# **Construction Management Plan**

for

# "Eastlakes Shopping Centre" EASTLAKES

### **REGISTERED COPY NO:**

Note: (i) All copies unregistered unless the copy number is in colour other than black.

(ii) Holders of registered copies will receive revisions to this document should they occur.

(iii) This copy will cease to be a registered copy once the final stage of the project has reached Practical Completion.

	DISTRIBUTION LIST OF REGISTERED COPIES									
Copy No.	Issued To									
1	Director – CROWN									
2	Construction Manager - CROWN		Gary Cory							
3	Developments									

Plan approved by:\_\_\_

(Construction Manager)

Date:

### <u>Revision 2 – 18.04.2012</u>

## **CONTENTS PAGE**

1.	Site Plan	3
2.	Site and Locality Description	3
3.	Proposal	3
4.	Construction Management	3
(A	A) Proposed Site Working Hours	3
(B	B) Contact Details	3
(C)	C) Complaints / Concerns	3
(D	D) Site Access and Accommodation	4
(E,	E) Parking	4
5.	Site Containment	4
(A		
(В		4
(C		4
(D	D) Noise	4
6.	Site Management	5
(A	-	
, (В		
(C		
(D		
(E,		
(F,	F) Scaffold	6
(G		
(H	H) Methods for Tree Preservation	6
7.	Protection of Private and Public Property	6
	······	
8.	Table of Figures	6
(A	A) Waste Management Plan – Smart Skip	6
(B	B) CMP – DA02 Rev A	6
(C	C) NRS Traffic Planning - Traffic Management Plan	6

### 1. Site Plan

Site plan showing the various construction staging, planning and access items have been prepared and are enclosed within this report. Please refer to the plan (Drawing no CMP-DA02 Rev A) in conjunction with reading the enclosed Construction Management Plan.

### 2. Site and Locality Description

The development site is bounded by Gardeners Road to the north, Barber Avenue to the east and south and Eastlakes Reserve to the west. Evans Avenue runs through the site in an east-west direction. The site is situated in the south eastern suburbs of Sydney in the City of Botany Bay and is located approximately 7km away from the Sydney CBD.

### 3. Proposal

The project consists of a mixed use development.

The major features of the project are as follows:

- Two levels of basement car park
- Ground floor retail level redevelopment consisting of:
  - Small supermarket
  - Large Supermarket
  - Various specialty retail;
- 11 residential apartment towers ranging from 2 to 6 storeys

### 4. Construction Management

### (A) Proposed Site Working Hours

The site working hours are as follows;

- 7.00am 5.00pm  $\rightarrow$  Monday to Saturday
- No work Sunday or Public Holidays
- Minimize construction related traffic movements during school peak periods
- Delivery of cranes required to the site outside of normal business hours;

### (B) Contact Details

A Project Manager will be appointed for the overall construction management of the project and will be co-coordinating all trades with the aid of a site manager and foreperson for all on site construction related activities.

The Project Manager will be identified on a sign posted on the site entry gate noting the following information:

- Company name;
- Phone number;
- Fax number;
- After hours/mobile number; and
- Contact name.

### (C) <u>Complaints / Concerns</u>

Complaints or concerns that residents have with the site or any construction related activity should be raised with the Project Manager. The Project Manager's contact details will be posted on the main site entry gate and will be contactable 24 hours.

(D) Site Access and Accommodation

Site access is to be as per the site plan mark-up (CMP-DA02 Rev A), with all construction traffic accessing and exiting the site via Racecourse Place onto Gardeners Road. A single site access gate to stage one (1) works and two (2) access gates to stage two (2) works as shown on the marked up plan (CMP-DA02 Rev A). These gates will provide a smooth cycle of trucks entering and exiting the sites.

Crown will install an 'A' Class hoarding around the site boundary as illustrated on the site plan markup (CMP-DA02 Rev A), approximately 336 lineal metres around stage 1 works and 520 lineal metres around stage 2 works, for the duration of demolition, piling, excavation & concrete structural works to at least 4 storeys high. A 'B' class hoarding will then be used for overhead protection for the remainder of the works. Site sheds may be transferred to the hoardings if required to do so. A combination of hay bales, sediment socks and geo-tech fabric will also be used as in accordance with the EPA requirements.

The site shed located on site in an area to be determined, the sheds may then be relocated into the basement car-park at a later stage during construction if required.

### (E) Parking

Parking will be available on site during the demolition and excavation stages. There will be no parking on Eastlakes Reserve. Once the basements have been completed, parking will then be on site in the basement.

### 5. Site Containment

### (A) Sediment Control

Existing grass cover will be maintained where possible during construction, or until landscape works commence. A sediment fence and silt socks will be used around the perimeter of both staged boundaries and will be installed prior to site earthworks commencing. A temporary sediment barrier will be installed to all pits likely to collect silt laden water, until landscape works are completed. All silt fences and barriers will be maintained and regularly de-silted during the construction project. All silt laden stormwater or seepage which accumulates in the basement excavation to be pumped out using a filtration vessel.

### (B) Dust and Debris Control

The site will be cleaned on a daily basis to reduce the level of dust. Hard surfaces will be wet down before work commences. All vehicles tyres are to be washed down or by means of a shaker at the site exits to remove any mud and dust if required.

All transports leaving the site will be checked to ensure all loads are covered and secure to prevent the possibility of material spilling onto the road and into the stormwater system. All trucks are to be covered prior to leaving the site (where applicable). All roads and pedestrian footways surrounding the site will be swept to remove any debris associated with the works on the site so as to not end up in the storm water system.

### (C) Wash out Area

The construction contractor may have a designated wash out area for the concrete delivery vehicles if required. This wash out area is to be a proprietary bin fully contained and cleaned out on a regular basis.

### (D) <u>Noise</u>

No works are to commence prior to 7.00 am. Excessive noisy activities such as jack hammering, rock breaking or explosive tools will be minimised.

### 6. Site Management

### (A) Deliveries / Materials handling / Cranage

Crown will ensure that no deliveries will be allowed outside the site working hours. All off loading and loading of vehicles will be done within the site boundaries. The site may be serviced by 3 Tower Cranes, of which the lifting path is located on drawing CMP-DA02 Rev A. Hoist and forklifts may be used if required for the loading and unloading of materials.

All vehicles, including cranes, concrete trucks and pumps will be wholly on the site or the construction zone when undertaking construction work. The trucks will exit the site in forward motion were possible.

#### (B) Storage/Materials

No materials will be stored outside the site boundaries. Materials will only be stored within a storage container and / or designated areas on site.

Hazardous materials will be stored in accordance with legislative work cover practices and codes.

### (C) Traffic Safety

Safe access and adequate visibility for both pedestrians and vehicles will be maintained at all times while any traffic enters or leaves the site.

Vehicle deliveries will be managed when required by a Traffic controller to ensure that the public are safe at all times and to minimize the impact of the construction vehicles on local traffic management and flow.

Measures will be adopted to manage traffic, with a view to minimizing traffic conflict and impact on the local community.

During periods where construction vehicles enter the site, a nominate stop/go person shall control the traffic. Construction related traffic movements during school periods will be minimised, where possible.

### (D) <u>Truck Routes & Traffic Effects</u>

During demolition, excavation and construction, trucks transporting material to and from the site will be accommodated on site or within the designated on-street *"Works Zone"*. These areas will be managed and controlled by traffic controllers. During demolition, excavation and construction, access driveways will be provided on Evans Avenue at access gates 1 & 2, and Barber Ave at access gate 3 (refer to CMP DA02 Rev A).

Truck movements will be restricted to designated truck routes, as shown in the traffic management plan prepared by NRS Traffic Plan on drawings "NRSP12041302 - Vehicle route - Stage 1" and "NRSP12041303 - Vehicle route - Stage 2", and will be confined to the main road network. At no time during construction will trucks be permitted to park on-street (other than within the designated on-street *"Works Zones"*)

During the demolition and excavation phase, it is estimated that there will some 30 - 50 trucks per day removing demolished and excavated material. These trucks will be loaded on site via the use of an excavator. This truck generation translates to an average of 8 to 10 trucks per hour two-way over the day entering and exiting the site.

The peak traffic activity generated during the construction period will occur during a concrete pour. Concrete pours will be controlled from the on-street *"Works Zones"* and from the on-site materials handling area. It is estimated that there will be up to two to three concrete pours per week.

Crown International has estimated the number of concrete trucks generated during a concrete pour to range from some 30 to 40 concrete trucks per day for large pours and some 20 to 30 concrete trucks per day for small to moderate sized pours. This traffic generation translates to an average of some 3 to 4 truck loads of concrete per hour two-way or one truck delivery every 15 to 20 minutes over the day, for large pours.

Whilst construction projects of this size must necessarily generate a number of truck movements, it is possible to mitigate their impact. This is primarily achieved by the following means:-

• Control the hours of construction work;

- Control the size of construction vehicles;
- Ensure that trucks travel to and from the site along designated truck routes;
- Carefully manage and control on-site construction activity, on-street "Works Zones" and the construction access driveways; and
- Co-ordinate and manage "just in time deliveries" for the duration of the project.

### (E) <u>Waste Management</u>

Waste bins will be provided by Crown and stored within the site boundaries. General construction waste may be separated between recyclable and non-recyclable off/on site. Refer to attached Waste Management Plan prepared by "Smartskip"

Food waste will be contained within bins with lids supplied by Crown. These bins will be changed over at regular intervals to avoid smells and the attraction of pests and rodents.

### (F) Scaffold

A perimeter scaffold screen with chain wire mesh and fabric will be erected to each building on the site to carry out all façade works to all levels and will be dismantled on completion of all works.

### (G) Method of Construction

Construction will be framed buildings with blockwork partition walls, and metal stud framing with plasterboard lining internally. The perimeter scaffold / screens for external walls are to meet Occupational Health and Safety requirements together with BCA requirements. The lifting of materials will be by tower cranes and hoists. A fork lift may also be included in materials handling for storage in the basement.

### (H) Methods for Tree Preservation

Crown will protect trees that are required to remain in place until the completion of the exterior building and landscape works. Crown may remove trees if required and will be replaced as part of the landscaping works. For those trees to be protected, a barrier is to be installed, as per aborist recommendations and / or landscape architect.

### 7. Protection of Private and Public Property

The stability of adjacent properties during excavation and construction will be maintained and monitored as per the design of a qualified structural engineer.

Fully documented dilapidation reports of the neighbouring properties and public land will be undertaken.

Crown may repair damage caused during the construction as a result of this work.

### 8. Table of Figures

- (A) Waste Management Plan Smart Skip
- (B) <u>CMP DA02 Rev A</u>
- (C) NRS Traffic Planning Traffic Management Plan

Kind Regards

Majed Jarboue Crown Contracts Administrator <u>18<sup>th</sup> April 2012</u>

### (A) Waste Management Plan – Smart Skip



# (NSW) Pty Ltd

# *Crown Group Site: Eastlakes Shopping Centre - Eastlakes*

### **SMARTSKIP'S WASTE MANAGEMENT DETAILS**

RECYCLING CENTRE	TYPE OF WASTE	SITE DETAILS	DETAILS
Sell & Parker	Non-ferrous metals	Tattersalls Rd Blacktown	Recycled and re-use for many manufacturing purposes
Sell & Parker	Ferrous metals	Tattersalls Rd Blacktown	Recycled and re-use for many manufacturing purposes
Recycled Resources	Concrete / Bricks	Carnarvon St Silverwater	Crushed for Road Base & Aggregates
Sita Enviromental	Timber, Soil, Bricks, Concrete, Gyprock ,Tile	Elizabeth Dr, Kemps Creek	Timber is turned into Mulch & used for Landscaping & Gardens
Benedicts	Soil	Chipping Norton	Used for Land Rejuvenation
Benedicts	Tile / Brick/Concrete	Chipping Norton	Crushed for Aggregates & Road Base
Paperway Recycling	Paper/Cardboard   Lisbon St Fairfield		Recycled into paper products.
Sita Enviromental	Asbestos /Glass/Timber / /Pallets	Elizabeth Dr, Kemps Creek	Asbestos not Recycled. Smartskip transports waste only all bins are lined and waste is wrapped and sealed. Timber ,Glass & Pallets are recycled.

Smartskip (NSW) Pty Ltd can also supply a waste recycle report monthly to enable your company to see what materials are recycled from each bin that is taken off site. Smartskip (NSW) Pty Ltd has a transfer station located at Silverwater to enable maximum materials to be recycled from your bin. On Average Smartskip (NSW) Pty Ltd recycles 90% of all waste.

# SAMPLE RECYCLING REPORT

### SAMPLE RECYCLING REPORT – OCTOBER 09'

DATE	0175		г. тір.	TID.	TID.	TID	DKT #	GEN	ТІМ	STL	PAP	CRD	CON	DRT	PLC	PBR	BRK	RECOVERED
DATE:	SIZE	WHT:	TIP:	DKT #:	%	%	%	%	%	%	%	%	%	%	ton			
6-Oct-09	9	4000	S/Water	86426		50		10	20	20					4000			
6-Oct-09	9	4000	S/Water	86425	10	30	20		20			20			3600			
12-Oct-09	9	4000	S/Water	86466		50			30			20			4000			
12-Oct-09	9	4000	S/Water	86465	10	50				40					3600			
22-Oct-09	9	5000	S/Water	86526		40				50		10			5000			
23-Oct-09	9	1000	S/Water	12352	20	40	20		20						800			
23-Oct-09	9	4000	S/Water	86529		50				50					4000			
24-Oct-09	9	4000	S/Water	86543			50			50					4000			
TOTAL		30000													29000			

Dirt is transferred to Benedict Recycling

Concrete, Bricks & Bitumen is transferred to Boral Recycling

Timber is transferred to Sydney Recycling Park

Metals are transferred to One Steel.

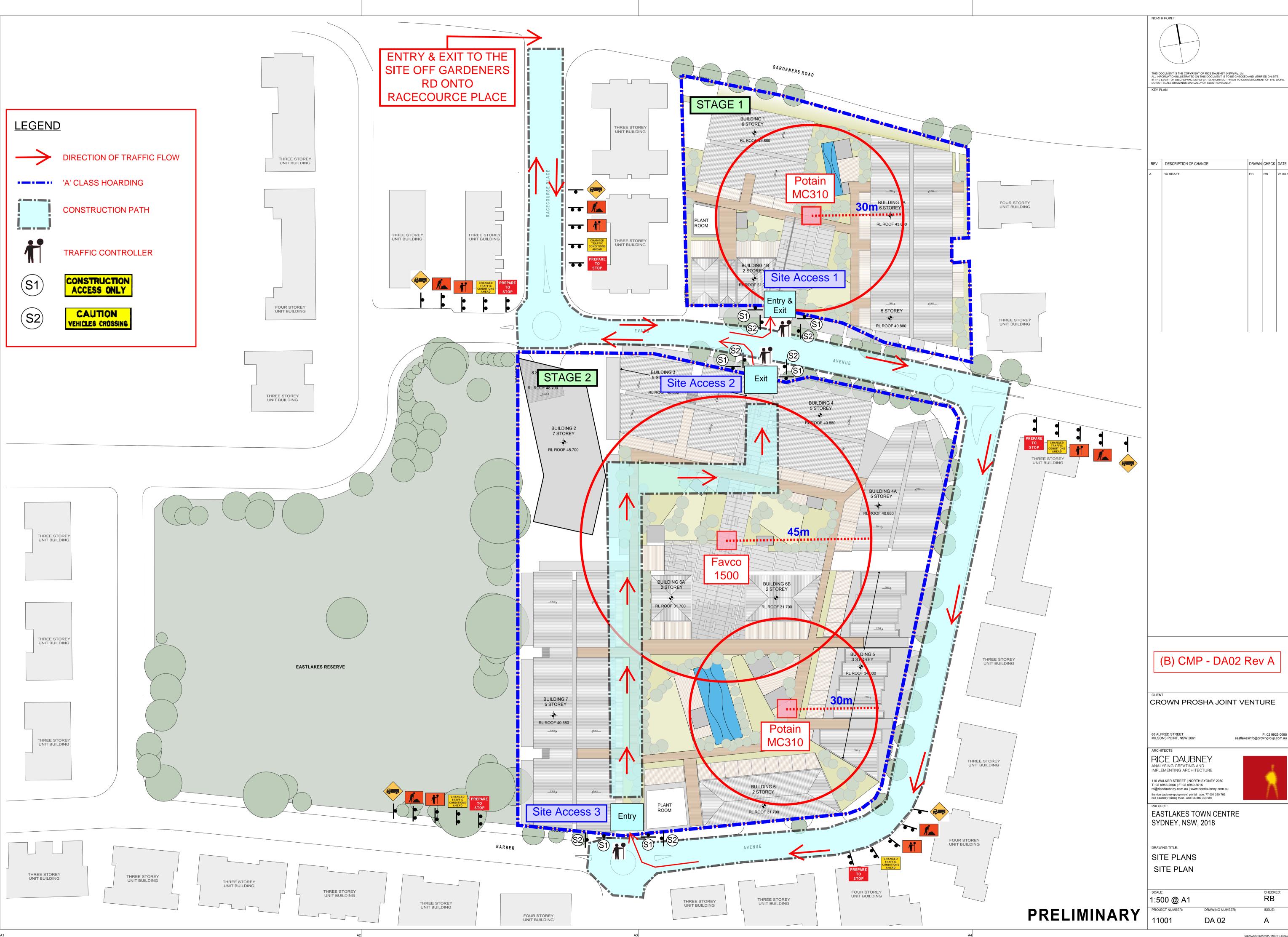
Cardboard is transferred to Paper way Recycling

All other non-recyclable material is transferred to our landfill Sydney Recycling Park.

## Total waste recovered approx 29 tonnes, Approximately 96%

- Soil is screened and then used for the rejuvenation of Parks, Gardens etc.
- Brick/Concrete is crushed where it is used as road base cross over material etc.
- Timber is mulched and is able to be re-used in gardens and the powering of power stations.
- Steel is re-used in metal base manufacturing.
- Cardboard and Paper is recycled for the re-use in paper base products.
- Gyprock is crushed and made into Gypsum/Lime soil stabiliser.
- All non-recyclable waste is sent to landfill Approximately 10%

# \*\*NOTE: THESE FIGURES ARE NOT RELEVANT TO THE EASTLAKES PROJECT AND ARE A SAMPLE ONLY\*\*



teamwork://rdbim01/11001 Eastlakes

26.03.1

# Traffic Management Plan

# MIXED USE DEVELOPMENT

Prepared for: Earthworx

Prepared By: Matthew Young RTA Design & Inspect Traffic Control Plans Certificate #: 2243011145 Exp: 03/02/2014

Friday, 13 April 2012 Document Number: TMP12041301



**1300 440 730** Fax: 02 8580 4890 PO Box 4051, Penrith Plaza NSW 2750 www.nationalroadsealing.com

# **Table of Contents**

1 Project Details	3
1.1 Project Summary	3
1.2 Scope of Works	3
1.3 Revisions	3
1.4 Location Map	3
2 Proposed Construction Vehicle Management	4
2.1 Site Entry & Exit	4
2.2 Vehicle Movements within site	4
2.3 Works Zones	4
2.4 Standing Plant Locations (i.e Cranes)	4
2.5 Parking for Site Workers	4
2.6 Loading and Unloading of Equipment and Materials	4
2.7 Storage of Equipment, Materials and Waste	4
2.8 Removal of Excavated Materials from Site	4
3 Project Impact	5
3.1 Residents	5
3.2 Pedestrians & Cyclists	5
3.3 Emergency Services	5
3.4 Local Traffic	5
3.5 Impact on Community & Businesses	5
3.6 Predicted Traffic Volumes & Routes	5

# **Appendix A - Traffic Control Plans**

# **1 Project Details**

### 1.1 Project Summary

*Project:* Residential Development *Location:* Evans Avenue, EASTLAKES NSW 2018 (formerly the Eastlakes Town Centre) *Hours of Operation:* As per applicable DA conditions and council regulations.

### 1.2 Scope of Works

Demolition of existing buildings and construction of multiple new mixed use building for residential and commercial use.

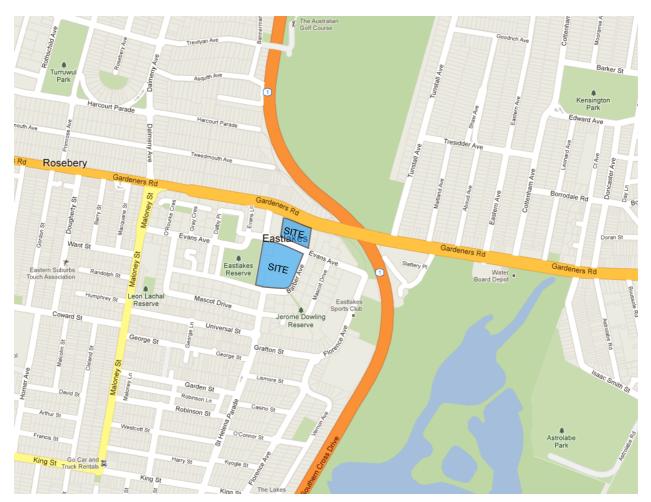
Included Stage(s):

- 1. Demolition / Site preparation
- 2. Excavation

### **1.3 Revisions**

Rev #	Date	Description
0	13/04/12	Initial Submission
1		

### 1.4 Location Map



# **2 Proposed Construction Vehicle Management**

### 2.1 Site Entry & Exit

### STAGE 1

Entry - From Gardeners Road turn onto Racecourse Place, then turn left onto Evans Avenue and left into site in a forward facing direction.

Exit - In a forward facing direction vehicles will exit the site and turn right onto Evan Avenue, Right onto Racecourse Place and then onto Gardeners Road.

### STAGE 2

Entry - From Gardeners Road turn onto Racecourse Place, then turn left onto Evans Avenue, Right at Barber Avenue and right into site in a forward facing direction.

Exit - In a forward facing direction vehicles will exit the site and turn left onto Evan Avenue, Right onto Racecourse Place and then onto Gardeners Road.

All site vehicles are to give way to pedestrians and vehicles already on the footpath and roadway.

All entry and exit point are using existing concrete laybacks and vehicular crossovers.

### 2.2 Vehicle Movements within site

Site vehicles will turn around within site boundaries to enable them exit in a forward facing direction at all times.

### 2.3 Works Zones

No proposed Works Zone.

### 2.4 Standing Plant Locations (i.e Cranes)

Where required plant will be located within site boundaries.

All other requirements to stand plant will require additional approval from council.

### 2.5 Parking for Site Workers

Site workers to park within site boundaries.

### 2.6 Loading and Unloading of Equipment and Materials

All vehicles to be loaded / unloaded from within site boundaries.

### 2.7 Storage of Equipment, Materials and Waste

The storage area for all equipment, materials and waste are within site boundaries.

### 2.8 Removal of Excavated Materials from Site

Excavation is required with all vehicles to be loaded from within site boundaries and prior to exit vehicles are to be checked and cleaned to ensure excavated material does not contaminate surrounding roadways.

# **3 Project Impact**

### 3.1 Residents

Existing residential driveways and access points to be maintained throughout project.

### 3.2 Pedestrians & Cyclists

Pedestrian access to be maintained at all times via the existing concrete footpath along the front of the site.

A Hoarding is to be installed to maintain safe access for pedestrians past the site when required.

Existing cyclists access along roadway to be maintained as per normal conditions (no dedicated cycleway near site).

### 3.3 Emergency Services

Access along Evans Avenue to be maintained throughout the project.

### 3.4 Local Traffic

Minimal traffic impact as vehicles will be loaded / unloaded from within site boundaries.

### 3.5 Impact on Community & Businesses

Minimal impact as existing access way along surrounding roadways are to be maintained throughout the project.

### 3.6 Predicted Traffic Volumes & Routes

Truck movements - Demolition stage 50-80 movements per day.

Excavation stage 80-100 movements per day

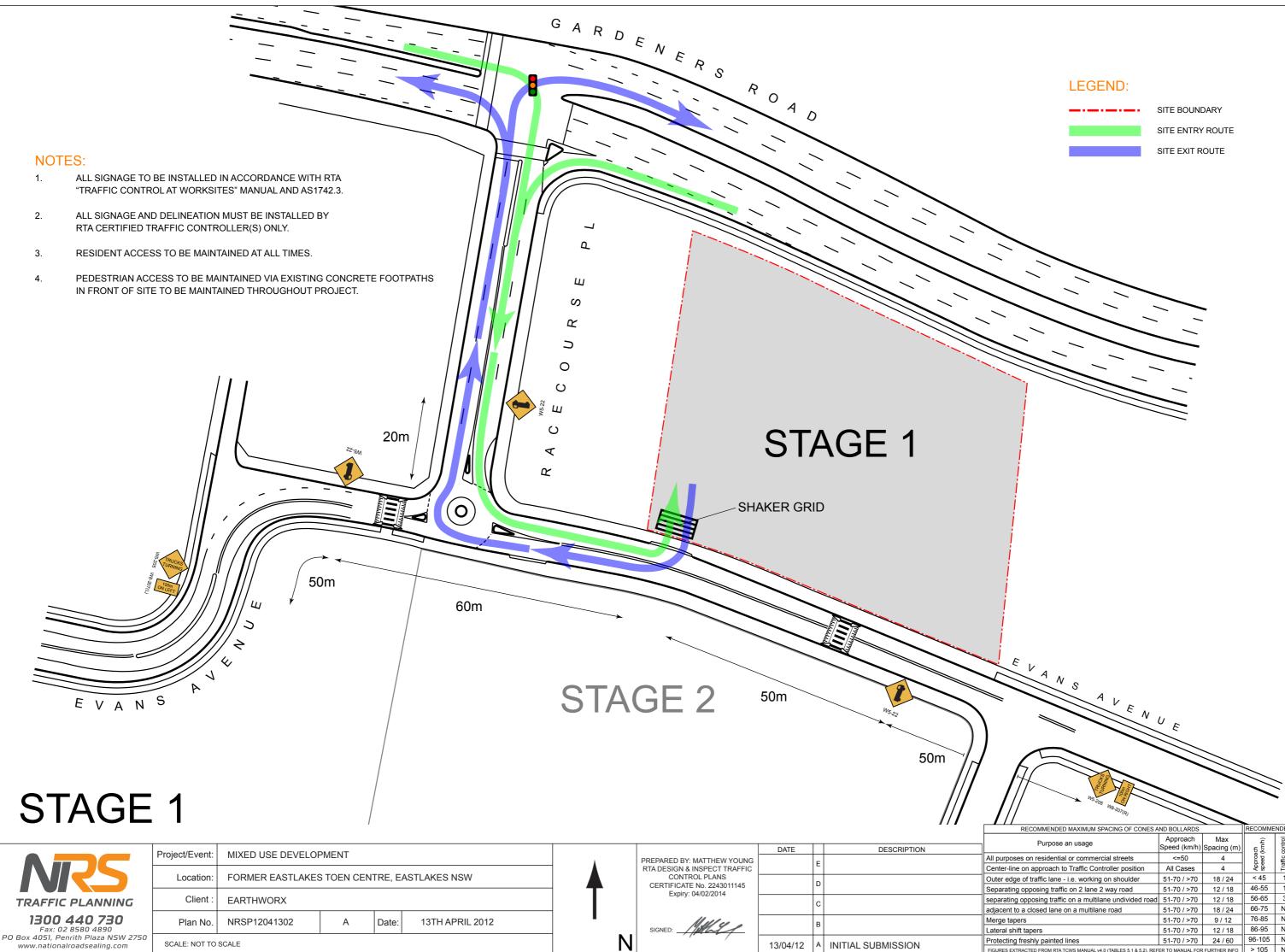
All vehicles to use approved travel routes only (see appendix A).

Vehicles are to be scheduled in such a manner as to not require queuing along surrounding roadways.

The maximum vehicle size required for project is a truck and dog configuration.

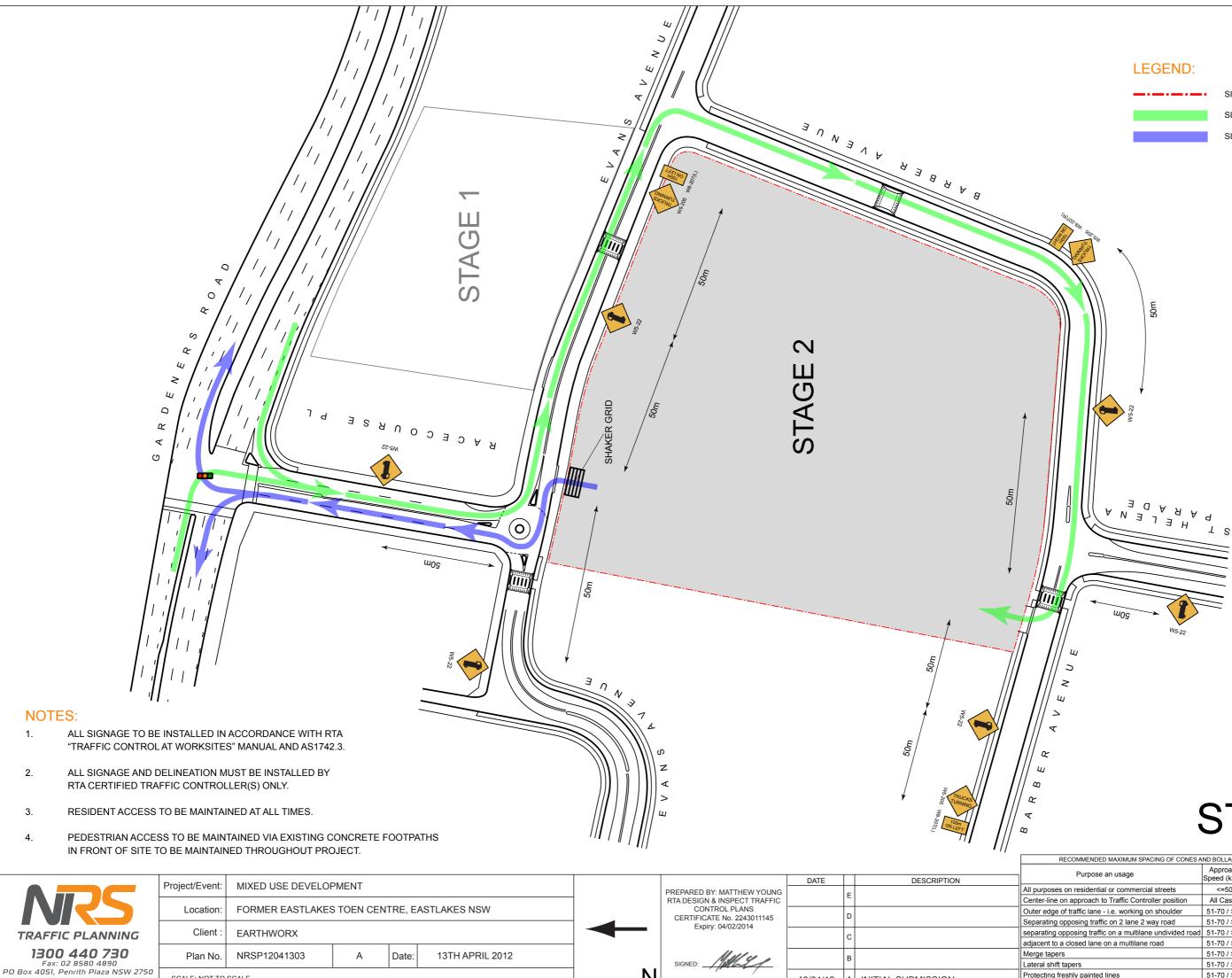
# **Appendix A - Traffic Control Plans**

NRSP12041302 - Vehicle route - Stage 1 NRSP12041303 - Vehicle route - Stage 2





RECOMMENDED MAXIMUM SPACING OF CONES A	RECOMMENDED TAPER LENGTHS					
Purpose an usage	Approach Speed (km/h)	Max Spacing (m)	lch (km/h)	control	shift	Merge taper
All purposes on residential or commercial streets	<=50	4	Approach speed (kn	Traffic o at start	Lateral	
Center-line on approach to Traffic Controller position	All Cases	4	Api	Tra at s	Lat tap	В
Outer edge of traffic lane - i.e. working on shoulder	51-70 / >70	18 / 24	< 45	15	0	15
Separating opposing traffic on 2 lane 2 way road	51-70 / >70	12 / 18	46-55	15	15	30
separating opposing traffic on a multilane undivided road	51-70 / >70	12 / 18	56-65	30	30	60
adjacent to a closed lane on a multilane road	51-70 / >70	18 / 24	66-75	N/A	70	115
Merge tapers	51-70 / >70	9 / 12	76-85	N/A	80	130
Lateral shift tapers	51-70 / >70	12 / 18	86-95	N/A	90	145
Protecting freshly painted lines	51-70 / >70	24 / 60	96-105	N/A	100	160
FIGURES EXTRACTED FROM RTA TCWS MANUAL v4.0 (TABLES 5.1 & 5.2). REF	> 105	N/A	110	180		



SCALE: NOT TO SCALE www.nationalroadsealing.com

 	SIGNED.
N	

13/04/12 A INITIAL SUBMISSION



# STAGE 2

RECOMMENDED MAXIMUM SPACING OF CONES A	RECOMMENDED TAPER LENGTHS					
Purpose an usage	Approach Speed (km/h)	Max Spacing (m)	Approach speed (km/h)	control	Lateral shift taper	Merge taper
All purposes on residential or commercial streets	<=50	4	proa	Traffic o at start		
Center-line on approach to Traffic Controller position	All Cases	4	Apl	Tra at s	Lat tap	₹ 2
Outer edge of traffic lane - i.e. working on shoulder	51-70 / >70	18 / 24	< 45	15	0	15
Separating opposing traffic on 2 lane 2 way road	51-70 / >70	12 / 18	46-55	15	15	30
separating opposing traffic on a multilane undivided road	51-70 / >70	12 / 18	56-65	30	30	60
adjacent to a closed lane on a multilane road	51-70 / >70	18 / 24	66-75	N/A	70	115
Merge tapers	51-70 / >70	9 / 12	76-85	N/A	80	130
Lateral shift tapers	51-70 / >70	12 / 18	86-95	N/A	90	145
Protecting freshly painted lines	51-70 / >70	24 / 60	96-105	N/A	100	160
FIGURES EXTRACTED FROM RTA TCWS MANUAL v4.0 (TABLES 5.1 & 5.2). REF	> 105	N/A	110	180		