



SIMMONS CIVIL CONTRACTING PTY LTD

***TRAFFIC MANAGEMENT PLAN FOR CASTLE HILL
POWERHOUSE MUSEUM DISCOVERY CENTRE (MDC) –
EARLYK WORKS CARPARK CONSTRUCTION***

Review May 17		Page 1 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.0 PROJECT TRAFFIC MANAGEMENT PLAN

5.1 Introduction

This Traffic Management Plan describes how Simmons Civil Contracting proposes to safely manage vehicular, cyclists and pedestrian traffic during the early works of the Powerhouse Museum Discovery Centre (PMDC).

Simmons Civil acknowledges the safety of road users and the effective management of traffic is paramount to the successful day-to-day activities during the construction phase of this project.

This Project Management Plan is applicable to all staff, employees, subcontractors, and any statutory Service Authorities undertaking service relocations throughout the duration of the contract until project completion and its implementation and on-going development will be managed by the senior project team.

5.2 Scope

This plan applies to all parts of the construction of the project works. It does not apply to the maintenance of the road after opening to traffic.

The scope includes:

- The provision for the safe movement of vehicular and pedestrian traffic.
- The protection of workers from passing traffic.

5.3 Project Description

The aim of this project is to successfully create an accessway between the MDC and the TAFE. Other works within this project may include the demolition of the existing car park and construction of a new car park on the TAFE, earth works and site subdivision [**refer to DA Condition B28 (a)**].

All proposed construction hours will be operational through the following hours:

- Monday to Friday: 7am-5pm,
- Saturday: 8am-1pm; and
- No work on Sundays and Public Holidays

Review May 17		Page 2 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.4 Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP)

The CTPMSP must be prepared to achieve the objective of ensuring safety and efficiency of the road network. The CTPMSP shall be prepared in consultation with TfNSW (Sydney Coordination Office) and shall specify, but not to be limited to, the following:

- a) A description of the development.
- b) Location for any proposed work zone(s).
- c) Location of any crane(s).
- d) Haulage routes.
- e) A detailed plan identifying all construction vehicle access arrangements.
- f) Estimated number of construction vehicle movements, including measures to reduce the number of movements during the AM and PM peak periods.
- g) Construction program.
- h) Proposed construction hours.
- i) Any potential impacts to the general traffic, cyclists, pedestrians, and buses within the vicinity of the site from the construction of the development; and
- j) Proposed mitigation measures. Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMSP.

Review May 17		Page 3 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.5 Project Work Zones

The following figure will show the proposed work zones of the early works at Powerhouse MDC [refer to DA Condition B28 (b)].



Figure 1 - Proposed Work Zones

Review May 17	Powerhouse Museum Discovery Centre – Traffic Management Plan	Page 4 of 12
Issued 30/06/16		Rev No 001

5.6 Hazard and Risk Management

When planning how to mitigate identified hazards the following hierarchy of controls is considered;

1. **Elimination** – remove the hazard altogether – Isolate the hazard
2. **Substitution** – use a different material / product posing a lesser risk
3. **Engineering controls** – changing the process to prevent persons being exposed to the hazard
4. **Administrative controls** – provide a system of work that reduces the possibility of a person being exposed to the hazard
5. **Personal protective equipment** – personal protective equipment is generally used as a short-term control measure. It can also be used to supplement other measures used to control risks

The table below outlines the methodology that shall be used to identify hazards, to calculate the risk associated with the hazard and what the outputs/controls of this analysis will be. Records of assessment must be kept and referred to Risk Assessment.

Inputs	Activity	Output/Records
Identify Hazards and Risks	Collect and review relevant documents relating to the potential project hazards and risks. Consult with and collect relevant information from clients and other stakeholders. Identify the Hazards/Risks and associated with systems, plant, facilities, processes and practices. Use applicable legislation, advisory standards, codes of practice etc.	Hazards and Risks identified
Assess the potential Hazards and Risks	Using Severity x Likelihood determine what the initial potential Risk Rankings are. A register of hazards and risks must be maintained by the management rep for each project	Initial Risk Rating determined and documented.
Develop controls.	Hazard and Risk controls must be identified and documented, assuming no existing controls are to be in place. Residual Risk is calculated after the appropriate control measures have been identified.	Control measures identified and documented. Residual Risk identified and documented.
Implement Hazard and Risk controls.	Hazard and Risk controls implemented, training provided etc.	Controls implemented.
Monitor / Audit	The effectiveness of Hazard and Risk control measures is monitored and reviewed. The audits must be documented for Mgt Review.	Controls monitored and reviewed.

Table 1 – Hazard and Risk Assessment

Review May 17		Page 5 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.7 Risks & Proposed Responses

No.	Risks	Potential Consequences	Proposed risk treatment
1	Construction may cause disruption to traffic.	Traffic delays causing frustration to all TAFE occupants and travellers.	Consider methods of construction at an early stage during the design to reflect community needs and reduce delay times therefore minimising the impact on traffic.
2	Traffic management inadequate anticipation and communication issues.	Potential community issues causing dissatisfaction and frustration.	Determine traffic routes and engage with community if needed. Confirm pre-existing conditions. Identify any short-term corrective actions.
3	Severe delays to traffic perceived by the community as a direct result of the construction activities.	Community dissatisfaction, claims for loss of trade, time delays.	Establish good public relations from the outset. Early engagement of affected property/business owners to explain process and ascertain needs and potential effects of changed access.
4	Major Traffic Incident.	Local traffic disrupted upsetting locals.	Regular checking of Traffic Management Plan implementation.
5	Access to site for deliveries.	Traffic disruption or interference.	All deliveries to site will enter from Green Rd (second entry) so there are no traffic disruptions.
6	Traffic Speed.	Construction on side road making it dangerous for road users.	Traffic to generally be reduced to 40kph speeds within the construction zone. Construction zone to be in the full length of the Project.
7	Pedestrian Access	Potential disruption to progress causing pedestrians to not comply with pedestrian provisions.	Pedestrians' access will have a walkway on the perimeters of our job site, and no disruptions will be made through the main TAFE carparks.
8	Seasonal traffic variations not allowed for	High volumes during holidays and weekends.	Consider seasonal volumes in programming works. Keep RMS informed and up to date. Be aware of reporting and notification requirements.
9	Damage to local roads due to heavy vehicle movements.	Vehicle damage and potential incidents. Poor community and council relationship.	Allow for heavy vehicle movements in traffic staging and planning to ensure existing, temporary alignment and pavements are suitable during the construction period.

Table 2 – Risks and Proposed Responses

5.8 Strategy for the Project

The road affected by the construction of the project vary greatly on Powerhouse MDC. However, the requirement remains the same as impacts in both cases must be kept to a minimum.

Therefore, Simmons Civil will:

- Design the works to ensure all occupants within the TAFE and the community maintain the one-way entry/exit point in a safe manner.
- Schedule the works to minimise closures during daylight hours
- Schedule the work to minimise the lane, road occupancy and shoulder closures for tie-ins to existing pavements
- Ensure appropriate controls and procedures are implemented during construction activities to address potential traffic impacts
- Incorporate traffic control measures for construction vehicle movements and works programs in order to minimise traffic and transport impacts on local roads and on the lively street (Showground Rd)

5.9 Objectives and Targets

The road affected by the construction of the project vary greatly on PMDC. However, the requirement remains the same as impacts in both cases must be kept to a minimum.

Therefore, Simmons Civil will:

- Design the works to ensure all occupants within the TAFE and the community maintain the one-way entry/exit point in a safe manner.
- Schedule the works to minimise closures during daylight hours
- Schedule the work to minimise the lane, road occupancy and shoulder closures for tie-ins to existing pavements
- Ensure appropriate controls and procedures are implemented during construction activities to address potential traffic impacts
- Incorporate traffic control measures for construction vehicle movements and works programs in order to minimise traffic and transport impacts on local roads and on the lively street (Showground Rd)

Review May 17		Page 7 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.9 Traffic Control Plans

Simmons Civil Contracting will implement approved Traffic Control measures for any works which disrupt free traffic movement in road related areas on Powerhouse Museum Discovery Centre.

These measures will include Traffic Control Plans (TCP) which have been created by Danny White from CBD Traffic Control as required and will encompass vehicle movement and pedestrian movement for both construction resources and the general public.

TCPs must be designed and implemented to allow for and accommodate the passage of over-dimension heavy vehicles through all the road occupancies.

To provide a safe environment for pedestrians, the Site Foreman will clearly define the boundaries of all work areas, and provide defined walking paths, where required.

Fencing and Jersey Kerbs will be installed to restrict physical access to hazardous areas and for site security, which will be appropriately sign posted. Various types of temporary and semi-permanent fencing may be installed including plastic mesh; water filled plastic delineators, weldmesh pool fencing and chain mesh hire. All physical barriers must be maintained during the Project and appropriately secured to prevent injury to the public

5.10 Location of Cranes

As part of the Early Works of the Powerhouse MDC Carpark Construction, there will be no cranes utilized within this project. Our primary focus is targeted on demolition and construction of the existing TAFE carpark area [**refer to DA Condition B28 (c)**].

5.11 Haulage Routes

The haulage routes refer to the network plan of any heavy freight vehicles entering and exiting the job site. The routes in Figure 2 as well as The Traffic Control Plan (TCP) provided below indicates that all construction personnel have access to the site. There will also be vehicle access/egress route from the second entry point on Green Rd [**refer to DA Condition B28 (d)**].

Review May 17		Page 8 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001



Figure 2 - Haulage Routes

5.12 Pedestrian Management Plan

Along with the Traffic Management Plan, the Pedestrian Management Plan must be prepared to achieve the objective of ensuring safety and efficiency of the road network. The proposed mitigation of pedestrian footpaths are identified and must be followed. An emergency evacuation procedure for all pedestrian traffic is also included in the figure below.

5.11 Road Occupancy License (ROL)

Where any work by the Project will or is likely to obstruct or have the effect of restricting, closing, interfering with, or obstructing the free flow of traffic on any lane or shoulder of the existing road, the project team will be required to lodge with RMS or the local council.

Simmons Civil Contracting will obtain the ROLs as part of the consultation with the RMS. When any unplanned closure of a lane or a restriction in the flow of traffic occurs on the existing highway or on specified local roads, the project team will immediately advise RMS of the nature of the closure or restriction and of the schedule for reopening of the lanes.

5.12 Construction Program

The construction program will consist of a 6 week program and they will consist of, but not limited to the following:

- Week 1: Site Establishment/Site Clearing
- Week 2: Site Clearing + Tree Removal
- Week 3: Base course and installing Kerb and Gutter
- Week 4: Base course and installing Asphalt
- Week 5: Final clean up
- Week 6: Extra week for wet weather conditions and miscellaneous works

The estimated number of construction vehicle movements will be **3-4 trucks per day**. These vehicle movements will be entering and exiting from our job site located on Green Rd (see Figure 2 for haulage routes).

Review May 17		Page 10 of 12
Issued 30/06/16	Powerhouse Museum Discovery Centre – Traffic Management Plan	Rev No 001

5.13 Proposed Mitigation Measures

Any impacts to the public, cyclists, pedestrians, and buses shall be minimized and managed through the following proposed mitigation measures:

- Any movement and deliveries will be scheduled outside of the AM and PM peak periods
- The construction egress/exit route will minimize the flow of traffic that is ongoing at Showground Rd (shown in Figure 3)

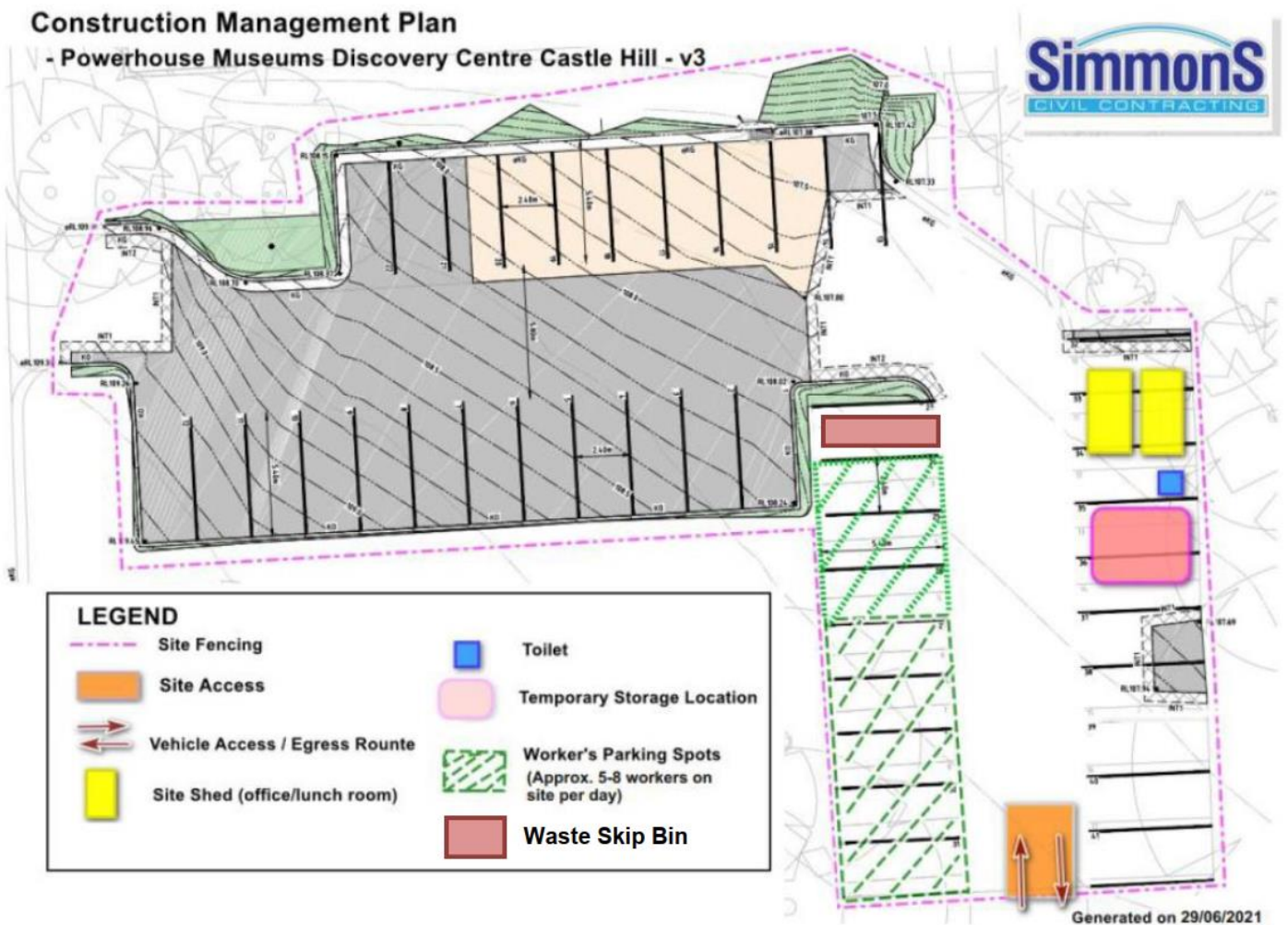


Figure 3 - Construction Management Plan

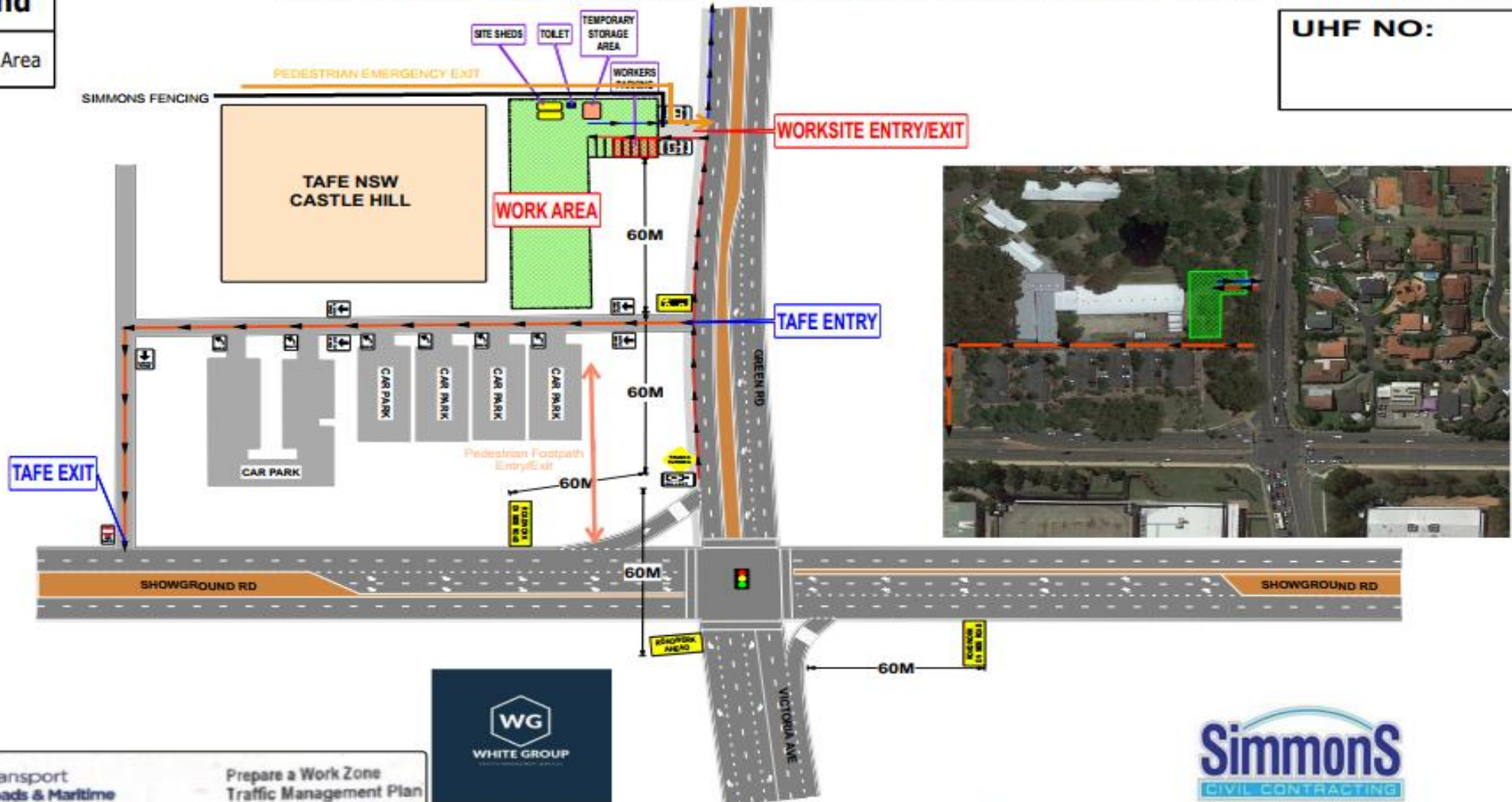
PEDESTRIAN MANGEMENT PLAN & TRAFFIC MANAGEMENT PLAN


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 **Transport Roads & Maritime Services**

Prepare a Work Zone Traffic Management Plan
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This qualification enables you to prepare Traffic Management Plans and conduct inspections on Traffic Management Plans.








DANNY LIONEL GEORGE WHITE

Expiry Date: 13/12/2022



This card is not a proof of identity.



Modifications By-		Ticket No-		Time Modified-		Date Modified-		Plan No- WG0187	
Date: 12/05/2021		Author: DANNY WHITE		Project: POWERHOUSE MDC, GREEN ROAD, CASTLE HILL					
Road Type: 2 Way Divided		Road Speed: 60KM							
TRAFFIC CONTROLLER 	TEAM LEADER 	CREW VEHICLE 	C CLASS ARROW BOARD 	TMA 	AWV 	OTHER EQUIPMENT			
						Prepared & Signed by: DANNY WHITE Cert No: 0052250460			
						