



**BUCKLE STREET TUNNEL
CONSTRUCTION TRAFFIC MANAGEMENT PLAN - CERTIFICATION**

**PREPARED FOR
MEMORIAL PARK ALLIANCE
BY PROJENZ LIMITED**

MAY 2013

PROJECT NAME: WELLINGTON INNER CITY IMPROVEMENTS

PROJECT NUMBER: 0811

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Table of Contents

1.	INTRODUCTION.....	3
2.	APPLICABLE CONDITIONS.....	3
	NZTA 14	3
	NZTA 15	4
	NZTA 16	6
	NZTA 17	6
	NZTA 18	6
3.	SUMMARY.....	7

1. INTRODUCTION

The purpose of this report is to provide certification that the Construction Traffic Management Plan (CTMP) for the Buckle Street tunnel meets the conditions prescribed in the National War Memorial Park (Pukeahu) Empowering Act 2012 (“the Act”).

Projenz is under commission to the Memorial Park Alliance to provide the role of Traffic Certifier for the works associated with the construction of the Buckle Street tunnel.

The Act requires the certifier to be a qualified traffic engineer. To meet this requirement, the certifier is Sam Wilkie, who has technical expertise in traffic engineering, transport planning and road safety engineering. His qualifications and affiliations are:

Bachelor of Civil Engineering, Christchurch
Chartered Professional Engineer (CPEng)
Member of IPENZ

The Buckle Street tunnel project fits within a suite of NZTA projects within Wellington’s Inner City, specifically on SH1 between the Mount Victoria Tunnel and the Terrace Tunnel. The Buckle Street tunnel will allow for a park area to be constructed on the northern frontage of the National War Memorial. To assist with delivering this park area in time for the commemoration of the centenary of the First World War (ANZAC Day 2015) the Government passed the Act into legislation which grants all necessary statutory authorisations to NZTA and the Ministry of Culture and Heritage, with selected conditions.

2. APPLICABLE CONDITIONS

The conditions of the Act applicable to the CTMP are identified in this section with an assessment of whether the methods provided for in the CTMP are consistent with these conditions. The final CTMP includes for revisions previously identified by the author, and therefore the assessments are positive.

NZTA 14

The Agency shall not commence the undergrounding of part of Buckle Street until:

(a) *the Agency has prepared a Construction Traffic Management Plan (CTMP)*

The Agency through the Memorial Park Alliance has prepared a CTMP (UND-04-CON-MP Construction Traffic Management Plan Rev 1 dated 13 May 2013).

(b) *a qualified traffic engineer has certified under subpart 5 of Part 2 that the methods provided for in the CTMP are consistent with the conditions of this designation relating to construction traffic management and provide for appropriate means to ensure as far as practicable those conditions of the designation are able to be met. The Agency may commence investigations and enabling works for the Project (including construction and use of the proposed at-grade diversion of Buckle Street and any other temporary roads) prior to the CTMP being certified.*

The Alliance appointed a qualified traffic engineer (as noted in Section 1) to assess whether the CTMP meets the conditions of the designation. Based on my review of the CTMP (UND-04-CON-MP Construction Traffic Management Plan Rev 1) provided, and amendments to as recommended, I am satisfied that the 13 May 2013 version of the CTMP meets NZTA condition 14 of the designation.

NZTA 15

The CTMP prepared under Condition NZTA 14 shall address the following:

- (a) *the staging of the works, including details of any proposals to work on multiple sections of the Project route concurrently*

Section 4.5 of the CTMP details the various construction phases of the works.

- (b) *details of construction yard access points where they gain access directly from a local road*

Section 4.1 of the CTMP details the access points to the works and identifies that the access points will change as the works progress.

- (c) *a general methodology for selecting detour routes so as to provide for the shortest and most convenient detours which it is reasonably practicable to provide, having regard to safety*

Section 4.6 of the CTMP details an appropriate methodology for selecting detour routes.

- (d) *the potential effects on the detour routes selected and how these will be managed to seek to ensure safety for all road users*

Section 4.6 of the CTMP details the potential effects on the detour routes selected and options have been considered and selected to manage these effects.

- (e) *any potential effects of the construction of the Project on on-street parking in the vicinity of the Project*

Section 4.11 of the CTMP identifies that there are no potential effects on on-street parking.

The CTMP shall describe—

- (a) *temporary traffic management measures required to manage impacts on road users during proposed working hours;*

Section 4.4 and Section 4.1 of the CTMP describe temporary traffic management measures that are appropriate to manage impacts on road users. The site is effectively separated from traffic with impacts limited to vehicles and workers associated with the site accessing the site and travelling on the surrounding road network. Site specific TMPs cover the safe and efficient operation of the site accesses.

- (b) *delay calculations associated with the proposed closure/s and detour routes*

Section 4.6 and Section 5.0 of the CTMP detail delay calculations undertaken on the proposed detour routes.

- (c) *the capacity of any proposed detour route(s) and their ability to carry the additional traffic volumes and any known safety issues associated with the detour route, including any mitigation measures the Agency proposes to put in place to address any identified safety issues*

Section 4.6 of the CTMP identifies that the proposed detour routes are able to carry the additional traffic volumes.

Section 4.9 of the CTMP identifies no known safety issues associated with the detour routes, but does identify the risk of vehicles entering one way roads facing the wrong way and mitigates appropriately. Within the same section, mitigation measures are also identified for the SH1 diversion road, such as a new signalised pedestrian crossing. Also the proposed monitoring will identify any safety issues, which then can be addressed and mitigated.

(d) individual traffic management plans for intersections of the proposed Project with arterial roads

Section 4.4 of the CTMP identifies that the intersections of the proposed Project with arterial roads will remain unchanged throughout the length of the project until the tunnel is commissioned and the SH1 diversion road de-commissioned, and do not require site specific TMPs. However the CTMP identifies that temporary TMPs will be in place for short term works, such as the commissioning of the tunnel, which will include the Taranaki Street and Tory Street intersections with the Project.

(e) measures to maintain, where practicable, existing vehicle access to adjacent properties and businesses

Section 4.8 of the CTMP identifies that existing vehicle access to adjacent properties and businesses is maintained.

(f) measures to maintain, where practicable, safe and clearly identified pedestrian and cyclist access on roads and footpaths adjacent to the construction works. Where detours are necessary to provide such access the Agency shall provide for the shortest and most convenient detours, which it is reasonably practicable to provide, having regard to safety

Section 4.10 and Appendix F of the CTMP identify measures to maintain access for pedestrians and cyclists. The signalised pedestrian crossing at the site's western end provides a short convenient detour.

(g) any proposed temporary changes in speed limit

Section 4.1 and Section 4.4 of the CTMP identify a proposed temporary speed limit of 30 km/h on Buckle Street.

(h) any proposed temporary restrictions to on-street parking

Section 4.11 of the CTMP identifies no proposed temporary restrictions to on-street parking. Should they be, a Council resolution or separate TMP process would be required.

(i) provision for safe and efficient access of construction vehicles to and from construction site(s)

Section 4.1 and Section 4.4 describe the provision of access for construction vehicles to and from the site. Safety and efficiency have both been considered in determining preferred routes for construction vehicles, in particular truck and trailer units.

There will be several accesses throughout the project duration that will be controlled by a generic TMP which provides for safe and efficient movement of construction vehicles and mitigation of any impacts on other traffic.

- (j) *the measures that will be undertaken by the Agency to communicate traffic management measures to affected road users and stakeholders.*

Section 4.1 and Section 4.4 describe appropriate measures that will be undertaken to communicate traffic management measures to affected road users and stakeholders.

Based on the above assessment, condition NZTA 15 is met.

NZTA 16

The CTMP shall be prepared in consultation with—

- (a) *the Road Asset Manager of the Wellington City Council (or his or her nominee(s)); and representatives of the following:*
- (b) *emergency services (Police, fire, and ambulance); and*
- (c) *Massey University; and*
- (d) *New Zealand Defence Force; and*
- (e) *the owners of the former Mt Cook Police Barracks, 13 Buckle Street; and*
- (f) *Tasman Garden Body Corporate; and*
- (g) *Wellington Tenth's Trust and Port Nicholson Block Settlement Trust; and*
- (h) *schools, childcare centres, and any other educational activities with frontage or access to roads that will be affected by works associated with the Project.*

Any comments and input received shall be clearly documented within the management plan, along with a clear explanation of where any comments have not been incorporated and the reasons why. A copy of the CTMP shall be provided to the Road Asset Manager.

Section 3.0 of the CTMP identifies that it was prepared in consultation with the above parties.

Comments from the parties and any resulting actions are documented as an Appendix in the CTMP dated 13 May 2013.

Based on the above assessment, condition NZTA 16 is met.

NZTA 17

The CTMP shall be consistent with the version of the NZTA Code of Practice for Temporary Traffic Management (COPTTM) which applies at the time the CTMP is prepared.

Section 1.1 and 4.4 identify that the CTMP and other dependent plans are consistent with the current version of COPTTM (4th version published 1 November 2012).

Based on the above assessment, condition NZTA 17 is met.

NZTA 18

The NZTA shall carry out random auditing of temporary road closure/s in accordance with COPTTM at regular intervals throughout the construction of the Project. The intervals shall be stated in the CTMP.

Section 5 identifies that daily audits of temporary traffic management equipment will be carried out.

Based on the above assessment, condition NZTA 18 is met.

3. SUMMARY

The document Construction Traffic Management Plan (UND-04-CON-MP Construction Traffic Management Plan Rev 1) dated 13 May 2013 (CTMP) was reviewed by a qualified Traffic Engineer. The document was found to be consistent with the applicable conditions of the Act.

The methods identified in the CTMP provide for appropriate means to ensure as far as practicable the conditions of the Act are able to be met. These methods include significant monitoring and reacting to issues as they may arise, as is necessary and appropriate for such construction activity. Issues may be presented through the other management plans – e.g. Network utility management plan or Local roads traffic improvement plan. It would be useful, if the works from other plans start within the construction timeframe of the CTMP, to review the CTMP which would then have specific regard to these plans.