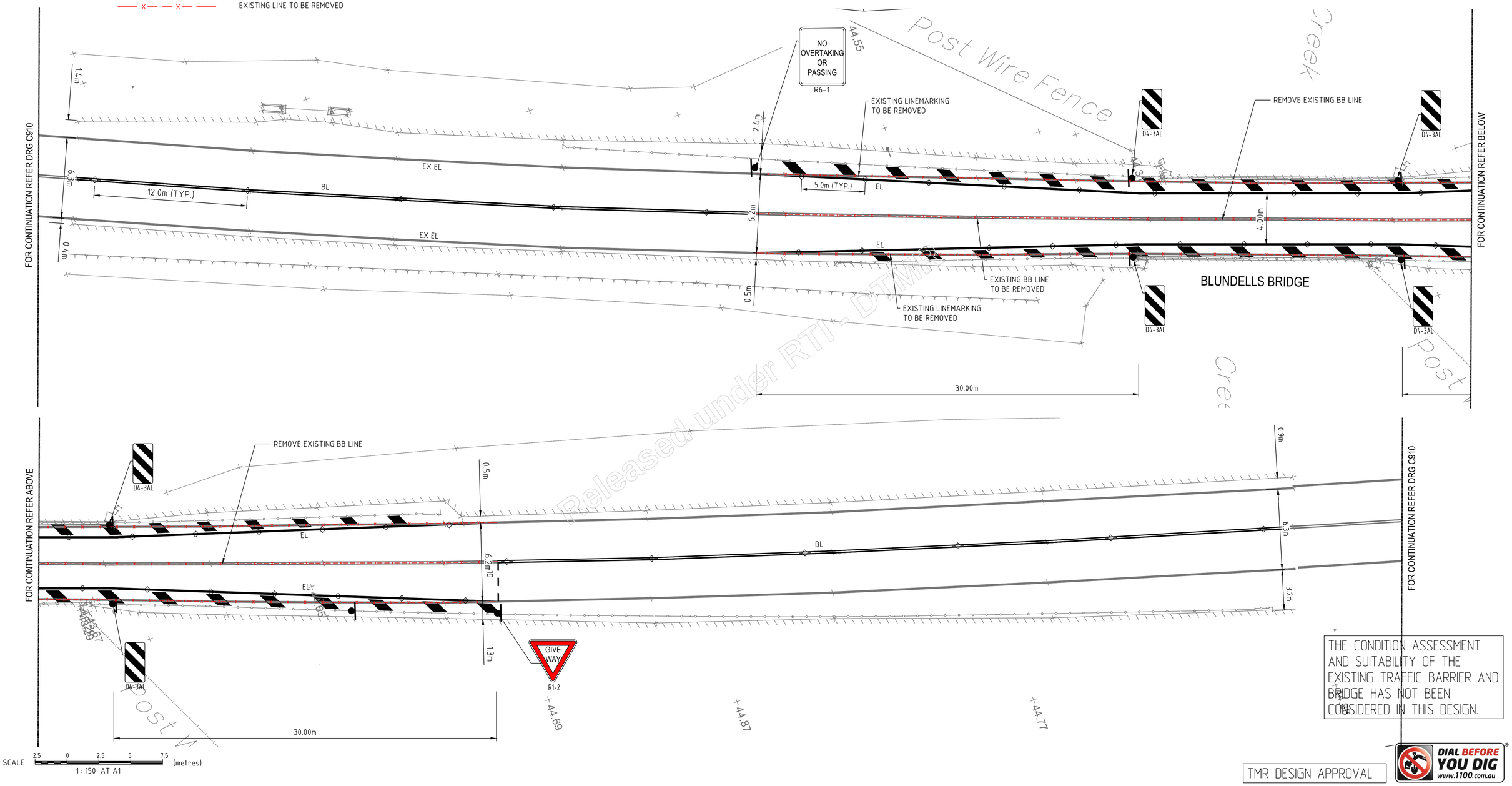
PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
SIGNAGE AND LINEMARKING
LAYOUT PLAN

DEVEL. APPLIC. No. :		DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.	
DRAFTSPERSON : D.B.	CHECKED : NF	
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.		
RPEQ No. :		
SCALE : AS SHOWN	DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C910	VERSION: B

LEGEND

- ADJACENT BOUNDARY
- 45.0 EXISTING CONTOUR
- EXISTING CENTRE LINE
- EXISTING LINE MARKING
- EXISTING FENCE
- EXISTING EDGE OF BITUMEN
- EXISTING EASEMENT
- EXISTING TRAFFIC BARRIER
- EXISTING LINE TO BE REMOVED



SCALE 2.5 0 2.5 5 7.5 (metres)
1 : 150 AT A1

THE CONDITION ASSESSMENT AND SUITABILITY OF THE EXISTING TRAFFIC BARRIER AND BRIDGE HAS NOT BEEN CONSIDERED IN THIS DESIGN.

TMR DESIGN APPROVAL

DIAL BEFORE YOU DIG www.1100.com.au

Released under RTI - DTMR

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT ©
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN - 674 130 845
M : N/R
E : N/R
engineers@nfassociates.com.au

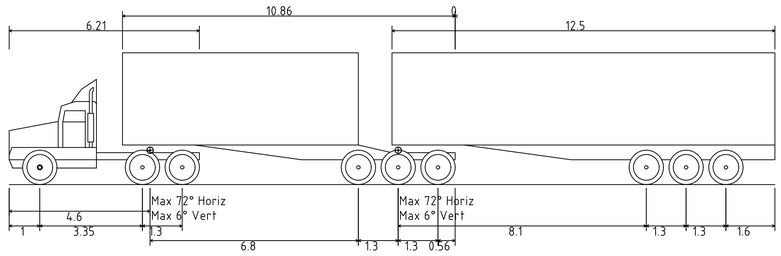
PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
DETAIL SIGNAGE
& LINEMARKING PLAN

DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.	
RPEQ No. :	
SCALE : AS SHOWN / DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C911 / VERSION: B

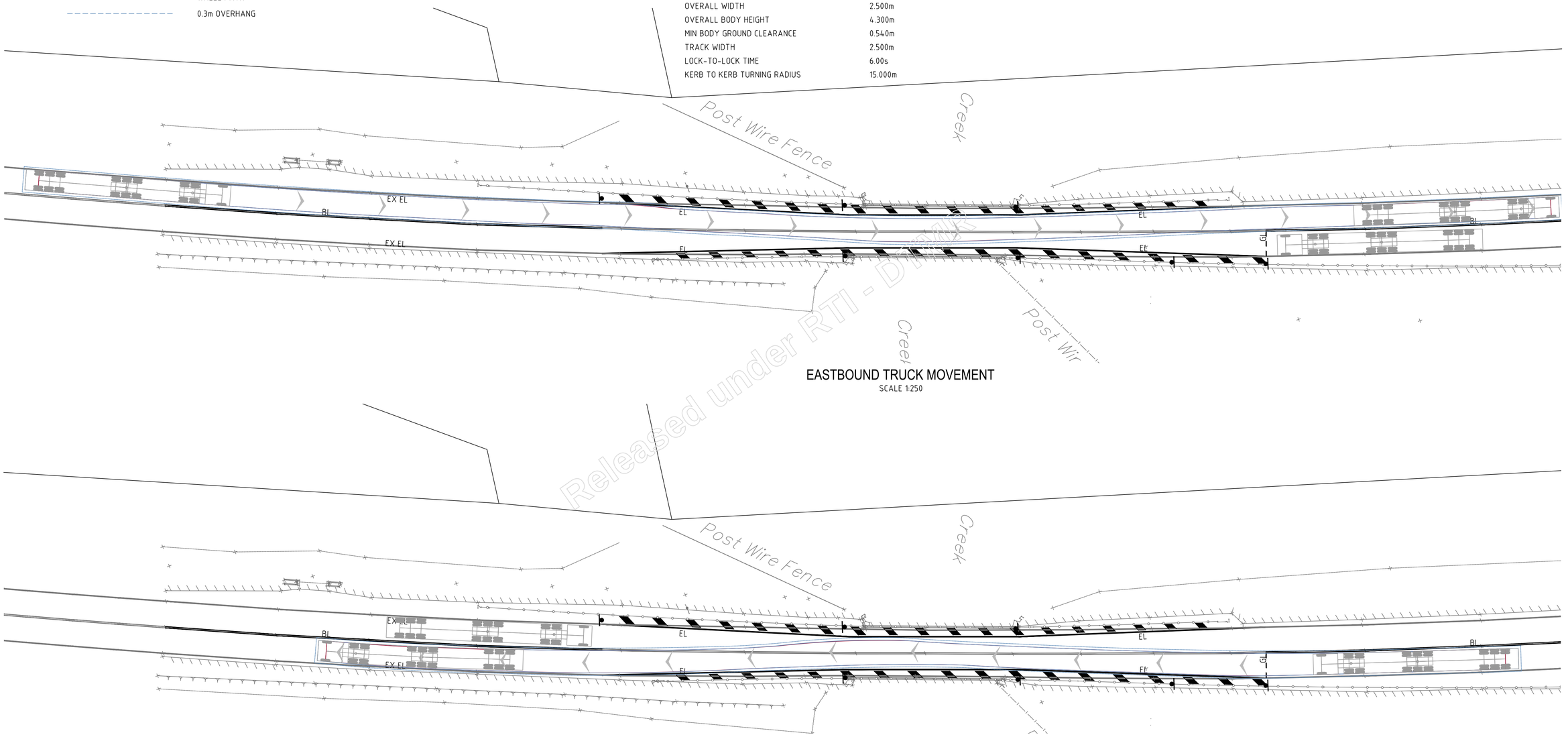
LEGEND

- ADJACENT BOUNDARY
- 45.0 EXISTING CONTOUR
- EXISTING CENTRE LINE
- EXISTING LINE MARKING
- EXISTING FENCE
- EXISTING EDGE OF BITUMEN
- EXISTING EASEMENT
- EXISTING GUARD RAIL
- VEHICLE BODY ENVELOPE
- WHEEL PATH
- 0.3m OVERHANG



B-DOUBLE (26.0m)

OVERALL LENGTH	25.000m
OVERALL WIDTH	2.500m
OVERALL BODY HEIGHT	4.300m
MIN BODY GROUND CLEARANCE	0.540m
TRACK WIDTH	2.500m
LOCK-TO-LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	15.000m



EASTBOUND TRUCK MOVEMENT
SCALE 1:250

EASTBOUND TRUCK MOVEMENT
SCALE 1:250

SCALE 5.0 0 5.0 10.0 (metres)
1 : 250 AT A1

TMR DESIGN APPROVAL

DIAL BEFORE YOU DIG www.1100.com.au

Released under RTI - DTMR

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN 674 190 845
M NIR
E NIR info@nigelfletcherassociates.com.au

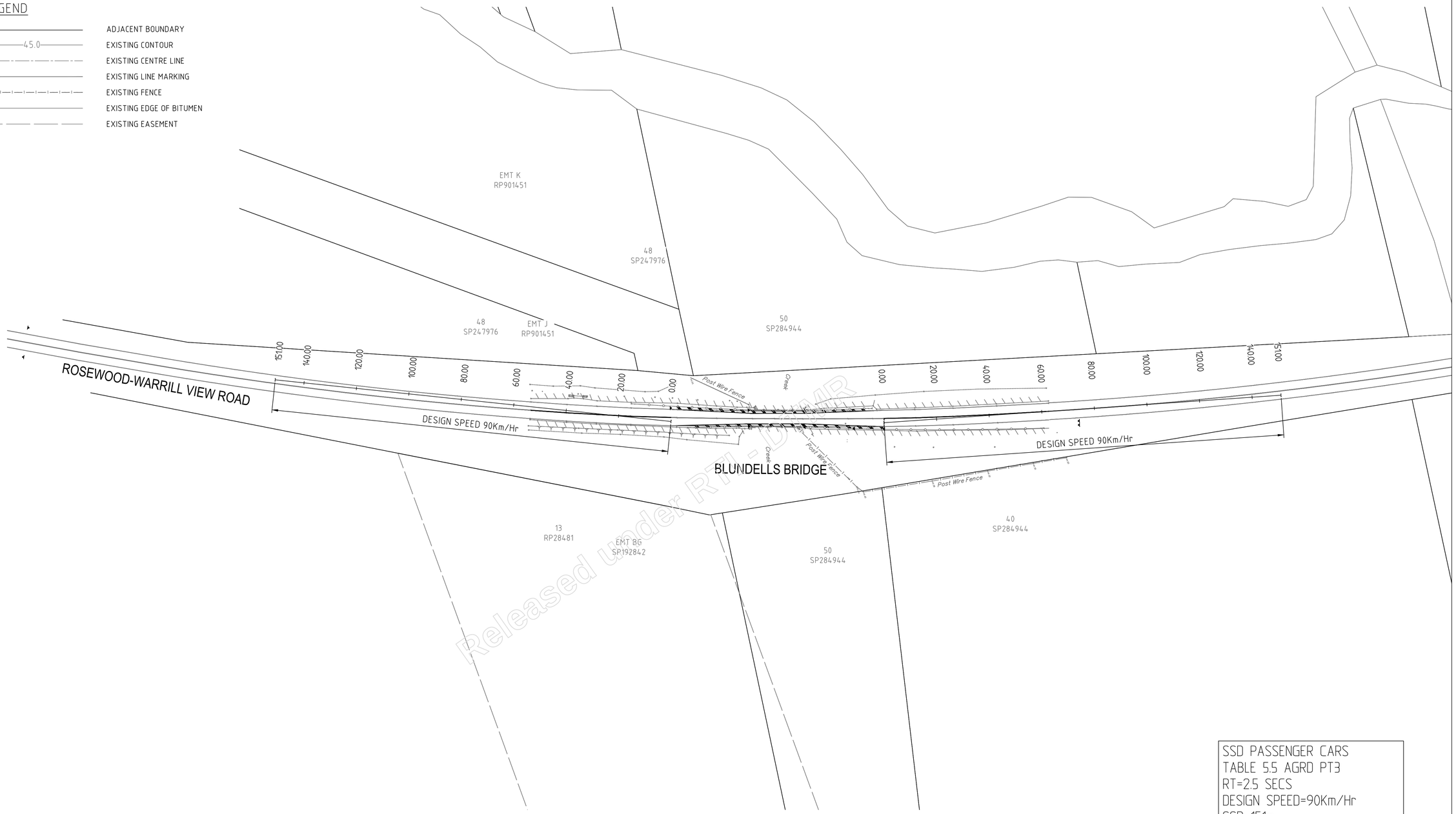
PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
26m B-DOUBLE
SWEPT PATHS

DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.	
RPEQ No. :	
SCALE : AS SHOWN / DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C920
	VERSION: B

LEGEND

- ADJACENT BOUNDARY
- 45.0 EXISTING CONTOUR
- EXISTING CENTRE LINE
- EXISTING LINE MARKING
- EXISTING FENCE
- EXISTING EDGE OF BITUMEN
- EXISTING EASEMENT



Released under RTI - DTMR

SSD PASSENGER CARS
TABLE 5.5 AGRD PT3
RT=2.5 SECS
DESIGN SPEED=90Km/Hr
SSD=151m

ADOPT OPERATING SPEED
80Km/Hr. DUE TO RESTRICTED
CAR SAFE SIGHTLINE DISTANCE

TMR DESIGN APPROVAL

SCALE 10 0 5 10 15 20 25 30 35 (metres)
1 : 750 AT A1

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN : 074 150 843
M N/R
E N/R info@nelsonassociates.com.au

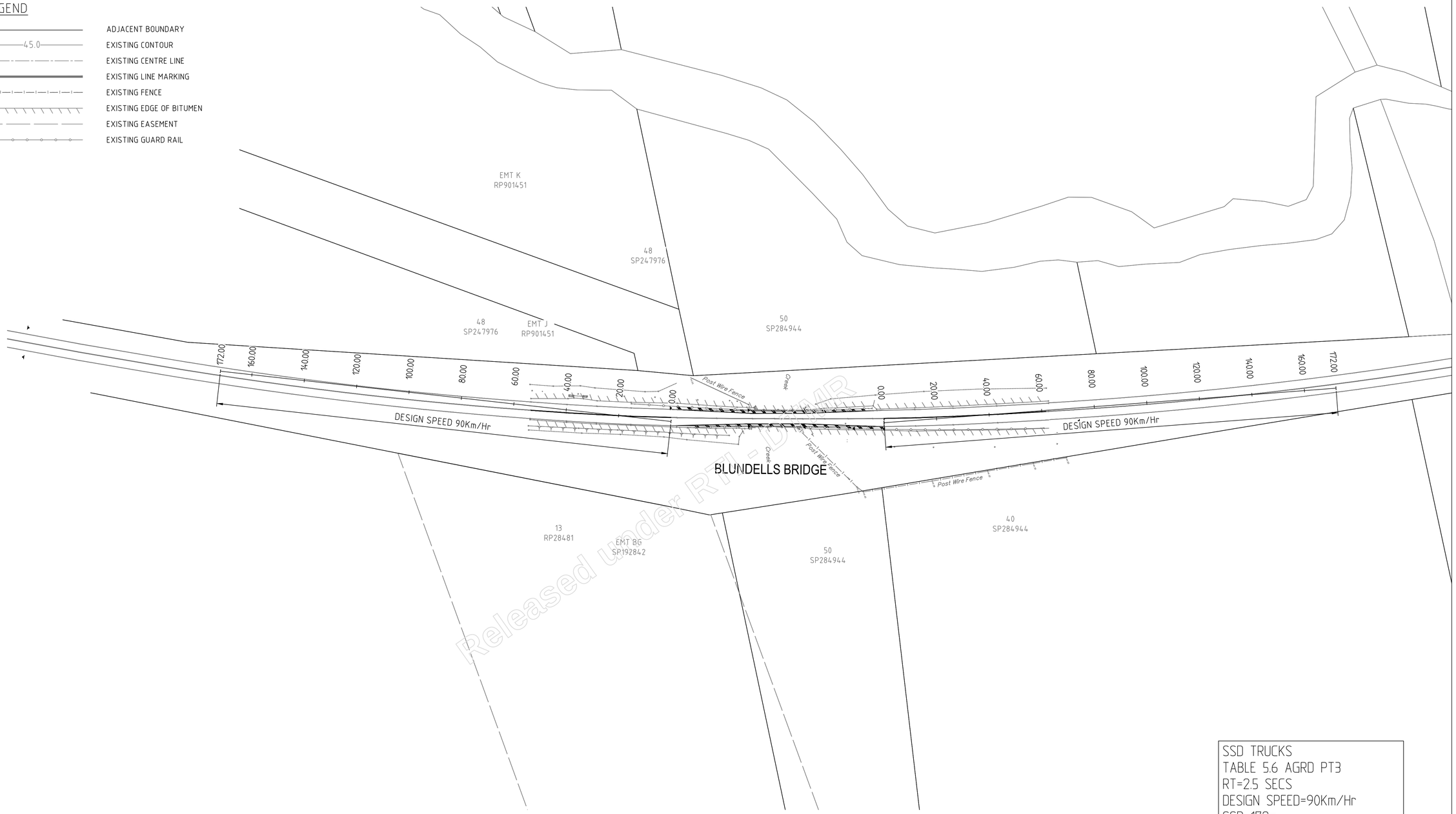
PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
SAFE SIGHT DISTANCE
LAYOUT PLAN
- PASSENGER CARS

DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.	
RPEQ No. :	
SCALE : AS SHOWN / DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C930
VERSION: B	

LEGEND

- ADJACENT BOUNDARY
- 45.0 EXISTING CONTOUR
- EXISTING CENTRE LINE
- EXISTING LINE MARKING
- EXISTING FENCE
- EXISTING EDGE OF BITUMEN
- EXISTING EASEMENT
- EXISTING GUARD RAIL



Released under RTI - DTMR

SSD TRUCKS
TABLE 5.6 AGRD PT3
RT=2.5 SECS
DESIGN SPEED=90Km/Hr
SSD=172m

ADOPT OPERATING SPEED
80Km/Hr. DUE TO RESTRICTED
CAR SAFE SIGHTLINE DISTANCE

TMR DESIGN APPROVAL

SCALE 10 0 5 10 15 20 25 30 35 (metres)
1 : 750 AT A1

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

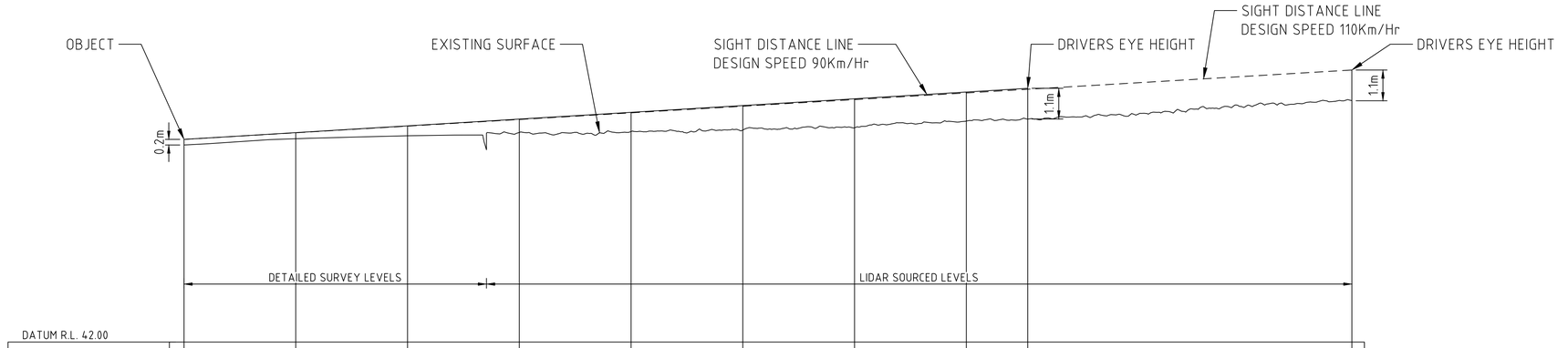
NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN: 671 430 843
M: N/R
E: N/R
nigelwebsu.nrfassociates.com.au

PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
SAFE SIGHT DISTANCE
LAYOUT PLAN
- TRUCKS

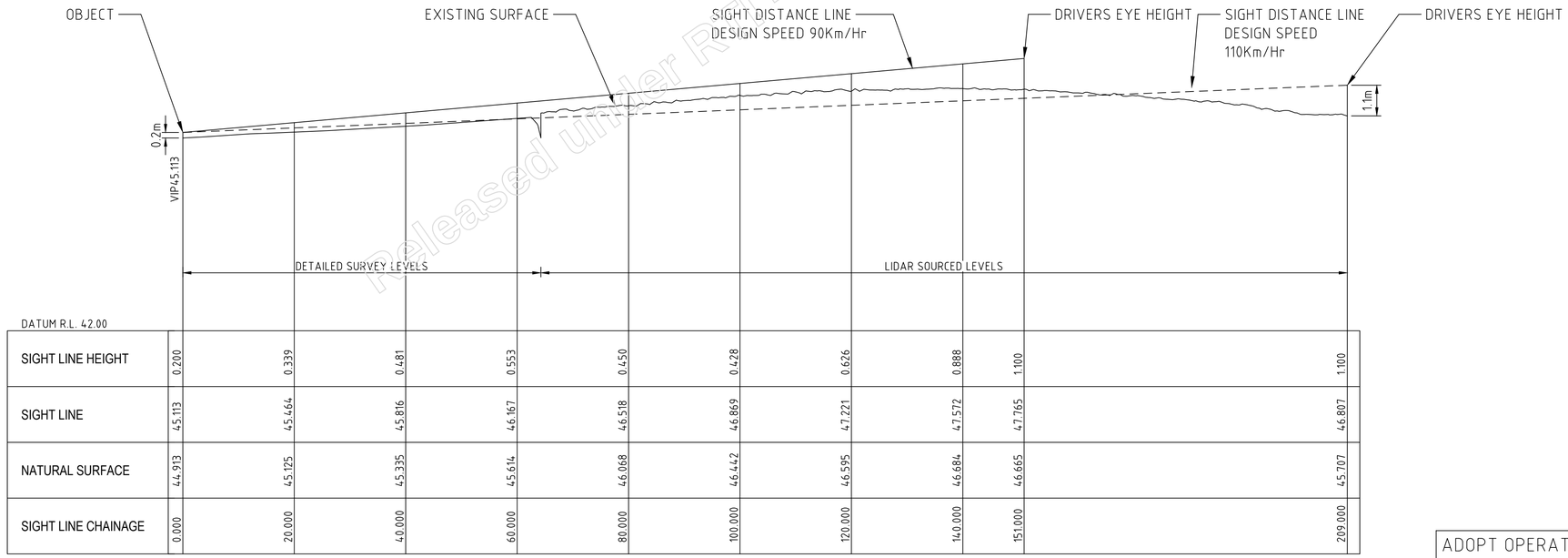
DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.	
RPEQ No. :	
SCALE : AS SHOWN / DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C931
	VERSION: B



DATUM R.L. 42.00

SIGHT LINE HEIGHT	0.200	0.218	0.354	0.477	0.690	0.878	1.037	1.041	1.100	1.100
SIGHT LINE	45.262	45.505	45.747	45.990	46.232	46.475	46.717	46.959	47.093	47.751
NATURAL SURFACE	45.062	45.287	45.393	45.512	45.543	45.597	45.680	45.918	45.993	46.651
SIGHT LINE CHAINAGE	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	151.000	209.000

SIGHTLINE LONGITUNAL SECTION - EASTBOUND APPROACHING CAR



DATUM R.L. 42.00

SIGHT LINE HEIGHT	0.200	0.339	0.481	0.553	0.450	0.428	0.626	0.888	1.100	1.100
SIGHT LINE	45.113	45.464	45.816	46.167	46.518	46.869	47.221	47.572	47.765	46.807
NATURAL SURFACE	44.913	45.125	45.335	45.614	46.068	46.442	46.595	46.684	46.665	45.707
SIGHT LINE CHAINAGE	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	151.000	209.000

SIGHTLINE LONGITUNAL SECTION - WESTBOUND APPROACHING CAR

ADOPT OPERATING SPEED 80Km/Hr. DUE TO RESTRICTED CAR SAFE SIGHTLINE DISTANCE

TMR DESIGN APPROVAL

VERTICAL SCALE 1 0 1 2 3 4 5 1:100 (meters)
HORIZONTAL SCALE 5 0 5 10 15 20 25 1:500 (meters)
AT A1

ORIGINAL SCALE BEFORE REDUCTION
A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

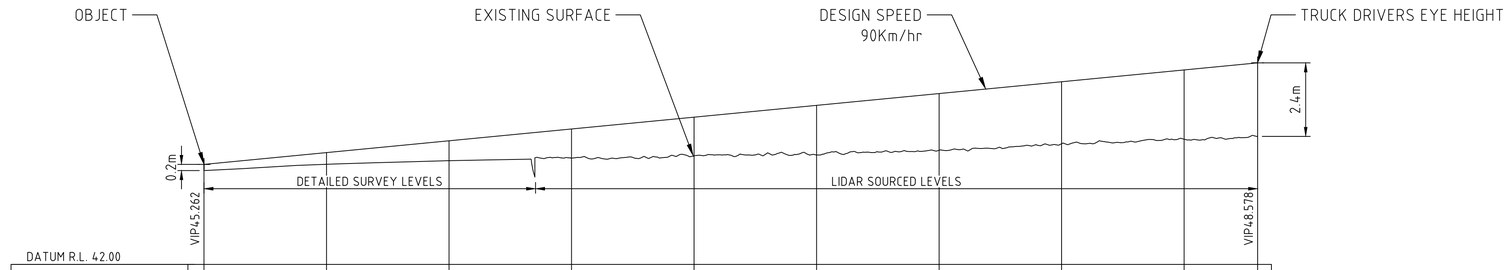
NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN: 074 130 841
M: N/R
E: N/R nigelfletcherassociates.com.au

PROJECT:
MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
SAFE SIGHT DISTANCE
LONGITUDINAL SECTIONS
- PASSENGER CARS

DEVEL. APPLIC. No. :	DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.
DRAFTSPERSON : D.B.	CHECKED : NF
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.	
RPEQ No. :	
SCALE : AS SHOWN / DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C935 / VERSION: B

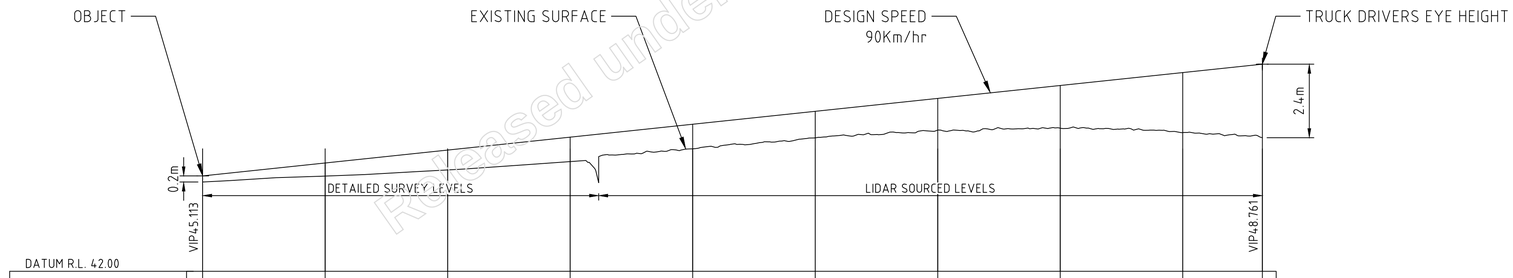
Released under RTI - DTMR



DATUM R.L. 42.00

SIGHT LINE HEIGHT	0.200	0.381	0.648	0.950	1.259	1.620	1.852	2.024	2.262	2.400
SIGHT LINE	45.262	45.648	46.033	46.419	46.804	47.190	47.576	47.961	48.347	48.578
NATURAL SURFACE	45.062	45.267	45.385	45.469	45.546	45.570	45.724	45.937	46.085	46.178
SITE LINE	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	160.000	172.000

SIGHTLINE LONGITUNAL SECTION - EASTBOUND APPROACHING TRUCK



DATUM R.L. 42.00

SIGHT LINE HEIGHT	0.200	0.428	0.648	0.798	0.802	0.866	1.034	1.393	1.959	2.400
SIGHT LINE	45.113	45.535	45.957	46.378	46.800	47.221	47.643	48.065	48.486	48.761
NATURAL SURFACE	44.913	45.107	45.308	45.580	45.998	46.356	46.609	46.671	46.527	46.360
SITE LINE	0.000	20.000	40.000	60.000	80.000	100.000	120.000	140.000	160.000	173.000

SIGHTLINE LONGITUNAL SECTION - WESTBOUND APPROACHING TRUCK

Released under RTI - DTMR

VERTICAL SCALE 1 0 1 2 3 4 5 1:100 (meters)

HORIZONTAL SCALE 5 0 5 10 15 20 25 1:500 (meters)

AT A1

TMR DESIGN APPROVAL

ORIGINAL SCALE BEFORE REDUCTION

A1 0 10 20 30 40 50mm.

VER.	DESCRIPTION	APPR.	DATE
B	TMR DESIGN APPROVAL	NF	16.10.25
A	ORIGINAL ISSUE	NF	27.09.25

COPYRIGHT (C)
This drawing is copyright and the property of Nigel Fletcher & Associates. It must not be retained, copied or used without the authority of Nigel Fletcher & Associates.

DISCLAIMER
This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended.
Nigel Fletcher & Associates will not accept responsibility for any consequences arising from the use of the drawing for other than its intended purpose or where the drawing has been altered, amended or changed either manually or electronically by any third party.

NOTE
This is an uncontrolled document issued for information purposes only, unless the checked sections are signed or completed.
Figured dimensions take precedence over scale. Do not scale reduced size drawings. Verify dimensions prior to commencing any on-site or off-site works or fabrication.

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS
PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN: 074 430 843
M N/R
E N/R nigelfletcherassociates.com.au

PROJECT:

MT WALKER QUARRY
HAUL ROAD
BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT

DRAWING TITLE :

BLUNDELLS BRIDGE
ONE WAY ARRANGEMENT
SAFE SIGHT DISTANCE
LONGITUDINAL SECTIONS
- TRUCKS

DEVEL. APPLIC. No. :		DATE : AUG 2025
PROJECT LEADER : NF	DESIGNER : D.B.	
DRAFTSPERSON : D.B.	CHECKED : NF	
APPROVED FOR AND ON BEHALF OF NIGEL FLETCHER AND ASSOCIATES PTY LTD.		
RPEQ No. :		
SCALE : AS SHOWN	DATUM : AHD	FULL SIZE : A1
PROJECT No.: 250128C	DRAWING No. : C936	VERSION: B

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS

PO BOX 7217
SOUTHPORT PARK QLD 4215
ACN : 671 139 843
M N/R
E N/R nigelfletcherassociates.com.au

Our Ref: 210173LET-04
Enquiries to: N/R

17th October 2025

Department Transport & Main Roads
South Coast Region,
Corridor and Land Management Team

Email: SouthCoast@tmr.qld.gov.au

Attention Mr Ken Jensen

Dear Ken

Re: ROSEWOOD WARRIL VIEW ROAD – BLUNDELLS GULLY BRIDGE ROAD LAYOUT WORKS
COUNCIL DA REF MCU 24/033
MT WALKER QUARRY COLEYVILLE HAULAGE ROAD
REF TMR24-042833

We are pleased to provide this submission is in response to Condition 24, point 1 of the development conditions issued on 22nd May 2015.

The attached drawings provide the assessment of Safe Stopping Distances, swept paths and general signage and linemarking plans for the one way operation of the Blundells Gully Bridge for two directional traffic.

The crest in Rosewood Warrill View Road on the west bound approach to the bridge was found to impede Safe stopping distances for passenger cars and as such an 80 Km/hr zone has been applied.

We trust that this is satisfactory, should you require any additional information please do not hesitate to contact the undersigned on N/R

Yours faithfully

N/R

Nigel Fletcher & Associates
NIGEL FLETCHER [redacted]
Director – Principal Engineer

Released under RTI - DTMR

From: N/R igelfletcherassociates.com.au
To: Ken W Jensen; SCR Corridor and Land Management Inbox
Subject: TMR24-042833 - ROSEWOOD WARRIL VIEW ROAD – BLUNDELLS GULLY BRIDGE ROAD LAYOUT WORKS
Date: Monday, 20 October 2025 9:39:35 AM
Attachments: 210173C-LET 04.pdf
251017 Blunders Creek Bridge.pdf
210173C NFA Doc Trans 021.pdf

Hi Ken

Please find our submission for the road layout works at Blundells Gully Bridge.

Kind Regards

N/R
Director

NIGEL FLETCHER & ASSOCIATES PTY LTD
ENGINEERS - PROJECT MANAGERS

E N/R @nigelfletcherassociates.com.au
M N/R

Released under RTI - DTMR