

Appendix E

TRAFFIC MANAGEMENT PLAN

PRINCIPLES

- Adopts and supports the vision and strategic intent of the MCC City Centre Development scheme and landuse plan.
- Provide clear information and wayfinding for travel mode decision-making by the community & visitors - walking, cycling, public transport and parking options
- Maximises the experience for all stakeholders
- Larger events include PT & Park and walk' options
- Excellent communication between traffic, risk, security and operations

The TMP that has been developed with EastCoast Traffic Control for Stage 1 opening of the City centre (early 2019) outlines the traffic flow and road closure of unopened roads, pedestrian access areas, and location of temporary regulatory signage. The TGS is based on MUTCD Part 3 and will be updated based on construction framework.

The Creative Precinct range of daily activities outlined in the main section of this management plan are supported by the designed intent of the city – that is to be a regional city centre. No additional TGS signage is required for this level of activity and no additional parking provisions will need to be made.

There are currently **90 on street carparks available within the first Stage 1A** until the first building construction complete within approx. the next 2 years.

For most activities, the **public carpark along Cornmeal Parade** and behind First Ave (Magistrates/State Govt. building) will provide weekend capacity until the first multilevel carpark is built within the city centre (part of first building developments). **This carpark is approx. 100metres from Lot 40 Creative Precinct** and has a capacity of **500 car spots**.

Only very special circumstances would there be any consideration of opening up an undeveloped block within the city for the use of parking. **Lots A 2, 3 & 4** have been identified for potential carparking (Appendix B). These sites have laneway access directly from First Ave/and Future Way facilitating a good flow of traffic for ingress and egress. A separate TMP will be submitted for this.

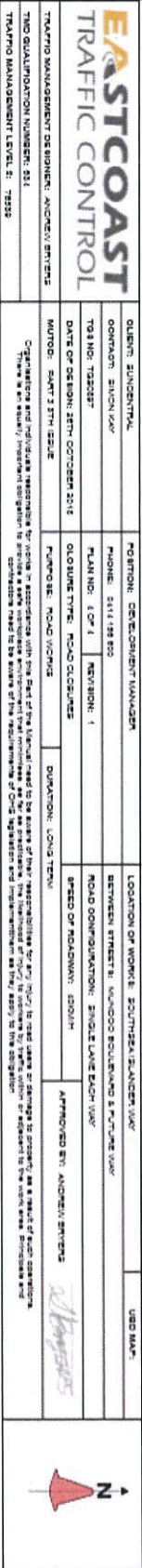
COMMUNICATION

The Activation Strategy 2019-2021 has a strong focus on getting this new city space into the 'mental map' of the locals and visitors alike. Establishing clear information for the public on the best options to reach the city from day one will support the establishment of best practice 'habits' and strategic intent as the city grows. This includes:

- Wayfinding - Pathway activation – lighting and projection art, treatment – non-permeant stickers – part of kid's orientation – virtual augmented reality aps etc
- Regional Maroochydore Transit Station
- New Bus stop at Aerodrome Rd/First Ave entrance into the city
- Additional bus stops along Maude St

BELOW EastCoast Traffic - TMP and TMS Nov 2018

LEGEND



SUNCENTRAL TGS



Road Full Closure has been deemed necessary due to the high risk activity of construction

This Traffic Guidance Scheme has been designed based on the information received by the client. Site risk assessment. Trucks and equipment shall be escorted into the closure under traffic control supervision. The purpose of this Traffic Guidance Scheme is to ensure the safety of the work site and the general public. Temporary speed zone to meet workplace or traffic safety requirements (see Clause 4.2). Cover or other appropriate signage. The STOP/SLOW sign shall be removed when workers have left the work area or are no longer visible to traffic. It is most important that the relevant signs and devices be removed or concealed from view as soon as any activity is completed or a hazard ceases to exist. When all work is complete, signs and devices should be dismantled in the reverse order to that specified in Clause 2.3.3. A TMR certified Traffic Management Implementation Officer must only implement the TGS. Traffic controllers shall be relieved from their duty after not more than 2 hours for a period of rest or 'other duties' of at least 15 minutes. (NOTE: 'Other duties' does not include operation of a STOP/SLOW sign or any duties involving standing in one position, or controlling traffic with a traffic control device).

Signs should face towards approaching traffic approximately at right angles to the line of sight from the driver to the sign. Before work commences, signs and devices at the approaches to and within the work area should be erected in accordance with the traffic guidance scheme in the following sequence: (a) Advance warning and regulatory signs (including temporary speed zone signs). (b) All intermediate advance warning and regulatory signs and devices required in advance of the taper or start of the work area. (c) All delineating devices required to form the taper including the illuminated flashing arrow sign at the end of the taper where required. (d) Delineation of the work area or side track. (e) All other required warning and regulatory signs including termination and end of temporary speed zone signs. Traffic controllers shall also be provided if necessary to control the movement of plant within the trafficable area. Traffic controllers shall not be located in positions where the sight distance is less than 2D (where the value of D is the greater value of the range of dimensions shown in Table 4.2) metres between the controller and oncoming traffic. See Clause 4.10.2 for positioning of the Traffic Controller/ PREPARE TO STOP sign (T1-005).

The regulation provides that the function of a traffic controller is to direct traffic in a way stated in the MUTCD and the TCASAP. A traffic controller must only use equipment specified in the MUTCD, TRUM or the TCASAP to direct or divert traffic through a designated worksite.

4.2.3 A STOP/SLOW sign (R6-8, R6-Q02/T7-1) must be used, except when a boom barrier or other traffic control devices approved by TMR is used.

Traffic controllers must be located so they are in a position to see approaching vehicles. Approval for erection or removal of regulatory traffic control devices shall be obtained from the Department of Transport and Main Roads or appropriate road authorities before implementing this traffic guidance scheme.

TABLE 4.11 MINIMUM LANE WIDTHS

Posted speed limit during road works, km/h	Minimum lane widths, m
60 or less	3.0
70 to 80	3.2
greater than 90	3.4

Recommended taper lengths, (Table 4.6)

Permanent posted speed, km/h	Traffic control at beginning of taper	Recommended taper lengths, m	Lateral shift taper	Merge taper
40 or less	15	5	15	15
50	15	15	15	30
60	30	30	30	60
70	30	60 to 80	60 to 80	120-160
80	30	60 to 80	60 to 80	120-160
90	30	60 to 80	60 to 80	120-160
100	30	60 to 80	60 to 80	120-160
Greater than 100	30	60 to 80	60 to 80	120-160

Table 3.10 SIGNS FOR PEDESTRIAN CONTROL - SIZE TABLE

Sign	Sign Number	Size, mm
PEDESTRIANS WATCH YOUR STEP	T8-1	900x600
PEDESTRIANS (arrow)	T8-2 (L or R)	1200x300
USE OTHER FOOTPATH	T8-3	900x600
FOOTPATH CLOSED	T8-4A	900x600
LOOK BOTH WAYS, TWO WAY TRAFFIC	T8-5A	900x600

Posted speed (prior to roadworks) km/h	Dimension D, m
40 or less	5 to 10
60	10 to 15
70, 80	15 to 45
90, 100	60 to 80
110	90 to 100
	100 to 120

Traffic controllers must ensure that they have a clear escape path to a non-traffic (closed) section of the roadway, shoulder, footpath or median. Traffic controllers must stand facing the traffic but just outside the projected travel path.

Traffic controllers should ensure that approaching traffic has sufficient distance to stop safely. A traffic controller must ensure that they are not partially hidden by signs and/or devices and they do not obstruct a driver's view of such signs and for devices.

The traffic controller must ensure that there is a maximum speed limit not exceeding 60 km/h established through the worksite.

The Traffic Controller Ahead/REPREPARE TO STOP sign is erected correctly at the beginning of the shift. The Traffic Controller Ahead/ PREPARE TO STOP sign is removed or covered when work is suspended throughout a shift or completed for the day. Existing signs and traffic control devices which are inappropriate to, or conflict with, the temporary work site situation shall be fully covered or removed.

The travelled path on the approaches and past the work area shall be delineated so as to properly define which part of the roadway is available to road users, or the path that traffic is required to follow, under all reasonably expected weather and atmospheric conditions, day or night as applicable.

Signs and devices should be positioned and erected so that: (a) they are properly displayed and securely mounted (see Clause 3.3); (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; and (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; and (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 placed 1 m clear of the travelled path where practicable.

However, traffic cones and bollards may also be used to define the edge of the travelled path or to separate opposing traffic. In open road areas and on unkerbed roads in built-up areas where signs are to be mounted on posts, they should normally be placed clear of the outer edge of shoulder and at least 2 m clear of the travelled path, whichever is the greater clearance. They should be erected 1 to 1.5 m above the level of the nearest edge of the travelled path to the underside of the sign.

In addition to providing adequate traffic control and guidance at a static work site the safety of road users will be enhanced by ensuring that the work site is managed in such a way as to cause the minimum amount of inconvenience to traffic movement. Works should be arranged to minimise: (i) disruption of established traffic movements and patterns; (ii) interference with traffic at peak movement periods; (iii) interference with public transport services; and (iv) the amount of road closed to traffic at any one time.

The objective of this TGS is to provide organisations carrying out works on roads with a set of uniform practices for the signing and delineation of construction and maintenance works which will promote the safety of both workers and road users at the work site. The traffic management company on site implementing this TGS on the day must assess the suitability of the TGS against a risk assessment and whether it is safe to implement.

EASTCOAST TRAFFIC CONTROL

TRAFFIC MANAGEMENT DESIGNER: ANDREW BRYERS	MUTCD: PART 3 8TH ISSUE	POSITION: DEVELOPMENT MANAGER	LOCATION OF WORKS: SOUTHSEA ISLANDER WAY	UBD MAP:
TMS QUALIFICATION NUMBER: 684	DATE OF DESIGN: 26TH OCTOBER 2018	CONTACT: SIMON KAY	BETWEEN STREETS: MUNDGO BOULEVARD & FUTURE WAY	
TRAFFIC MANAGEMENT LEVEL: 2: 76589	TGS NO: TGS0897	PHONE: 0414 156 600	ROAD CONFIGURATION: SINGLE LANE EACH WAY	
	PLAN NO: 1 OF 4	REVISION: 1	SPEED OF ROADWAY: 40KM/H	
	CLOSURE TYPE: OPTIONS/ANALYSIS	PURPOSE: ROAD WORKS	DURATION: LONG TERM	APPROVED BY: ANDREW BRYERS



Careful consideration should be given to the signing of the work site, no matter how brief the occupation of the site may be. This should include:

[illegible]

- (b) Edge of traffic lane to roadworks delineators or temporary hazard markers - 1.0 m
- (c) Edge of traffic lane to road safety barrier system -

- (ii) posted speed limit during roadworks 50 to 80 km/h - 0.5 m; and
- (iii) posted speed limit during roadworks greater than 80 km/h - 1.0 m.

2.3.7 Provision for pedestrians and bicycles

or visual impairment, have to move through, past or around a work site or to cross the road within a work site, they shall be provided with and

directed to suitably constructed and protected temporary footpaths at crossing points, or formal pedestrian crossings, or refuges if warranted.

Pedestrian and bicycle paths should be provided on the same scale and to the same width as any facilities for pedestrian or bicycle traffic that were

existing prior to the works. Further guidance is available in *Austroroad Guide to Road Design Part 6A Pedestrian and Cyclist Paths 2.3.8* and the same width as any facilities for pedestrian or bicycle traffic that

Temporary footpaths and pedestrian crossing Where footpaths or pedestrian crossings have been partially closed or temporarily relocated

(a) The unobstructed width at local constrictions shall be not less than 1.0 m.

(b) Where pedestrian traffic has been diverted onto an e

pedestrian path shall be separated from vehicular traffic. A mesh fence may be used provided that—(i) the clearance to the delineated edge of the traffic lane is at least 4.3 m and the speed limit is 50 km/h or lower, or (ii) the clearance

40 km/h or less. Where traffic speeds (see Clause 1.4.18) are more than at least 120 km/h and the speed limit is 60 km/h or less, or (ii) the clearances of the delineated edge of the traffic lane is less than 1.2 m and the speed limit is 40 km/h or less.

10km/h above the speed limits given in Items (i) and (ii), a road safety barrier system (see Clause 3.10.3) shall be provided. NOTE: The channelling of

pedestrians and bicycle traffic using lightweight modules is subject to the requirements of Clause 3.10.2. (c) Surfacing should provide for prams,

strollers and wheelchairs, and other mobility aids. (d) Except as below, lig shall be not less than the level provided on the original footprint or

crossing, or to AS 1158.4, whichever is the lesser level. Lighting to AS 1158.4 should be provided if the associated works reduce either the sight distance or the crossing of the crossing. (4) Crossovers shall be located as near as possible to the crossing.

of the prominence of, the crossing; (e) crossings shall be located as near as practicable to established pedestrian routes, and shall have the same level function as the crossings they replace, including provisions for the people

replace were signalled. (g) The management of pedestrians at crossings

roadways temporarily converted from one-way to two-way is given in Clause 4.14.8.

TABLE 3.7 RECOMMENDED MAXIMUM SPACING OF CONES AND BOLLARDS

Purpose and usage	Speed Limits, km/h	Recommended maximum spacing, m
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All purposes	<50	4
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TABLE 3.7 RECOMMENDED MAXIMUM SPACING OF CONES AND BOLLARDS

Purpose and usage	Speed Limit3, km/h	Recommended maximum casing m
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	spacing, m
Closure	>70 12

Taper	>70	9
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TABLE 3.6 SIZE AND POSITIONING OF RETROREFLECTIVE BANDS ON TRAFFIC CONES AND BOLLARDS (millimetres)

item	Height	Band Width	Distance from top of device to band
1	470 ± 500	470	170 ± 5

Cone	450 to 500	150	150 + 5
Cone	700 and over	250	220 + 5
Cone	all heights	250	220 + 5

	UBD MAP:	
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Figure 10.10

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VED BY: ANDREW BRYERS

property as a result of such operations.

adjacent to the work area. Principals and

DESKTOP RISK ASSESSMENT

PROJECT ADDRESS:	SOUTHSEA ISLANDER WAY/FIRST AVE/ FUTURE WAY	DATE: 10.10.2018
PREPARED BY:	ANDREW BRYERS	QUALIFICATION: TRAFFIC MANAGEMENT DESIGN LEVEL 3 No. 684
RISK RATING:	1 = (HIGH) 2 = (MEDIUM) 3 = (LOW)	
DESCRIPTION OF HAZARD:	2) WORKS ON NEW ROADWAYS THAT ARE NOT READY FOR PUBLIC USE NO PROTECTION OR DELINEATION MAY RESULT IN ROAD USER OR COLLISION.	
ACTION DEEMED NECESSARY TO REDUCE THE RISK TO A SAFE LEVEL:	2) ROAD CLOSURES REQUIRED TO ALLOW SAFE TRUCK ENTRY AND EXIT WITH ROAD WORKS BEING PERFORMED BEHIND THE BARRIERS.	
CIRCLE REQUIRED CONTROL LEVEL:	1) ELIMINATION 2) SUBSTITUTION 3) ISOLATE 4) ENGINEERING 5) ADMINISTRATION 6) PPE	
PROPOSED FURTHER ACTION:	ROUTINE TRAFFIC CONTROL AUDITS SHALL BE COMPLETED BY CROMPTON CONCEPTS	
RISK RANKING AFTER IMPLEMENTING CONTROL:	1=(HIGH) 2=(MEDIUM) 3=(LOW)	

Careful consideration should be given to the signing of the work site, no matter how brief the occupation of the site may be. This should include: (a) protection of workers, provision of adequate warning of changes in surface condition and the presence of personnel or plant engaged in work on the road, and (c) adequate instruction of road users and their guidance safely through, around or past the work site.

Important basic principles to be observed are as follows:

- (i) Signs and devices shall be installed by a competent person.
- (ii) Signs and devices shall be appropriate to the conditions at the work site and shall be used in accordance with this Part of the Manual unless a risk assessment by a competent person indicates that an alternative arrangement is satisfactory (see Clause 2.2.3).
- (iii) Signs and devices shall be erected and displayed before work commences at a work site.
- (iv) Signs and devices shall be regularly checked and maintained in a satisfactory condition.
- (v) Signs and devices shall be removed from a work site as soon as practicable. However, appropriate signs should remain in place until all work (including loose stone removal and line marking following bituminous surfacing) has been completed.
- (vi) Records shall be kept of all works signing and delineation at roadway or part-roadway closures.
- (vii) Where works require the relocation of regulatory traffic control items, they shall be relocated or reinstalled promptly in positions where they are visible and can perform their regulatory function.

EASTCOAST TRAFFIC CONTROL	CLIENT: SUNCENTRAL	POSITION: DEVELOPMENT MANAGER	LOCATION OF WORKS: SOUTHSEA ISLANDER WAY	URD MAP:
	CONTACT: SIMON KAY	PHONE: 0414 156 600	BETWEEN STREETS: MUNDOO BOULEVARD & FUTURE WAY	
	TGS NO: TGS6887	PLAN NO: 3 OF 4	REVISION: 1	
	DATE OF DESIGN: 20TH OCTOBER 2018	CLOSURE TYPE: RISK ASSESSMENT	PURPOSE: ROAD WORKS	DURATION: LONG TERM
TRAFFIC MANAGEMENT DESIGNER: ANDREW BRYERS	MATCHED: PART 3 8TH ISSUE			
TWO QUALIFICATION NUMBER: 684	Organisations and individuals responsible for works in accordance with this Part of the Manual need to be aware of their responsibility for any injury to road users or damage to property as a result of such operations. There is an equally important obligation to provide a safe workplace environment that minimises, as far as practicable, the likelihood of injury to workers by traffic within or adjacent to the work area. Principals and contractors need to be aware of the requirements of OHS legislation and implement them as they apply to this obligation.			
TRAFFIC MANAGEMENT LEVEL 2: 76509	APPROVED BY: ANDREW BRYERS			

Organisations and individuals responsible for works in accordance with this Part of the Manual need to be aware of their responsibilities for any injury to road users or damage to property as a result of such operations. There is an equally important obligation to provide a safe workplace environment that minimises, as far as practicable, the likelihood of injury to workers by traffic within or adjacent to the work area. Principals and contractors need to be aware of the requirements of OHS legislation and implement them as they apply to this obligation. Steps should be taken to warn the public of prevailing conditions and to guard, delineate, and, where necessary, illuminate work which may pose a hazard to road users. Care should also be taken to avoid, wherever possible, long delays or detours which may cause unnecessary inconvenience to road users (see Clause 2.6.5).

Supervisory personnel carrying out construction, maintenance or other works that require the use of a traffic guidance scheme shall give attention to the following:

- (a) Be mindful of their responsibility to provide, as far as practicable, a safe workplace for personnel and plant under their control, and safe and convenient travelling conditions for road users.
- (b) Ensure that personnel under their control are at all times courteous to road users. Personnel should not allow themselves to become distracted by provocation from members of the public.
- (c) Ensure that personnel are competent to perform the roadwork signing task (see Clause 1.4.3).
- (d) Ensure that all personnel at a work site are aware of their responsibilities.
- (e) Ensure that traffic controllers are appropriately trained and informed of their duties and that they are regularly relieved from their duty (see Clause 4.10.5).
- (f) Be familiar with, and act, as far as is practicable, in accordance with the provisions of this Part of the Manual.

Risk management entails the identification and analysis of all safety risks likely to arise during works on road including the setting up, operating, changing and ultimate dismantling of a traffic guidance scheme, followed by the determination of appropriate measures to mitigate those risks. The process is appropriate at all levels of planning and operation including the following:

- (a) When preparing standardised plans and safe work method statements for the conduct of all types of closures on the road and footpath.
 - (b) When preparing traffic guidance schemes for more extensive or complex works where site specific risks will assume importance.
- In each case the process should be carried out by first identifying all the hazards likely to arise, evaluating them in terms of likelihood of occurrence and adverse consequences using historical data, experience or other means. The proposed procedural statement or traffic guidance scheme should then be checked in detail to ensure that adequate means of controlling or reducing those risks found to be significant, are in place.

HOW SEVERELY COULD IT HURT SOMEONE OR MAKE SOMEONE?	HOW LIKELY IS IT TO OCCUR?			VERY UNLIKELY COULD HAPPEN BUT PROBABLY NEVER WILL
	VERY LIKELY COULD HAPPEN ANY TIME	VERY LIKELY COULD HAPPEN SOMETIME	UNLIKELY COULD HAPPEN BUT VERY RARELY	
KILL OR CAUSE PERMANENT DISABILITY OR ILL HEALTH	1/H	1/H	1/H	2/M
LONG TERM ILLNESS OR SERIOUS INJURY	1/H	1/H	2/M	2/M
MEDICAL ATTENTION AND SEVERAL DAYS OFF WORK	1/H	2/M	2/M	3/L
FIRST AID NEEDED	2/M	2/M	3/L	3/L



ROAD CLOSURE OF UNOPENED ROADS

LEGEND

WATER BARRIERS

NOT CONSTRUCTED

SIGN LOCATION

TRAFFIC CONTROLLER
(AS REQUIRED)

SITE

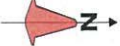
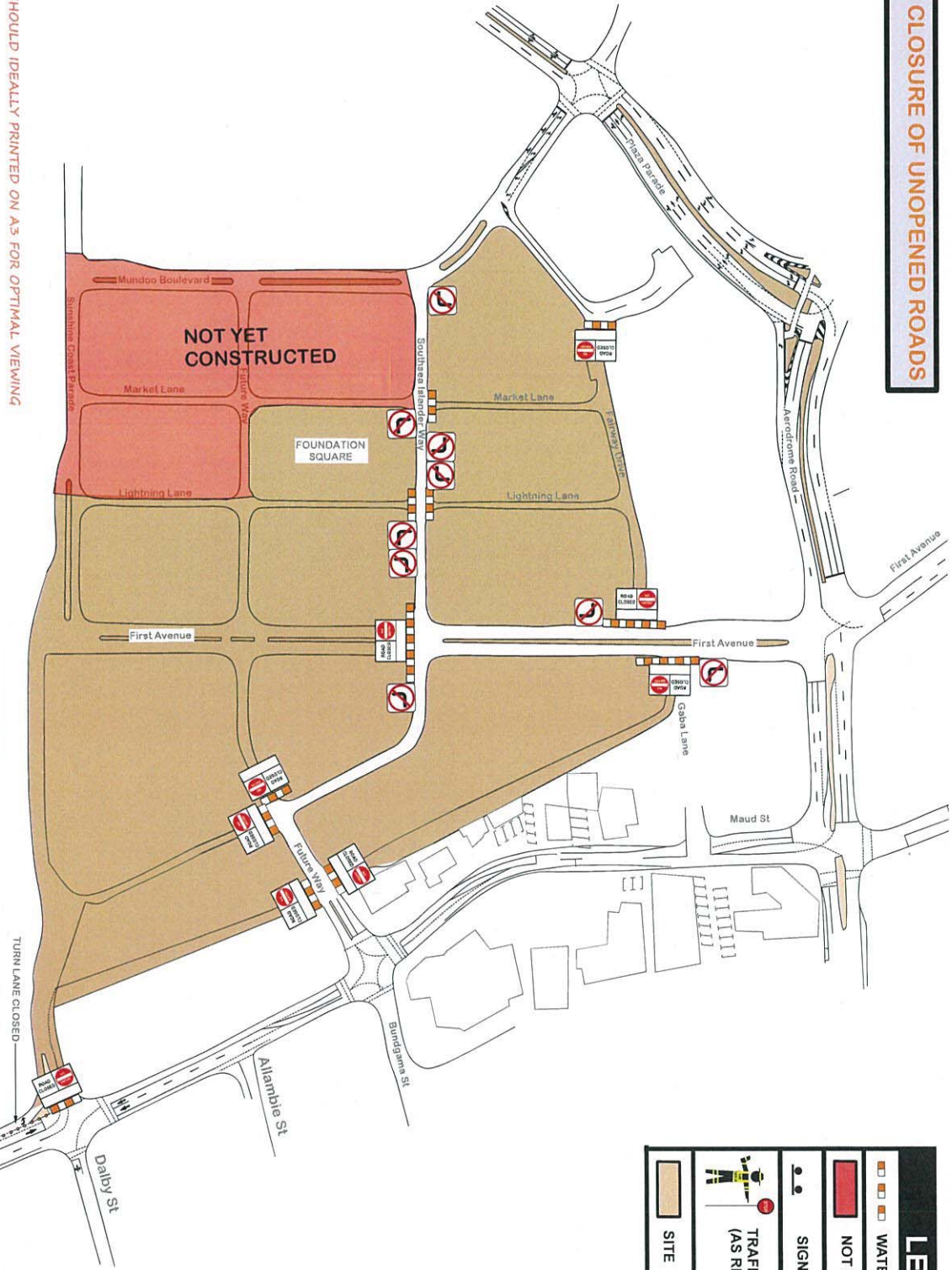
THIS PLAN SHOULD IDEALLY PRINTED ON A3 FOR OPTIMAL VIEWING

EASTCOAST
TRAFFIC CONTROL

TRAFFIC MANAGEMENT DESIGNER: ANDREW BRYERS
TMO QUALIFICATION NUMBER: 004
TRAFFIC MANAGEMENT LEVEL 2: 76589

CLIENT: SUNCENTRAL	POSITION: DEVELOPMENT MANAGER	LOCATION OF WORKS: SOUTHEAST ISLANDER WAY	UBD MAP:
CONTACT: SIMON KAY	PHONE: 0414 156 600	BETWEEN STREETS: MUNDODO BOULEVARD & FUTURE WAY	
TGS NO: TGS00897	PLAN NO: 4 OF 4	REVISION: 1	
DATE OF DESIGN: 28TH OCTOBER 2018	CLOSURE TYPE: ROAD CLOSURES	SPEED OF ROADWAY: 40KPH	
MUTCD: PART 3 8TH ISSUE	PURPOSE: ROAD WORKS	DURATION: LONG TERM	
	APPROVED BY: ANDREW BRYERS		

Organisations and individuals responsible for works in accordance with this Plan of the Manual need to be aware of their responsibilities for any injury to road users or damage to property as a result of such operations. There is an equally important obligation to provide a safe workplace environment that minimises, as far as practicable, the likelihood of injury to workers by traffic within or adjacent to the work area. Principals and contractors need to be aware of the requirements of OHS legislation and implement them as they apply to this obligation.



TRAFFIC MANAGEMENT PLAN

Project Details

Project number: N/A
Project name: Maroochydore City Centre – Stage 1
Start date: 1 October 2018
End date: 1 October 2019
Location: Maroochydore City Centre
Sub-contractor: Suncentral Maroochydore P/L
Contractor ABN: 92 603 652 231
Project Manager: Simon Kay **Phone:** 0439 406 392
Site Foreman: Will be provided by individual contractor **Phone:** N/A

Description of works: City centre, new road network
TMP prepared by: Kelly Govind TMD #442
Document enquires: Kelly Govind 0450 488 016

Rev	Date	Amendment Description	Amendment Pages	Approved By
1	NIL	NIL	NIL	NIL
2	NIL	NIL	NIL	NIL
3	NIL	NIL	NIL	NIL
4	NIL	NIL	NIL	NIL
5	NIL	NIL	NIL	NIL
6	NIL	NIL	NIL	NIL

This Traffic Management Plan has been reviewed and deemed suitable by the Project Manager (PM).

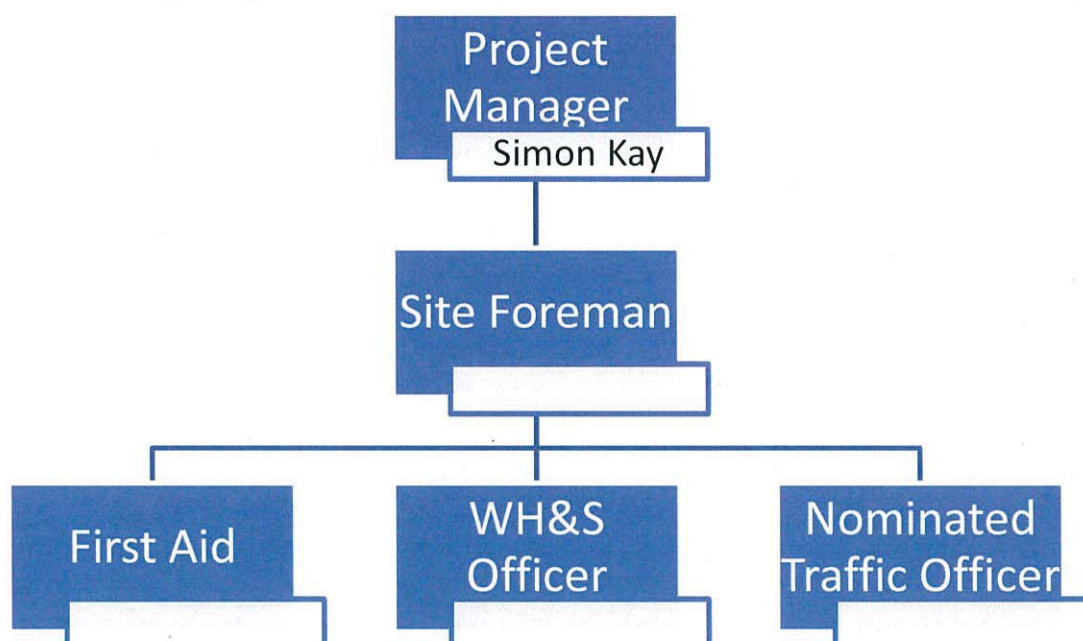
Signed: _____ **Date:** _____

Any amendments of this Traffic Management Plan to be reviewed and deemed suitable by the PM.

Important Names and Numbers

Nominated Traffic Officer:	Joe Townsend TMD # OP128	Phone:	0438 381 016
Project Manager:	Simon Kay	Phone:	0439 406 392
Site Foreman:	Will be provided by individual contractor	Phone:	N/A
Engineer:	Will be provided by individual contractor	Phone:	N/A
Traffic Control Supervisor:	Joe Townsend	Phone:	0438 381 016
First Aid Officer:	Will be provided by individual contractor	Phone:	N/A
WH&S Officer:	Will be provided by individual contractor	Phone:	N/A
Emergency services:	Police	Phone:	000
	Fire	Phone:	000
	Ambulance	Phone:	000

Site Organisational Reporting Structure



Scope of Works

This section details the intended traffic management procedures and sign layout for the Maroochydore City Centre – Stage 1 project.

The works will involve:

Civil, Landscaping and Building Construction activities within the Maroochydore City Centre

Proposed traffic management procedures and sign layouts shall address all conditions for day time operations and shall comply with the project specific requirements stated in the contract – Clause 3 of Annexure MRTS02 if specified. When Construction activities are underway all vehicles required within site will enter/exit worksite with traffic flow with assistance of Traffic Controllers

Work is scheduled to commence: 1 October 2018

Standards/Spec/Polices

- MUTCD Part 3 2016 Seventh issue
- Traffic Management for construction or Maintenance Works Code of Practice
- Part 3: Work on Roads (MUTCD Supplement April 2016)
- MRTS 02
- Any Relevant Site-Specific Documentation supplied by the Principle Contractor

Traffic Arrangement

Traffic signage and delineation will be erected by a certified TMI. These will be set up as instructed in the attached TGS in **Appendix B** and the current MUTCD "Part 3 Works on Roads Manual – 2016".

Site Visited on 2018

By Simon Kay

Site Location



Site Control

- The proposed Traffic Guidance Schemes (TGS) for the works are Based on the MUTCD Part 3 2016 Seventh issue and are contained in Appendix B.

The TGS selected for use during works shall be included in the TMP under the attachment M994 Installation and/or Removal of Regulatory Traffic Signs/Devices for Main Road owned roads or signage log for other roads and will be submitted for review prior to the commencement date of the works project as shown in the above Section 5.4 – Traffic Arrangements

Contractors are to supply their own, Traffic Guidance Schemes and Traffic Management Plans to Suncentral Maroochydore, so all site contacts are available. These are to be stored onsite in site buildings.

Sequence of Works

Sequence of works would be as follow:

1. Install all temporary / permanent traffic signs and devices as per TGS contained in Appendix B.
2. Road users are advised to travel at a reduced speed in the City centre, new road network zone as per Diagram TGS
3. Construct and completion of works.
4. Remove all construction material from site and demobilise.
5. Remove all temporary / permanent traffic signs and devices.
6. Open road to public and reinstate the designated speed limits.

Method of Construction

Refer to **Construction plan** for construction procedures (if applicable). The method of construction is supported by the selected TGS as detailed in **Appendix B** of this document.

Traffic Guidance Schemes

Where any changes to existing traffic arrangements are proposed a TGS shall be submitted to the Principal or their representative at least 24 hours prior to the proposed traffic change. The TGS shall clearly detail the revised traffic arrangement at all affected areas. A copy of the selected TGS will be given to any persons involved in erection of roadwork signage and is for Information Only.

The TGS complies with the requirements of the MRTS02 and MUTCD Part 3 - 2016. The TGS selected for use and included in this plan provides a clear arrangement of the traffic signs and speed limits to be installed and maintained during the construction works. The TGS is in accordance with the requirements of MRTS02 Clause 6.4 – Traffic Guidance Schemes and clause 2.2.1 Traffic Guidance Schemes of the MUTCD Part 3 – 2016.

The TGS is structured to maintain a safe work place all the time in accordance with MUTCD Part 3 - 2016, Clause 4.1.2.

Works will be carried out in a controlled work zone. Example TGS selected from the MUTCD Part 3 – (2016) will be used to control the construction work zone during the works.

The selected TGS will be installed in accordance with the requirements of the example TGS contained in the MUTCD Part 3 – (2016).

The TGS details are included in the TMP under the attachment M994 Installation and/or Removal of Regulatory Traffic Signs / Devices contained in **(Appendix C) If Applicable.**

Traffic Management Options Considered

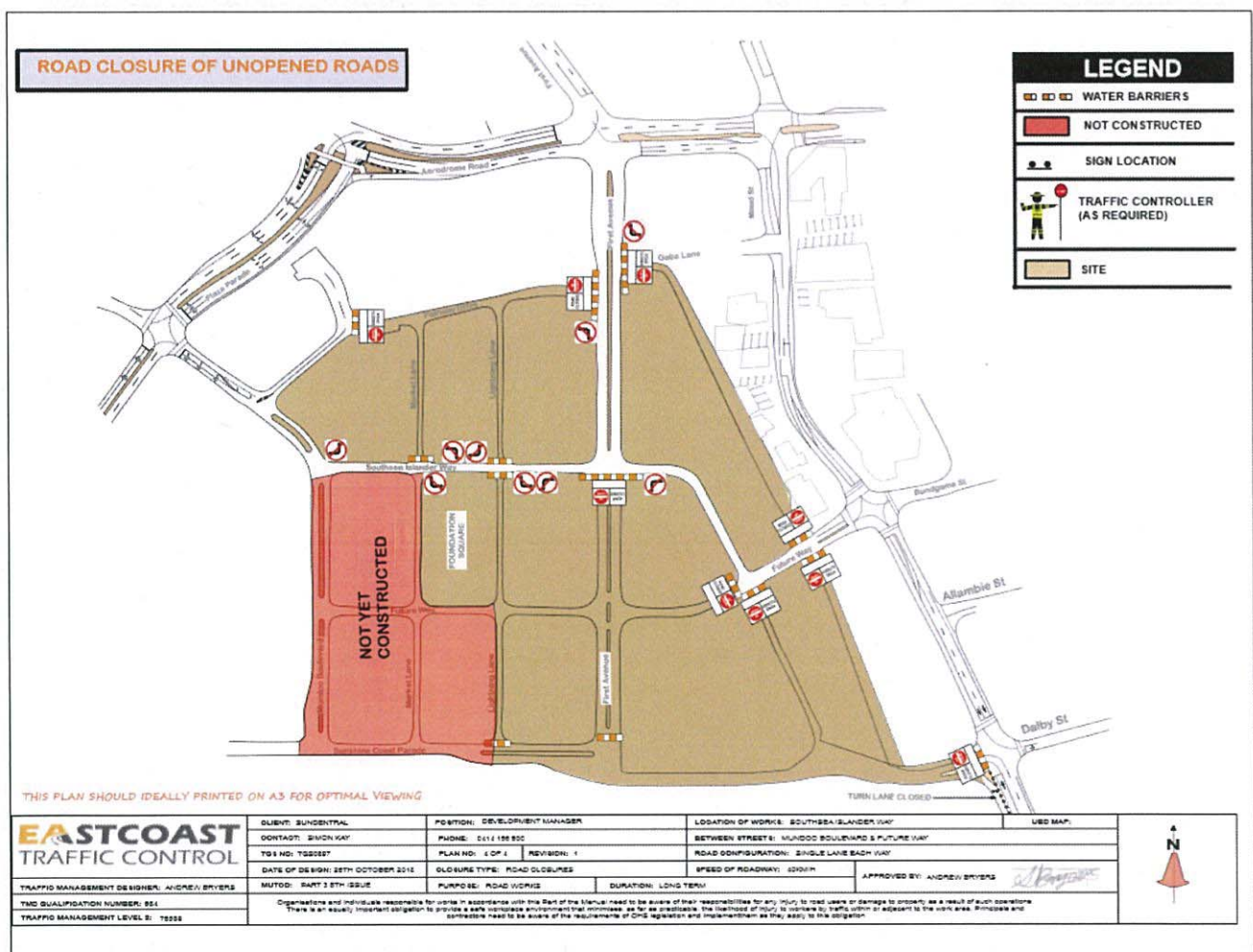
- All Road Users

Option	Features	Comments
Road Closure	Due to imminent building construction on vacant sites, roads have not been opened for public safety.	Selected Option
Past / Through	Will not give enough safety for the public	Not Selected

- Pedestrians

Option	Features	Comments
Detour	This would allow for a Traffic Free work area however the Detour would cause substantial delays due to distance.	Not Selected
Past / Through	This option will have minimal impact on road users however using Traffic control will help with the flow of traffic past / through site minimising the risk to workers	Selected Option

Staging Plans (Traffic Flow)



Consultative Process

Public Notification

The contractor shall advise the general public of any changes to normal traffic movements and any possible disruptions through one or all of the following methods:

- Direct consultation with the affected residents / businesses.
- Letterbox drops to affected residents / businesses.
- Radio announcements.
- Web based road reports.
- All Emergency Services to be advised of when and where works are being carried out

Notification of Traffic Changes

The relevant authorities and emergency services shall be given no less than 48 hours notice of any changes to normal traffic movements or possible disruptions. All emergency service vehicles shall have priority through site when safe.

Construction Work Zone

The construction work zone will be physically and/or visually isolated from road user as per the TGS contained in **Appendix B** via 700mm traffic cones or standard bollards fitted with reflective band.

All the temporary traffic signs and devices will be installed as per the attached TGS based on the MUTCD Part 3 - 2016 to notify all road users of the revised traffic arrangements and speed restrictions being enforced when travelling past the work zone.

The Project Manager and staff will ensure that a safe working environment is maintained at all times in accordance with the requirements of the MUTCD Part 3 – 2016.

Local / Business Access Requirements

Local property/ Business accesses will be sign posted, if applicable, and full access via traffic controllers at all times to ensure any/all vehicles travelling in the area are made fully aware of the works, including the traffic restrictions in place while the construction work is in progress.

Side-tracks / Detours

N/a

Traffic Speed and Lanes

One lane to be operational at all times and to be a minimum width of 3.0m plus 0.5m edge clearance from delineation devices or the nominal lane width marked on the road. Should the width requirement not be able to be achieved then a risk assessment shall to be completed on site retained for inspection when requested.

The nominated travel speed through the work zone will be restricted to n/a kph under traffic control. Traffic controllers will be used to control the work zone for the duration of the project. *The actual Speed of the Road Users will NOT be monitored on This Site.*

All 3 m lane(s) will be made available to traffic per the selected TGS contained in **(Appendix B)**.

Signage Layout

The signage for the proposed construction work will be set up to operate throughout the day. These signs will be retro reflective. Flashing lamps should be used appropriately to draw attention to signs, and steady lamps to augment lines of delineation.

Height requirements for Traffic Signs and Devices		
Short Term	Long Term	Kerbed/ Built up Areas
200 mm from the pavement to the bottom edge of the signage	1.0 to 1.5 m from the pavement to the bottom edge of the signage	2.2 m from the pavement to the bottom edge of signage.

When designing a layout for the erection of advance warning signs for detours it is important to keep in mind that all signs should be placed in the most advantageous positions.

Maintenance of Trafficable Surfaces and Traffic Control Devices

The traffic control devices utilised will be in accordance with the document "Manual of Traffic Control Devices" (MUTCD Part 3 – 2016). All loose debris shall be kept cleared from traffic lane at all times, and all unsealed sections to be used as traffic lane shall be compact and dust suppressed.

All traffic control devices shall be installed as per the requirements and layouts specified in the MUTCD and/or instructions from the Principal or their representative.

The equipment/materials that will be used to divert traffic safely past any works or road workers may include, but not be limited to, the following: *(as required)*

- Roadwork signs (conforming to the MUTCD Part 3 – 2016).
- Regulatory signs (conforming to the MUTCD Part 3 – 2016).
- Delineators – temporary and permanent markers.
- Temporary street lighting.
- Approved traffic barriers.
- Variable message signs.
- Flashing arrows.
- Temporary traffic signals.
- Barrier mesh.
- Flashing lights.
- Dust control will be assessed on-site by the supervisor and suitable control measures as listed in the EMP will be implemented when deemed necessary.

Traffic Controllers

Traffic controllers will be operating for the duration of the construction works project.

Traffic controllers will ensure that they:

- Carry an identification card showing that the person is a qualified Traffic Controller.
- Card must be accredited by Queensland Transport under the Traffic Controller Accreditation Scheme.
- Traffic control shall be conducted as per the approved procedure for controlling traffic which is available from the site office.
- Carry a Construction Safety Induction Card (blue/white card)
- Traffic Controllers if used are to be relieved from their duty after not more than 2 hours for a period of rest or other duties of at least 15 mins MUTCD CI 4.10.5

On-Site Communication

When on-site, Traffic Controllers (TC) communication with each other and other site staff will be by means of two-way radio, visual, and/or verbal.

Road Closure / Traffic Restrictions

As per the attached TGS Diagrams based on the MUTCD Part 3 – 2016 for the works activities will be under taken with the "site" (coloured in brown) Maroochydore City Centre .

The travel speed will be/ if reduced on contractors Traffic Guidance Schemes while under traffic control however there is no normal posted speed prior to works as these roads are not registered for public use yet as per the details contained in the TGS that has been attached for use during the construction works and which is contained in (Appendix B).

Nominated Traffic Officer (NTO)

The Traffic Control Approval Officer is the nominated person to be contacted regarding the TMP and/or any traffic management issues in relation to the demonstration works being undertaken. The NTO must hold a current TMD Qualification. The TMD for this TMP is Joe Townsend TMD # OP128, these details are also shown on pages 1 and 2. If this person is away on a leave or for other reasons, then all contact is via Project Manager.

Maintenance Outside of Working Hours

Project Manager:	Simon Kay	Phone:	0439 406 392
Site Foreman:	Will be provided by individual contractor	Phone:	N/A
After Care Signage:	Simon Kay		

Duties/Responsibilities

The responsibilities for traffic management issues are as follows:

- | | |
|----------------------------------|--|
| • TMD | Responsible for the-
Design and signing off of the TMP and or TGS required |
| • Project Manager | Responsible for the initial checking and Signing of
the Traffic Management Plan (TMP) and audits of
the TMP |
| • Works Supervisor/ Site Foreman | Responsible for ensuring all traffic control devices
required as part of the TMP and TGS's are available
On-site and used correctly. |

- **Nominated Traffic Officer (NTO)** Must hold a Minimum TMD Certificate and will be Responsible for the checking correct installation, maintenance, removal and record keeping of all traffic Control devices
- **Site Supervisor / Foreman** Check functioning of the TMP on daily basis or delegate a suitable person for this task.
- **Site Foreman or representative** Organise maintenance of the trafficable surfaces and Traffic control devices during the working hours and Outside working hours.
- **Traffic Management Implementer** To Implement to TGS on site as per request of the contractor or contractor's supervisor
- **Traffic Controller** follow any lawful instructions from the Traffic Management companies and or contractor's supervisor

The check list forms part of this TMP, and is to form a part of the records of the TMP.

NOTE

"One Member of the Contractors Staff (the Project Manager) is nominated to attend a Traffic Co-ordination committee convened by the Principal. If the Project Manager is unavailable for any reason then another Staff Member must be Nominated to attend."

Statutory, Public and School Holidays

To be advised if works will affect or run through school holidays.

Queues

The queue lengths will be monitored on-site by the supervisor to ensure that any one vehicle is not delayed above the maximum time period of 5 mins.

Delays

The delay time shall be kept to a maximum of 5 mins for any single vehicle, in single lane one-way traffic and for 5 mins to stop traffic in both directions for the extent of the project in working hours.

Traffic controllers shall be used at both ends of the working zone and will communicate with each other and other site staff by mean of two-way radio, visual and/or verbal.

In the event of an emergency, the traffic controller shall notify the supervisor and site team to temporarily stop work as to allow emergency passage through the work zone.

Working Hours / Days

7am to 6pm Monday to Saturday

Duration of Works

Approx 12 Months

Variable Message Signs

TBA

Roadway Lighting Requirements

Notwithstanding the requirements of Clause 13.1 of MRTS02, where existing roadway lighting is to be removed, the Contractor shall provide temporary lighting that meets the pre-existing luminance levels. Any temporary road lighting shall be deemed to be included under Item 1201

Worksite Lighting

Show Locations on TGS

Public Transport, Pedestrian and Bicycle Facilities

New road infrastructure to be constructed, no current pedestrians and bicycles using road infrastructure.

Records

A set out of all temporary regulatory signage will be submitted with each detailed TGS for the staged construction processes for approval. The detailed plans will be retained in project file.

Records of all temporary regulatory signs and changes to traffic control will be recorded and maintained by Will be provided by individual contractor . These documents will be stored on-site up until practical completion and presented to the Principal or their representative on completion of the project and/or stored as per Queensland Government filing requirements. A copy of the record sheet M994 (if required) – Installation and/or Removal of Signage/Devices log) used is attached in **Appendix C**. All traffic control signs (including regulatory signs) are to be checked twice daily and records completed on a signage records document such as the "Signage Register".

In the event of a traffic accident photographs of relevant signage are to be taken as soon as possible and retained in the project file with the accident report.

Portable Traffic Control Systems (Portable Traffic Lights)

TBA

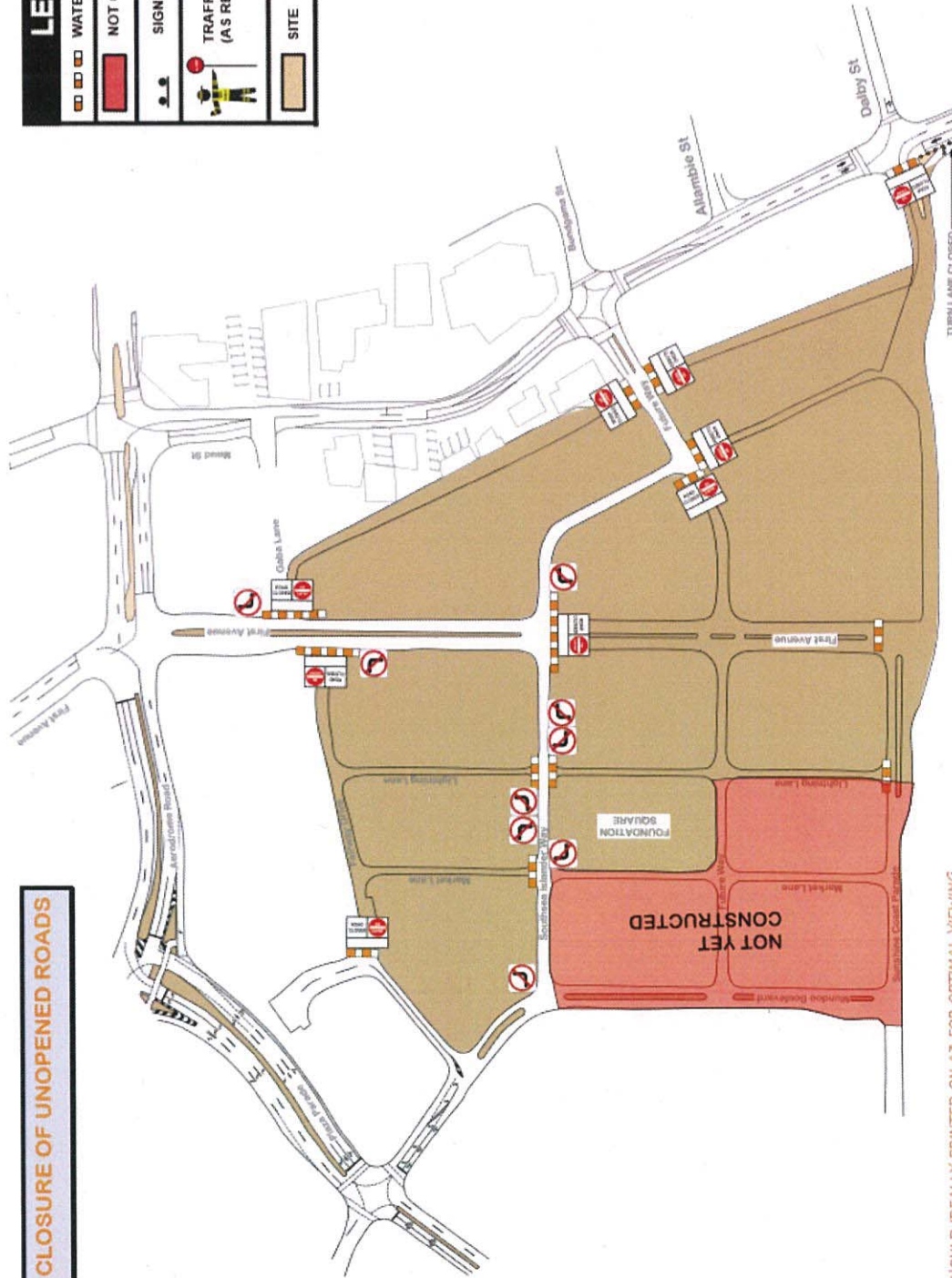
Prohibition Notices

All non-conformances shall be remedied by the Contractor within two hours of receipt of written notice of the non-conformance. Failure to remedy any non-conformance within the two-hour period shall entitle the Principal to carry out any remedial work deemed necessary pursuant to the Contract

Description of TGS	TGS Number	Location of Task / Description	Task completed by	Installation Date	Removal Date
Road Closures	TGS0897	Maroochydore City Centre	East Coast Traffic Control	TBA	TBA

ROAD CLOSURE OF UNOPENED ROADS

LEGEND	
	WATER BARRIERS
	NOT CONSTRUCTED
	SIGN LOCATION
	TRAFFIC CONTROLLER (AS REQUIRED)
	SITE



THIS PLAN SHOULD IDEALLY PRINTED ON A3 FOR OPTIMAL VIEWING

EASTCOAST TRAFFIC CONTROL		CLIENT: SUNCENTRAL CONTACT: SIMON KAY T03 NO: T030037 DATE OF DESIGN: 28TH OCTOBER 2016 MUTOD: RANT 3 2TH ISSUE	POSITION: DEVELOPMENT MANAGER PHONE: 0114 195 800 PLAN NO: 6 OF 1 REVISION: 1 PURPOSE: ROAD CLOSURE DURATION: LONG TERM	LOCATION OF WORK: SOUTHERA BLANDER WAY BETWEEN STREET: MANDOO BOULEVARD & FUTURE WAY ROAD CONFIGURATION: SINGLE LANE EACH WAY SPEED OF ROADWAY: 600KM APPROVED BY: ANDREW BYERS	USED MAP:
TRAFFIC MANAGEMENT DESIGNER: ANDREW BYERS TMD QUALIFICATION NUMBER: 051 TRAFFIC MANAGEMENT LEVEL 2: T0302		Construction and temporary traffic management to be undertaken with the Road of the Road need to be aware of their responsibilities for any work to road users or damage to property as a result of such construction. There is an existing obligation to provide a safe working environment and maintain the health and safety of the public. The health and safety of the public is a priority and must be maintained at all times. The health and safety of the public is a priority and must be maintained at all times. The health and safety of the public is a priority and must be maintained at all times.			



Installation and/or Removal of Regulatory Traffic Signs/Devices

Road number	Road name	Section/Location	Local Authority

Sketch or Description

Show details and sketch or describe the location of the signs/devices (including distances from street or road junction, bridge or other permanently identifiable point to sign location) or list all the documents that define their details and location.

Reason required

[illegible]

Complete below as applicable for either Permanent or Temporary installation and/or removal

☐ Permanent installation or removal		Proposed date (for installation or removal) / /	
Recommended	Date	Approved (Delegate of the Director-General)	Date
	/ /		/ /

Note: use to provide approval for erection and/or removal of regulatory signs/devices including traffic signals, pedestrian crossings etc. (i.e. those erected to inform motorists of regulations governing movement)

☐ Temporary installation and/or removal