



# TRAFFIC EVALUATION REPORT

**'Festival of the Stone'  
Stone & Wood Brewery  
96-100 Centennial Cct, Byron Bay**

For: Stone & Wood Brewing Company Pty Ltd  
Report no: 23001-TER-0  
Date: 31-Oct-22



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## Document Information

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summary

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## 1. Introduction

Greg Alderson & Associates (GAA) have been engaged by Stone & Wood Brewing Company Pty Ltd to prepare a Traffic Evaluation Report (TER) for the Festival of the Stone (FOTS) 2022 event at the 96-100 Centennial Circuit, Byron Bay, NSW. This report is prepared in accordance with the FOTS 2022 DA consent conditions which requires a submission report reporting on the adequacy of the following and recommending improvements for subsequent events:

- Traffic management
- Traffic guidance scheme (TGS)
- Car parking arrangements
- Shuttle bus pick-up and drop-off arrangements
- Patron numbers
- Any other issues of relevance to event traffic management

### 1.1 Project Brief

The aim of this TER is to describe the 2022 FOTS event from a traffic management point of view, as observed by the traffic manager and other staff during the event, and as commented upon by GAA. This TER is also to be used to evaluate the success of this event from a traffic management point of view and in the planning of future events at the site.

### 1.2 Relevant Standards, Specifications & Guidelines

This TER has been prepared in general accordance with the following standards, specifications and guidelines:

- Guide to Traffic and Transport Management for Special Events Version 3.5
- Transport for NSW (TfNSW) Traffic Control at Worksites Technical Manual (TCWS) Version 6.1
- Australian Standards (AS1742 in particular)
- Quality Assurance specifications
- Austroads Guide to Traffic Management

### 1.3 Event Description

Festival of the Stone is an event hosted by Stone & Wood Brewing Company Pty Ltd that celebrates live music, beer, food and provides an opportunity for the community to come together. The 2022 FOTS event was held on Saturday 4th June starting at 3:00pm and concluding at 10:00pm. The event is capped at 2,000 attendees (inclusive of 1,900 patrons and 100 staff).

A photo of the 2022 FOTS event is shown in Figure 1.



Figure 1 - FOTS 2022 event photo (Stone & Wood Brewing Pty Ltd, 2022)

## 1.4 Site Location

The event site is located in Centennial Circuit, in the Byron Bay Industrial Estate, approximately 3 kilometres west of Byron Bay town centre.

The vehicular entrance/s to the event site are via the existing brewery driveways at 96-100 Centennial Circuit. It is proposed that service vehicles, artist and stall holders would use these existing entrances during bump-in and bump out.

During the event, patrons entered the site on foot via a temporary entry (using the concrete driveway) from Centennial Circuit.

During event times, a temporary road closure was implemented to provide full separation of external vehicle traffic from pedestrian traffic along the site frontage. Centennial Circuit intersecting Bayshore Drive also had a road closure for traffic turning left onto Centennial Circuit from Bayshore Drive. The purpose of this road closure was to ensure no queuing occurred on Ewingsdale Road. Traffic entering the festival was directed by signage to Brigintine Street order to enter the festival.

Figure 2 depicts the location of the site with respect to its locality.



Figure 2 – Site locality (Byron Shire Council Mapping, 2021)

## 1.5 Definitions

<b>AADT</b>	Average Annual Daily Traffic; average traffic volume per day after application of correction factors
<b>ADT</b>	Average Daily Traffic; average traffic volume per day, based on a limited survey period, typically 1 week.
<b>Peak Flow Rate</b>	Hourly volume of vehicles during busiest part of assessment period
<b>Background Traffic</b>	Traffic composition as would typically exist without superposition of event traffic
<b>Heavy Vehicle</b>	For the purposes of this report: anything other than a pedestrian, cyclist, motorbike or car

## 2. Implementation of Traffic Guidance Scheme (TGS)

The approved TGS was installed prior to commencement of the festival. An inspection was undertaken by GAA staff on Saturday 4<sup>th</sup> June 2022 to check the general compliance of the installed signs and devices with the approved TGS.

TGS implementation certificates were issued by GAA on Saturday 4<sup>th</sup> June 2022.

## 3. Traffic Monitoring Summary

### 3.1 Traffic Management & Traffic Guidance Scheme (TGS)

The traffic management was observed by the traffic manager who was on site for the duration of the festival. The findings listed in this section are based on feedback provided to GAA by the traffic manager.

Traffic was observed to flow well at the event site and on the wider road network surrounding the event site. This was observed to be the case leading up to, during and following the conclusion of the event.

No traffic flow or safety issues were observed under the implementation of TGS. Traffic controllers and monitors were posted throughout the site to direct traffic as required and monitor the flow of traffic. There was an issue obtaining the water barriers for the site, but this was resolved prior to the TGS implementation inspection. It is recommended that additional preparation is undertaken at future events to ensure the traffic control equipment is available on site well in advance of the beginning of the festival.

### 3.2 Car Parking Arrangements

150 parking spaces were allocated in the Cavanbah Centre carpark for patrons to access the site. Following parking, patrons could either walk or catch a shuttle bus to the site.

The number of vehicles utilising the Cavanbah Centre carpark for the FOTS event was observed each hour as follows:

- 3pm: 4 vehicles
- 4pm: 14 vehicles
- 5pm: 37 vehicles
- 6pm: 47 vehicles
- 7pm: 57 vehicles
- 8pm: 52 vehicles
- 9pm: 45 vehicles
- 10pm: 30 vehicles

As shown above, the number of vehicles utilising the Cavanbah Centre carpark peaked at 57 vehicles (equal to 38% of the 150 parking spaces available). Thus, the number of parking spaces made available was sufficient for the event.

### 3.3 Shuttle Bus, Rideshare & Pick-up/Drop-off Arrangements

The shuttle buses operated to a reasonable level throughout the festival. Shuttle buses transported patrons from the Byron Bay town centre to the festival entry, picking up patrons who had parked



at the Cavanbah Centre carpark along the way. The shuttle buses were particularly effective in transporting patrons from the festival to Byron Bay town centre at the conclusion of the event.

The following improvements are recommended regarding shuttle buses at future events:

- Ensure shuttle bus drivers are aware of the schedule and which contingencies to follow in various situations (i.e., whether to keep leaving on time if no patrons are on the bus, etc.)
- Make it clearer to patrons that the shuttle bus is available to transport patrons between the Cavanbah Centre carpark and the festival entry through the duration of the festival

Taxi and rideshare services were observed to operate efficiently without issue throughout the festival. Many patrons opted to use taxi and rideshare services as opposed to driving and using the shuttle bus service.

## 3.4 Patron Numbers

The cumulative number of patrons who had checked in at the festival by hour is as follows:

- 3pm: 133 patrons
- 4pm: 401 patrons
- 5pm: 963 patrons
- 6pm: 1,278 patrons
- 7pm: 1,395 patrons
- 8pm: 1,422 patrons
- 9pm: 1,427 patrons
- 10pm: 1,427 patrons

It was observed that the peak departure period was between 9pm and 10pm.

## 3.5 Other

Aside from the observations listed earlier in Section 3 of this report, the following recommendations are made for future events:

- Larger pedestrian barriers to be implemented at the pick-up/drop-off area to keep patrons from straying into areas of potential conflict with vehicles or dangerous situations
- More directional signage to be implemented for patrons leaving the festival (where to queue and wait for shuttle buses, how long the wait may be, where patrons can expect to be dropped off, etc.)
- More lighting to be provided on the street outside the venue for pedestrians moving to and from the festival area

## 4. Conclusion & Recommendations

FOTS 2022 was held on Saturday 4<sup>th</sup> June 2022 and was a successful event from a traffic management perspective.

The findings of this TER are summarised below as follows:

- Traffic was observed to flow well at the event site and on the wider road network surrounding the event site before, during and after the event
- No traffic flow or safety issues were observed under the implementation of TGS
- The number of parking spaces made available was sufficient for the event, with a peak of 57 vehicles utilising the Cavanbah Centre carpark (equal to 38% of the 150 parking spaces available)
- Taxi and rideshare services operated efficiently without issue, with many patrons preferring to use these services as opposed to the shuttle bus or driving themselves
- 1,427 patrons were checked in over the course of the festival

Recommendations from this report that are to be considered in the planning and implementing phases at future events are as follows:

- Additional preparation is undertaken to ensure the traffic control equipment is available on site well in advance of the beginning of the festival
- Ensure shuttle bus drivers are aware of the schedule and which contingencies to follow in various situations (i.e., whether to keep leaving on time if no patrons are on the bus, etc.)
- Make it clearer to patrons that the shuttle bus is available to transport patrons between the Cavanbah Centre carpark and the festival entry through the duration of the festival
- Implement larger pedestrian barriers to keep patrons from straying into areas of potential conflict with vehicles
- Implement more directional signage for patrons leaving the festival (where to queue and wait for shuttle buses, how long the wait may be, where patrons can expect to be dropped off, etc.)
- Install additional lighting on the street outside the venue for pedestrians moving to and from the festival area

## 5. References






*Traffic Control at Work Sites*, Transport for NSW, Issue no. 6.1, February 2022

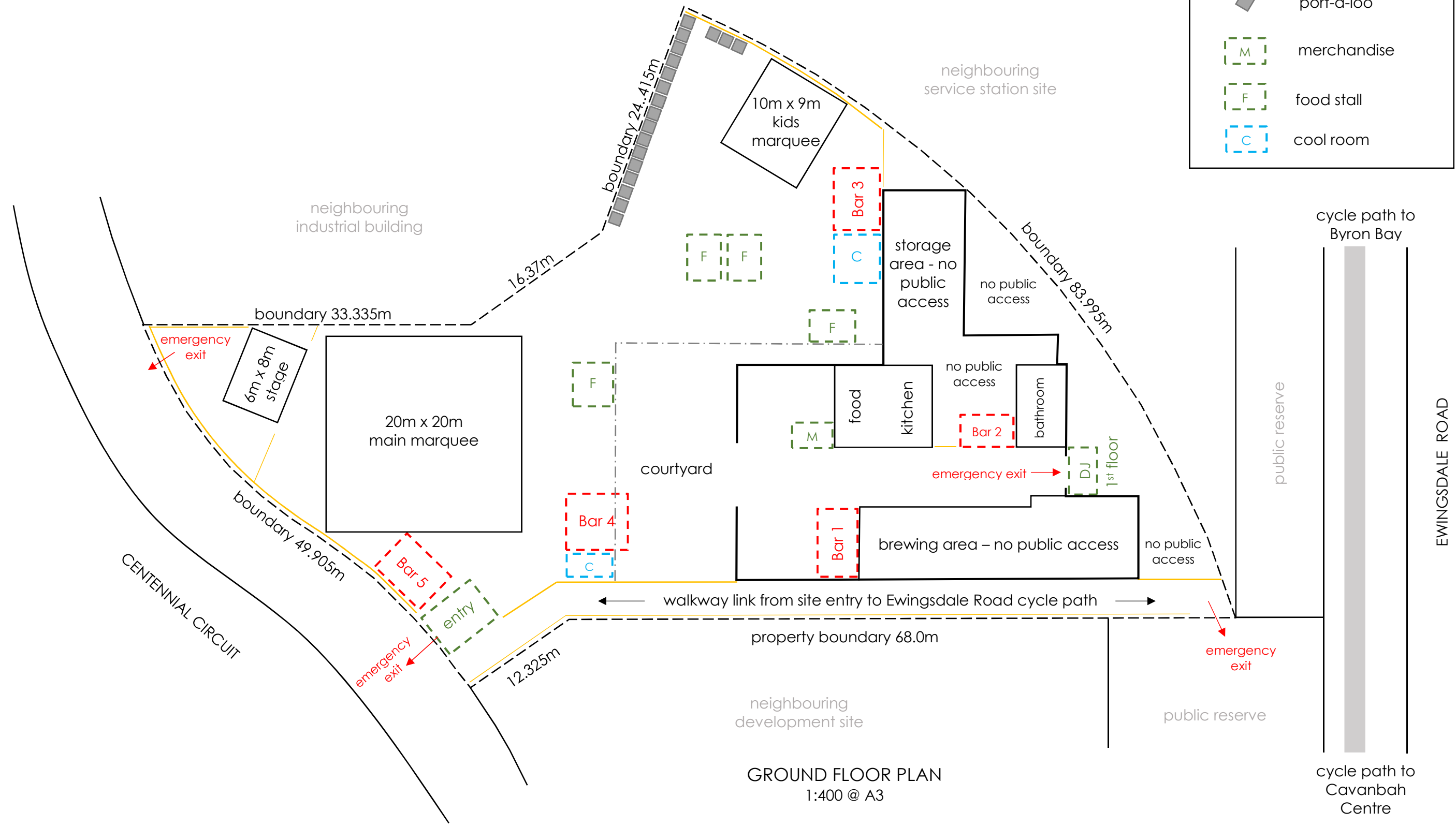
*Guide to Traffic and Transport Management for Special Events*, NSW Government, Version 3.5, June 2018

*Austrroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods*, Austrroads Inc., Edition 4.0, Sydney, April 2020

Appendix A – Event Site Plan

**GENERAL KEY**

-  temporary fencing
-  port-a-loo
-  merchandise
-  food stall
-  cool room

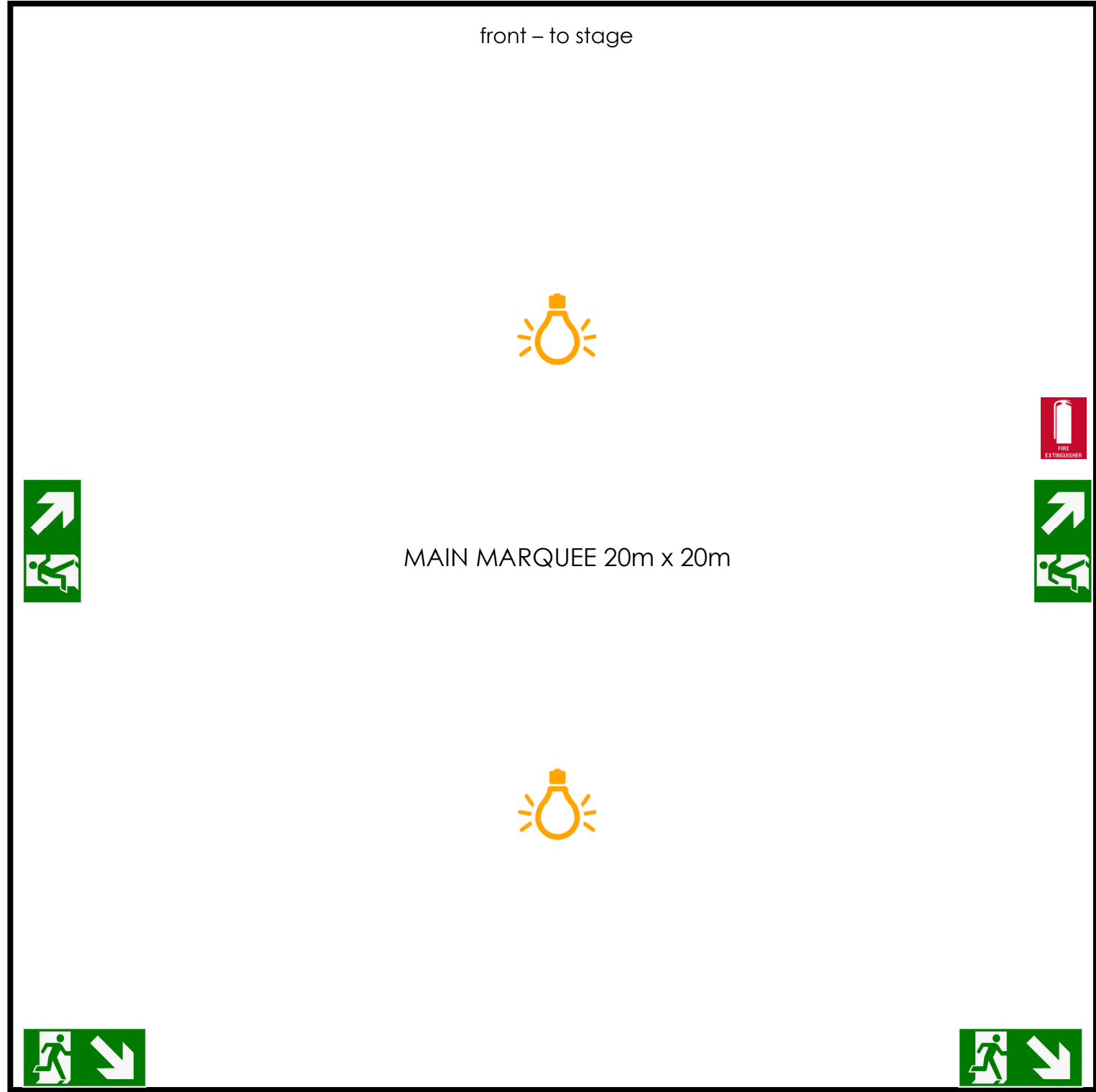
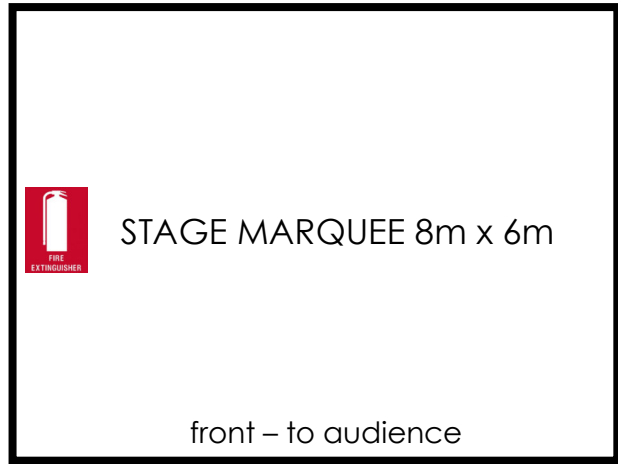
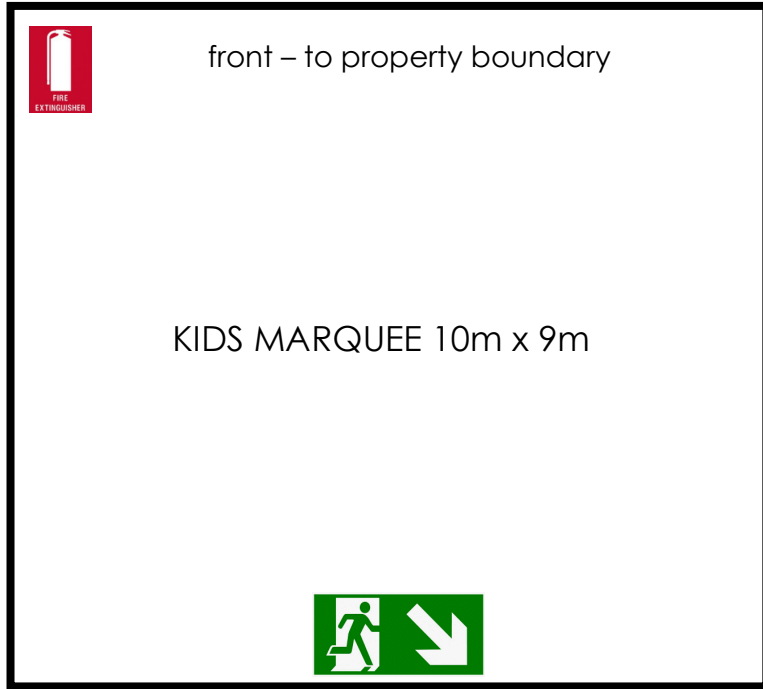


GROUND FLOOR PLAN  
1:400 @ A3





**FESTIVAL OF THE STONE - LAYOUT PLAN**  
 PLAN No. DA-01 Rev B  
 Stone & Wood Brewery - Lot 59 DP 835249  
 No. 96-100 Centennial Circuit, Byron Bay


**JOE DAVIDSON**  
**TOWN PLANNING**  
 12 March 2019



**EMERGENCY SERVICES KEY**

 Exit Sign

 Emergency Evacuation Lighting

 Portable Fire Extinguisher

**FESTIVAL OF THE STONE – TEMPORARY STRUCTURES**

PLAN No. DA-03

Stone & Wood Brewery - Lot 59 DP 835249

No. 96-100 Centennial Circuit, Byron Bay

**JOE DAVIDSON**

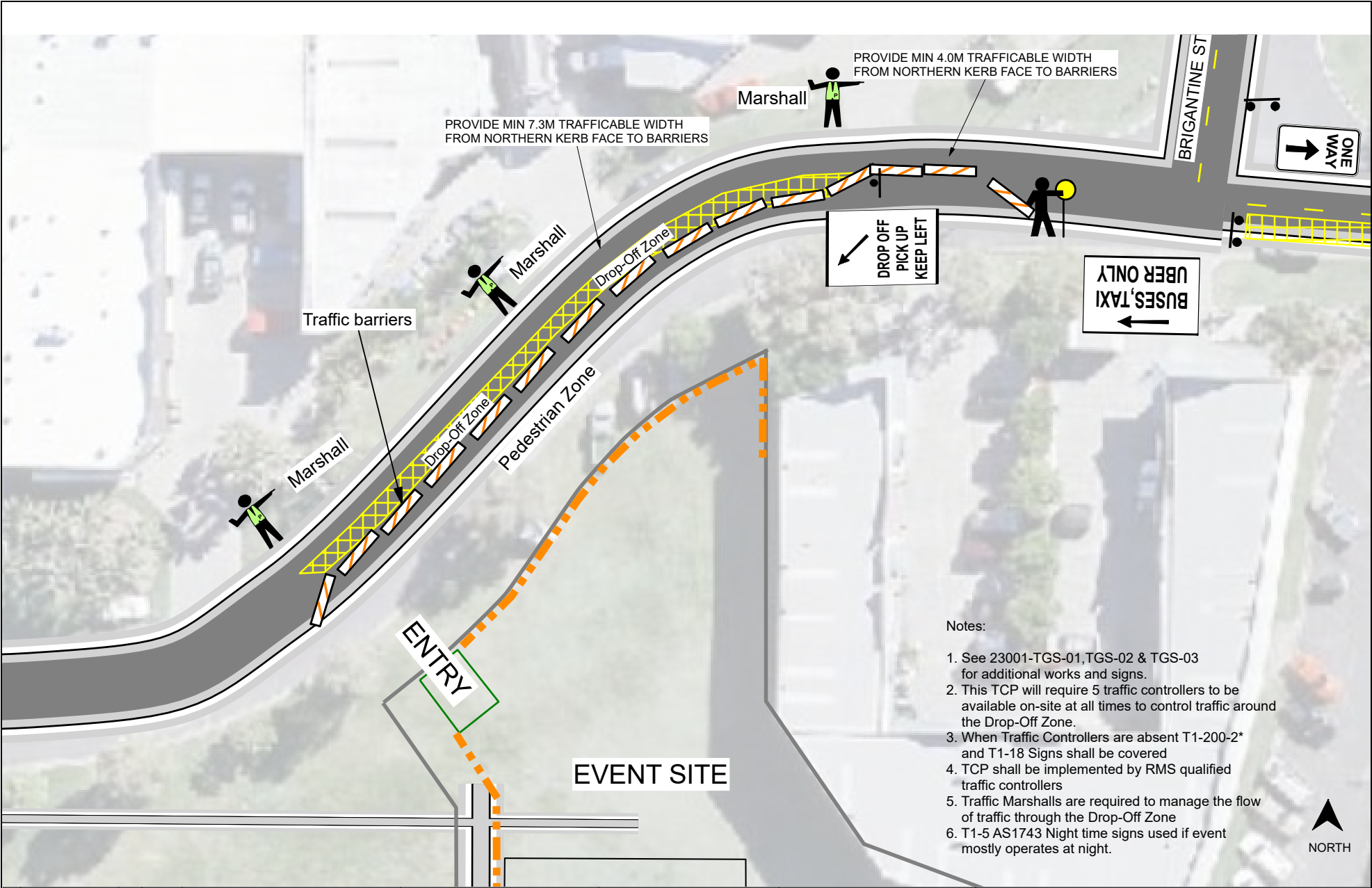
TOWN PLANNING

12 March 2019

**Appendix B – Traffic Guidance Scheme (TGS)**







- Notes:
1. See 23001-TGS-01, TGS-02 & TGS-03 for additional works and signs.
  2. This TCP will require 5 traffic controllers to be available on-site at all times to control traffic around the Drop-Off Zone.
  3. When Traffic Controllers are absent T1-200-2\* and T1-18 Signs shall be covered
  4. TCP shall be implemented by RMS qualified traffic controllers
  5. Traffic Marshalls are required to manage the flow of traffic through the Drop-Off Zone
  6. T1-5 AS1743 Night time signs used if event mostly operates at night.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUE FOR APPROVAL	AE	28/10/22

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Client: **STONE WOOD**  
BYRON BAY AUSTRALIA

Title: TRAFFIC GUIDANCE SCHEME  
 PICK-UP/DROP-OFF BAY DETAIL

Project: FESTIVAL OF STONE

ISSUE FOR APPROVAL			
Drawn: AE	Scale: N.T.S.	Checked: Allan Evans, BE (Civil) RMS Prepare a Work Zone TMP Card No. TCT1007605	Date: 28/10/22
Checked: AB	Original Size: A3		Revision: 0
Job Number: 23001	Drawing Number: 23001-TGS-01A		



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 www.aldersonassociates.com.au

Client: **STONE WOOD**

STONE WOOD AUSTRALIA

Title: TRAFFIC GUIDANCE SCHEME  
 SITE OVERVIEW - DIRECTIONAL SIGNS

Project: FESTIVAL OF THE STONE

ISSUE FOR APPROVAL			
Drawn: AE	Scale: N.T.S.	Checked: Allan Evans, BE (Civil) RMS Prepare a Work Zone TMP Card No.: TCT1007605	Date: 28/10/22
Checked: AB	Original Size: A3		Revision: 0
Job Number: 23001	Drawing Number: 23001-TGS-02		

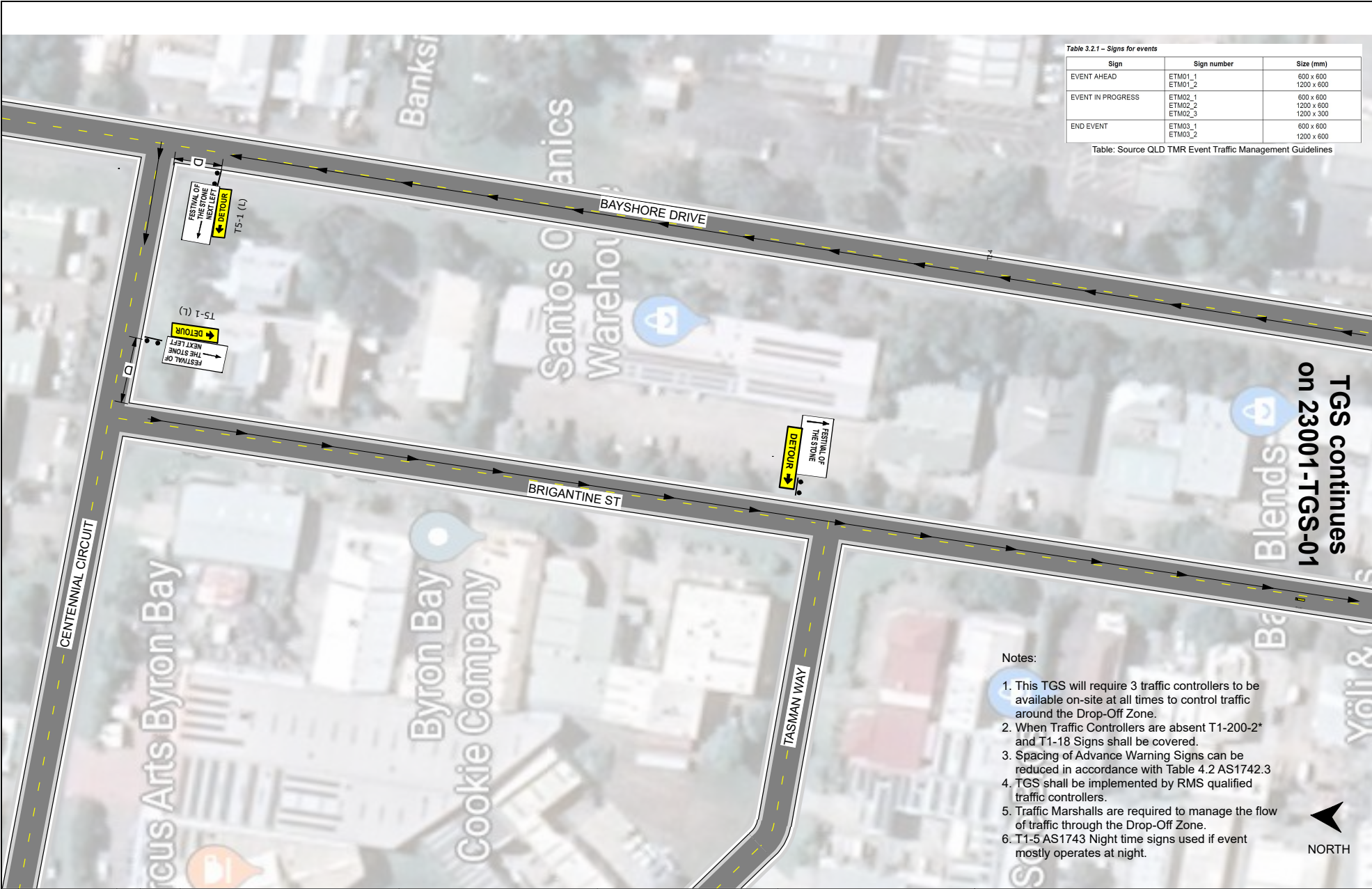


Table 3.2.1 – Signs for events

Sign	Sign number	Size (mm)
EVENT AHEAD	ETM01_1	600 x 600
	ETM01_2	1200 x 600
EVENT IN PROGRESS	ETM02_1	600 x 600
	ETM02_2	1200 x 300
	ETM02_3	1200 x 600
END EVENT	ETM03_1	600 x 600
	ETM03_2	1200 x 600

Table: Source QLD TMR Event Traffic Management Guidelines

Notes:

1. This TGS will require 3 traffic controllers to be available on-site at all times to control traffic around the Drop-Off Zone.
2. When Traffic Controllers are absent T1-200-2\* and T1-18 Signs shall be covered.
3. Spacing of Advance Warning Signs can be reduced in accordance with Table 4.2 AS1742.3
4. TGS shall be implemented by RMS qualified traffic controllers.
5. Traffic Marshalls are required to manage the flow of traffic through the Drop-Off Zone.
6. T1-5 AS1743 Night time signs used if event mostly operates at night.

NORTH

REV	REVISION DESCRIPTION	BY	DATE
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Client: **STONE WOOD**

STONE WOOD AUSTRALIA

Title: TRAFFIC GUIDANCE SCHEME  
 EVENT HOURS NORTH OF SITE

Project: FESTIVAL OF THE STONE

ISSUE FOR APPROVAL			
Drawn: AE	Scale: N.T.S.	Checked: Allan Evans, BE (Civil) RMS Prepare a Work Zone TMP Card No.: TCT1007605	Date: 28/10/22
Checked: AB	Original Size: A3		Revision: 0
Job Number: 23001	Drawing Number: 23001-TGS-03		



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