

1 Denison Street & 88 Walker Street,
North Sydney

Review of Construction Traffic Management

6 July 2011

Prepared for

Eastmark Holdings Pty Ltd

1 Denison Street & 88 Walker Street, North Sydney Review of Construction Traffic Management

Prepared for
Eastmark Holdings Pty Ltd

This report has been issued and amended as follows:

Rev	Description	Date	Prepared by	Approved by
V01	Draft client review	5/7/2011	NI	JR
V02	Final for submission	6/7/2011		JR

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1 Introduction

On behalf of Eastmark Holdings, Brookfield Multiplex Pty Ltd have prepared a *Construction Environmental Management Plan* (CEMP) ¹ for the proposed construction methodology for the approved development proposal at 1 Denison Street and 88 Walker Street North Sydney.

Included in the CEMP construction methodology is a detailed outline of the proposed staging of construction, operational conditions such as working hours and the associated construction traffic management measures to be implemented during construction.

Halcrow has been engaged by Eastmark Holding to review and provide input into the development of the CEMP regarding the construction traffic management arrangements.

Specifically the review of the CEMP has been prepared to address Condition 14 of Consent MP08_0238 dated 25 February 2010.

Therefore this review of construction traffic management is to be read as a supporting document to the overall construction methodology described in the CEMP.

The purpose of this CTMP is to:

- provide a review of the proposed construction activities with regard to traffic and parking;
- identify potential construction traffic implications on the operation of the surrounding road, transport and pedestrian networks; and
- recommend management measures to be implemented to mitigate these implications.

¹ *Construction Environmental Management Plan – 1 Denison Street & 88 Walker Street North Sydney* (6 July 2011) prepared by Brookfield Multiplex Pty Ltd

It is also noted that the proposed construction methodology was discussed with North Sydney Council officers at a meeting held on the 21 June 2011. The key outcomes of this meeting regarding construction traffic were:

- in principle the use of kerb side “work zones” for construction loading / unloading was supported by Council. Changes to the on street parking arrangements would need to be accompanied with a signage plan;
- any proposed amendments to the existing Berry Street parking conditions would need not generally be supported by Council and would need to consider other construction activities in the area; and
- pedestrian access and safety in the laneways (ie. Little Spring Street, Denison Street and Spring Street) needs to be considered and maintained at all times; and
- access to adjacent properties (both vehicular and pedestrian) to be maintained at all times.

These issues have been considered and incorporated into the CEMP submitted to Council for approval via the North Sydney Traffic Committee.

It is noted that the CEMP and this review sets out the principles for construction traffic management including standard TCPs to be implemented. Detailed traffic control plans (TCP's) including signage location, details of traffic control and work zone occupation will be made via separate TCPs and applications for road occupation for each of the various stages of development.

2 Proposed Works

2.1 Proposed Construction Works and Traffic Management

2.1.1 Overview of Works

The CEMP report outlines the various stages of construction for the proposed development at 1 Denison Street and 88 Walker Street.

The works will include:

- Early works (to relocate existing essential services);
- Demolition;
- Excavation ; and
- Building works.

The construction activities will be staged with work commencing initially on the 1 Denison Street site and then subsequently on 88 Walker Street site.

The location of the site and the surrounding road and transport network is shown in Figure 1.

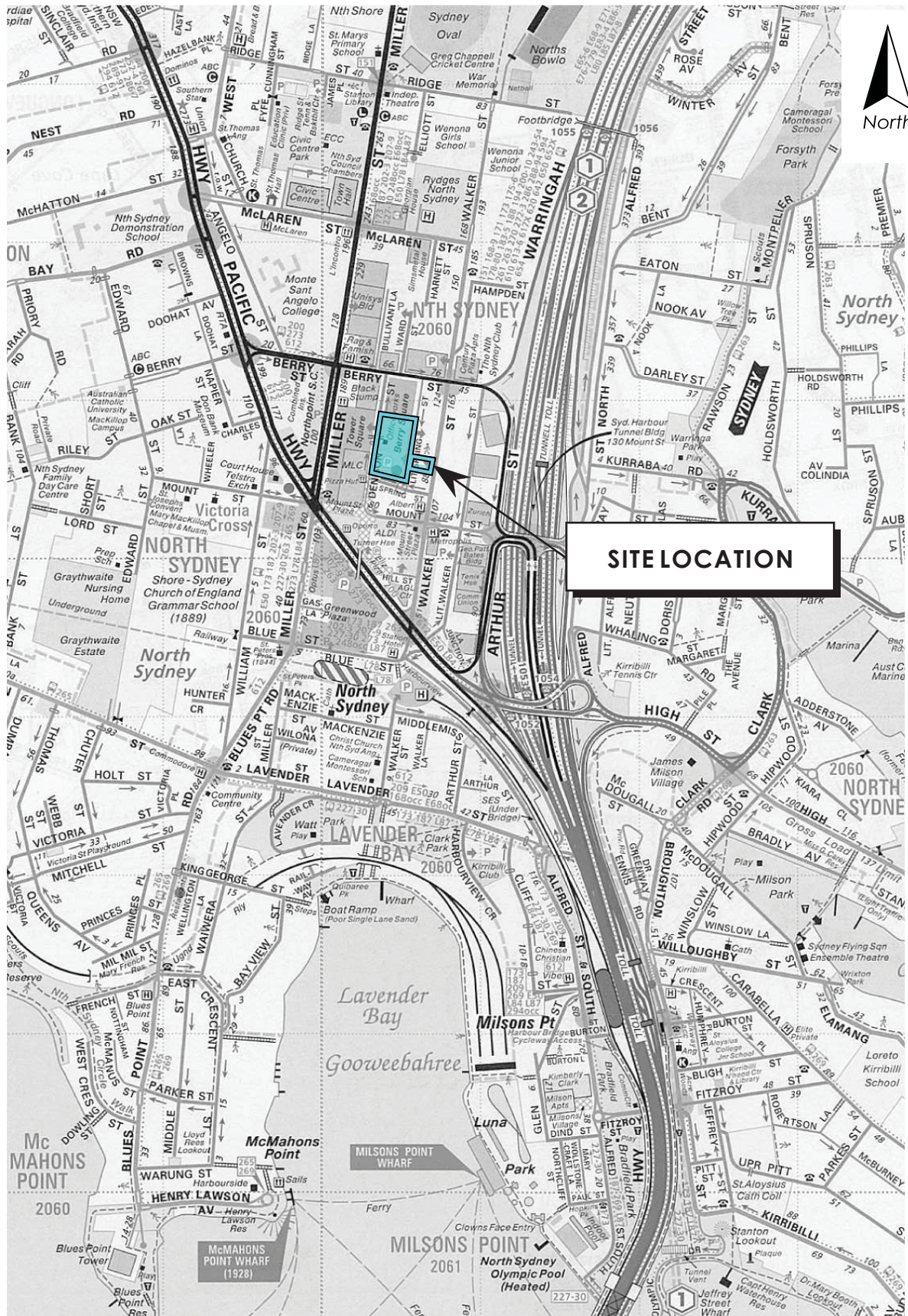
2.1.2 Overview of Truck Movement Types

The proposed construction operations affecting traffic are outlined below:

- Delivery trucks associated with site establishment works including the installation of any fencing / hoarding, worker facilities, and the like;
- Loading and unloading of trucks from public roads throughout the works;
- Use of Medium Rigid Vehicles (including truck and trailer) for demolition and excavation material removal;
- Use of trucks longer than heavy rigid vehicles such as semi trailers for delivery of materials and machinery.
- Concrete deliveries by medium rigid concrete trucks; and
- Delivery vans, utilities and cars as required.

SITE LOCATION

1 DENISON STREET & 88 WALKER STREET, NORTH SYDNEY



2.1.3 *Work Zones*

It is proposed that material handling will be undertaken via 4 separate Construction (Work) Zones, namely:

- Construction Work Zone 1 - western side of Little Spring Street
- Construction Work Zone 2 - eastern side of Denison Street (southern zone)
- Construction Work Zone 3 - western side of Walker Street at 88 Walker Street
- Construction Work Zone 4 - eastern side of Denison Street (northern zone)

These Work Zones will be utilised at various stages of the overall construction works. For example Work Zone 4 would only be used as a work zone during the early works associated with the construction of the electrical substation room.

It is proposed to construct a loading platform at the southern end of the 1 Denison Street site. This will reduce the volume of materials received at the other “on street” work zones.

The proposed Work Zones are shown in Appendix A and Appendix B of this review.

Further details are provided in the CEMP.

These Work Zones will include the permanent use of hoardings / fencing and would be directly controlled by construction staff when in operation. In this way the public is protected from overhead loading by cranes.

The selection of locations for Work Zones has taken into account a number of significant restrictions for material handling, including;

- Crane manoeuvrings and reach limitations associated with adjacent buildings; and
- Heavy vehicle access restrictions to Work Zone areas (namely difficulties in maintaining semi trailer access to Little Spring Street and Denison Street).

It is noted that the proposed Work Zone in Walker Street would not operate on a 24 hour per day basis.

In Walker Street, parking would be permitted outside of clearway and construction hours. In Little Spring Street, parking would be permitted outside of construction hours in the section without B-Class hoarding (ie. north of the site).

2.2 Timing of the Works

Approximate timing of the works has been calculated and presented in the CEMP based on the approved hours of operation as set out in the conditions of consent, namely:

- Monday – Friday : 7am – 5pm
- Saturday: 8am – 1pm
- Sunday: No work

As stated above, the proposed Walker Street Work Zone would only be available between 10am – 3pm on weekdays.

3 Construction Vehicle (Truck) Management

3.1 Truck Routes

General truck traffic would have different origins / destinations throughout Sydney. There are a limited number of options for inbound and outbound routes depending on origin and destination of trucks.

The recommended truck arrival and departure routes for construction vehicles accessing the site are shown in Figure 2 and Figure 3.

These figures show the local road routes to be used to access the proposed construction site from the regional road network.

The truck access routes shown in Figure 2 and Figure 3 attempt to minimise the extent of construction traffic movements on local roads and direct construction vehicles to the Warringah Freeway or Pacific Highway as directly as possible.

The extent of the proposed “work Zones” in Little Spring Street and Denison Street is to facilitate convenient vehicle access for both construction vehicles and other vehicles.

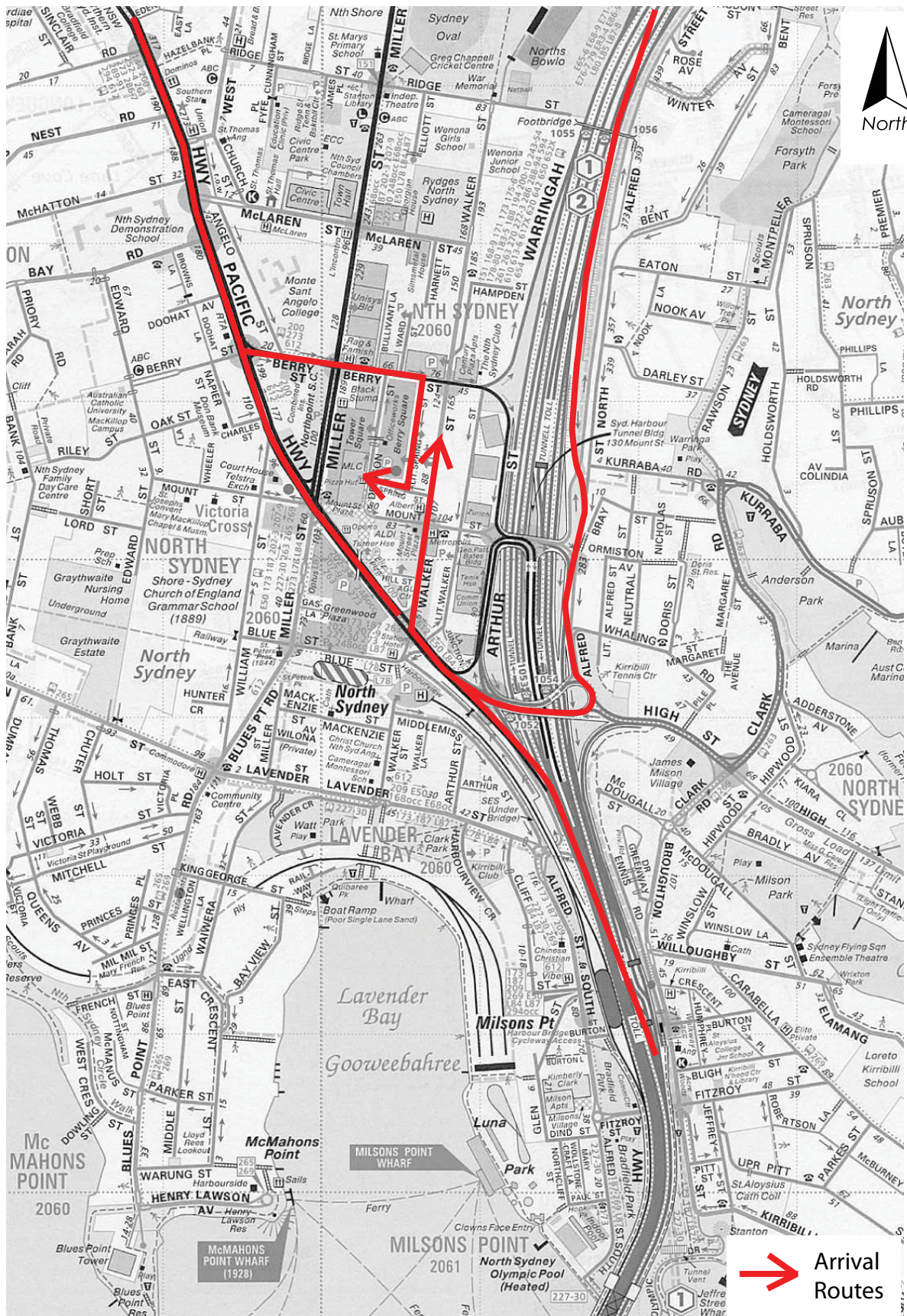
3.2 Materials Handling Options

3.2.1 Onsite Loading

Onsite loading and unloading would be facilitated with the early construction of the vehicle platform at the southern end of the site. The onsite platform would allow construction vehicles to enter and exit in a forward direction. This arrangement provides the safest method of work as it minimises the impact to the public and reduces the amount of traffic control that would be required.

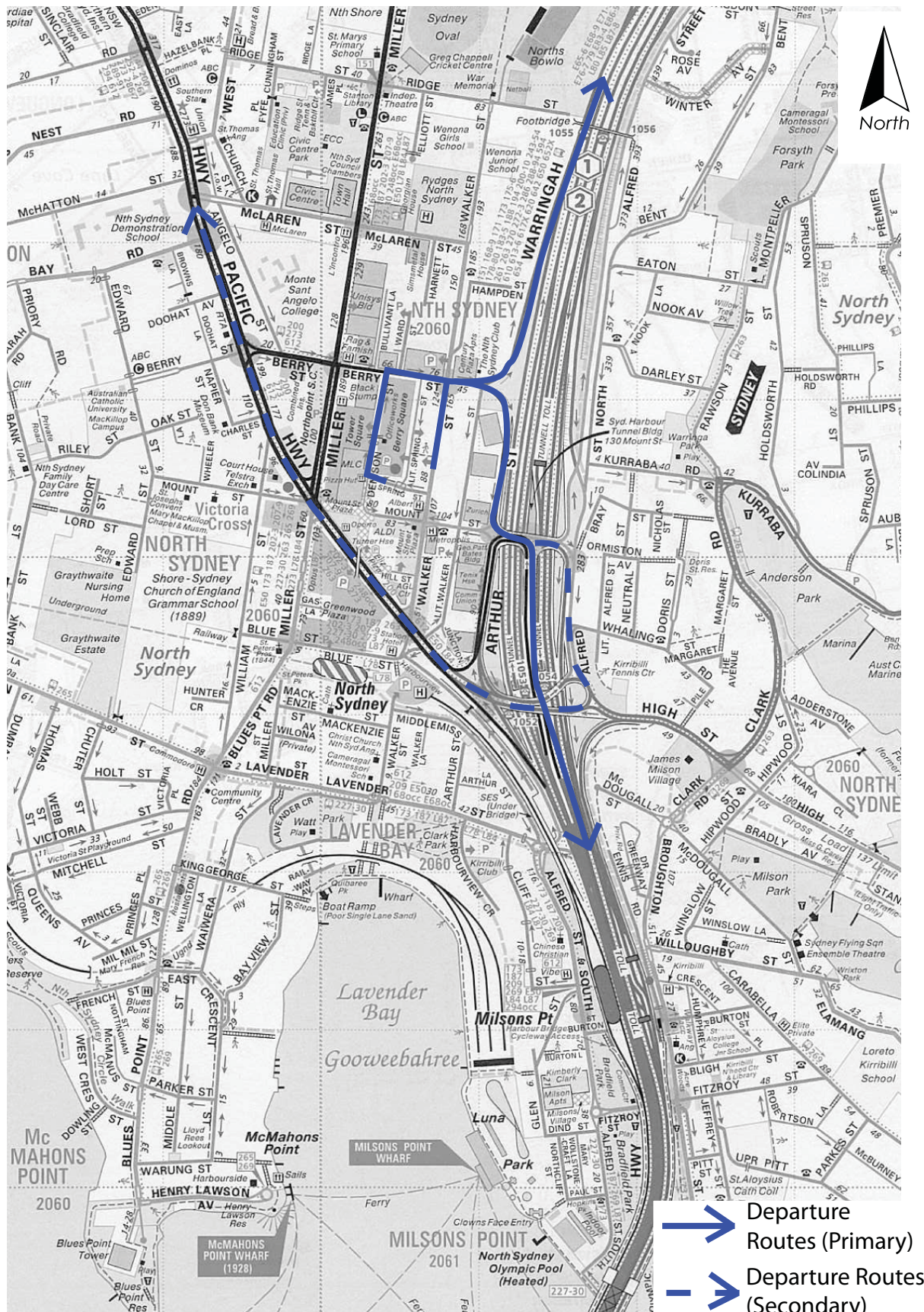
CONSTRUCTION VEHICLE ARRIVAL ROUTES

1 DENISON STREET & 88 WALKER STREET, NORTH SYDNEY



CONSTRUCTION VEHICLE DEPARTURE ROUTES

1 DENISON STREET & 88 WALKER STREET, NORTH SYDNEY



3.2.2 *Offsite Loading*

Use of the on site loading platform would need to be supplemented by on street areas.

The use of larger trucks would be required when:

- materials must be delivered by a heavy rigid truck over 10.7 metres due to size or weight;
- direct crane lifting is required from the street frontage;
- during construction of the loading platform; and
- accommodate truck numbers during peak periods such as concrete pours.

3.3 *Traffic Control Plans (TCP)*

As indicated in Section 1 of this report, this review sets out the principles for construction traffic management including standard TCPs to be implemented.

Detailed traffic control plans (TCP's) including signage location, details of traffic control and work zone occupation will be made via separate TCPs and applications for road occupation for each of the various stages of development.

The operation of the proposed “work zones” would not necessitate the preparation of a TCP as defined by the RTA's *Traffic Control at Work Sites* manual.

However the principles of the manual shall be applied and specific TCP's be development for the following activities:

- Use of traffic controllers;
- Temporary partial or full closure of road ways for erection of hoarding / tower cranes; and
- Closure of pedestrian access.

Example TCPs extracted from the RTA's *Traffic Control at Work Sites* manual are provided in Appendix C.

3.4 *Work Zone Impacts to On-street Parking*

As indicated above, the implementation of on street work zones will impact on the existing on street parking provisions.

An audit of the existing on street parking signage (and other signage) has been undertaken as part of this review. This audit of existing signage has been used to identify where changes to the existing on street parking signage are required to accommodate the proposed work zones.

Details of the existing and proposed on street parking signage are provided in Appendix B.

The purpose of the detailed signage plans is to allow Council to:

- Quantify the impact to the various types of on street parking (ie. metered / unmetred parking); and
- Install signage in accordance with the proposal (if approved).

3.5 *Pedestrians*

Details of the proposed pedestrian management and safety measures are provided in the CEMP. Essentially hoarding (B-Class and A-Class) would be used to protect pedestrians on the footpaths.

Pedestrian access along the laneways shall be maintained at all times. Where existing pedestrians may need to be temporarily disrupted, alternate crossings and pathways shall be provided and appropriately signposted.

3.6 *Public Transport*

There are no designated bus stops within the laneways or areas of the proposed work zones.

It is not expected that public transport services would need to be detoured during construction works.

3.7 *Emergency Vehicle Access*

Emergency protocols on the site would include a requirement for traffic controllers to assist with emergency access from the street. Emergency protocols must also be established and staff inducted on emergency evacuation protocols for the site under OHS.

3.8 *Green (Work Place) Travel Plan*

It is recommended that the builders of the development implement a Green (Workplace) Travel Plan for construction workers.

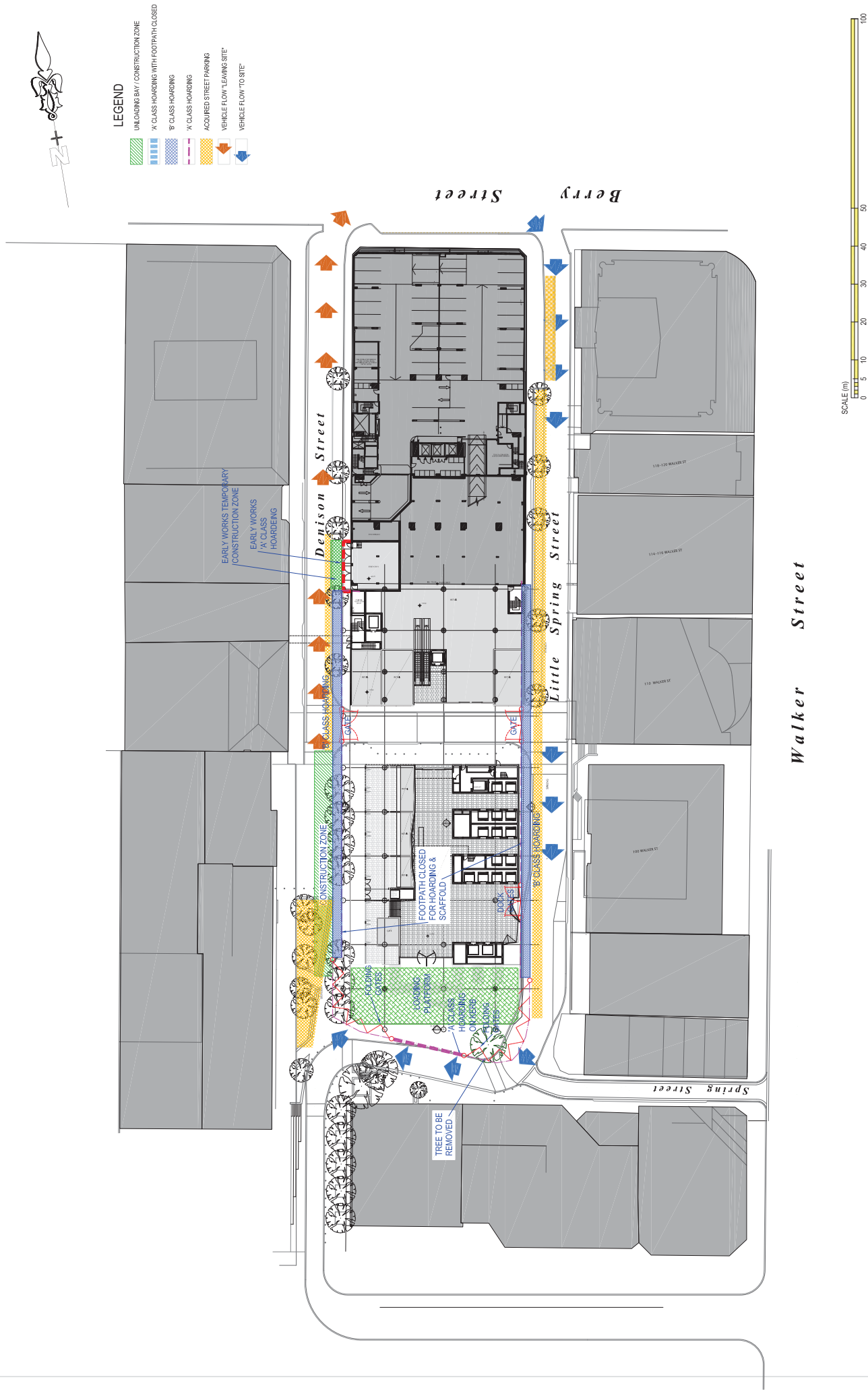
A Green Travel Plan would potentially include:

- Information on Transport Options
 - Preparation of an “access guide brochure” detailing how to get to and from North Sydney by public transport, cycling and walking.
 - This access guide shall be provided to each employee and contractor on the project as part of the site induction process.
 - The access guide shall be mounted on employee notice boards
- On Site Bicycle Facilities
 - Bicycle parking areas could be provided on site.
 - Showers will be provided on site and would be available to workers cycling to the site.
- Tool Drop Off and Storage Facilities
 - On site tool drop off and storage facilities shall be provided such that workers do not need to bring tools each day to the site by vehicle. Storage of tools allows workers to more conveniently utilise public transport.

Appendix A CEMP Traffic Management Diagrams

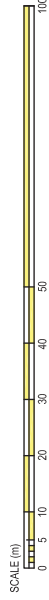
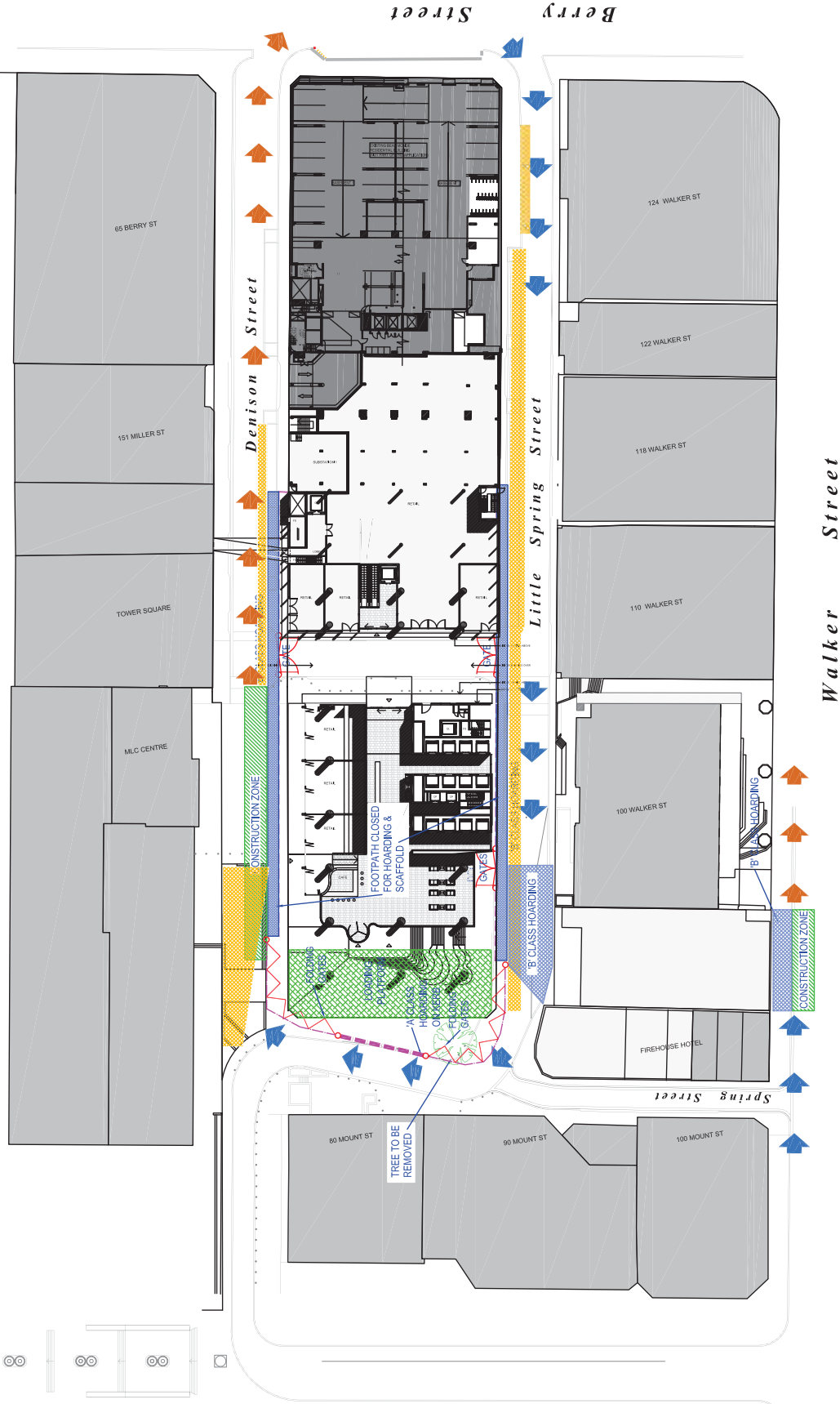
Source: CEMP prepared by Brookfield Multiplex (7 July 2011)

Appendix B On Street Parking Signage Plans





LEGEND	
	UNLOADING BAY / CONSTRUCTION ZONE
	A' CLASS HOARDING WITH FOOTPATH CLOSED
	B' CLASS HOARDING
	A' CLASS HOARDING
	ACQUIRED STREET PARKING
	VEHICLE FLOW "LEAVING SITE"
	VEHICLE FLOW "TO SITE"

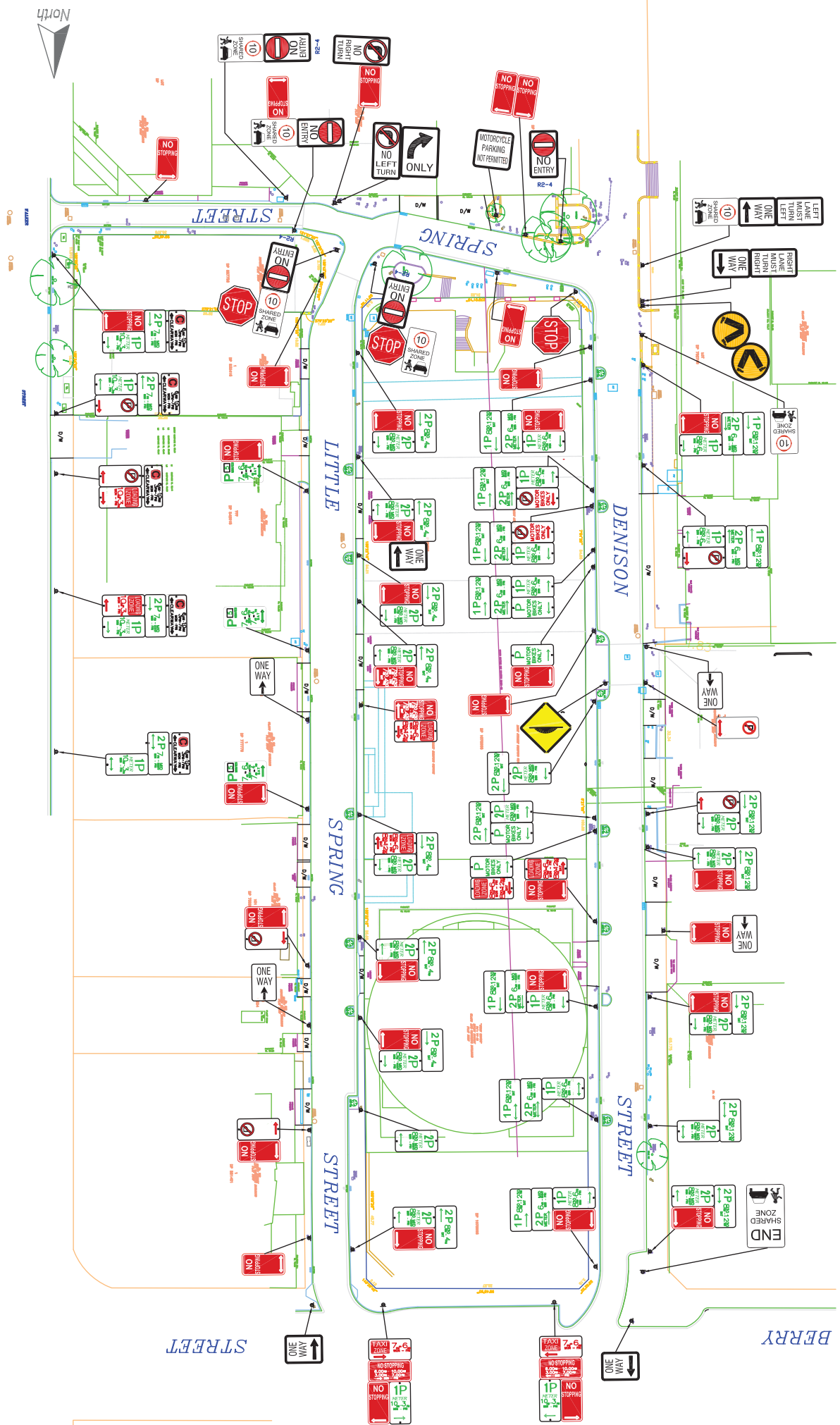


1 DENISON STREET

TRAFFIC FLOW, CONSTRUCTION ZONES & HOARDINGS

EXISTING STREET SIGNAGE

1 DENISON STREET + 88 WALKER STREET, NORTH SYDNEY



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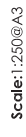


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Figure A

Date: 04 JULY 2011

1 DENISON STREET + 88 WALKER STREET, NORTH SYDNEY

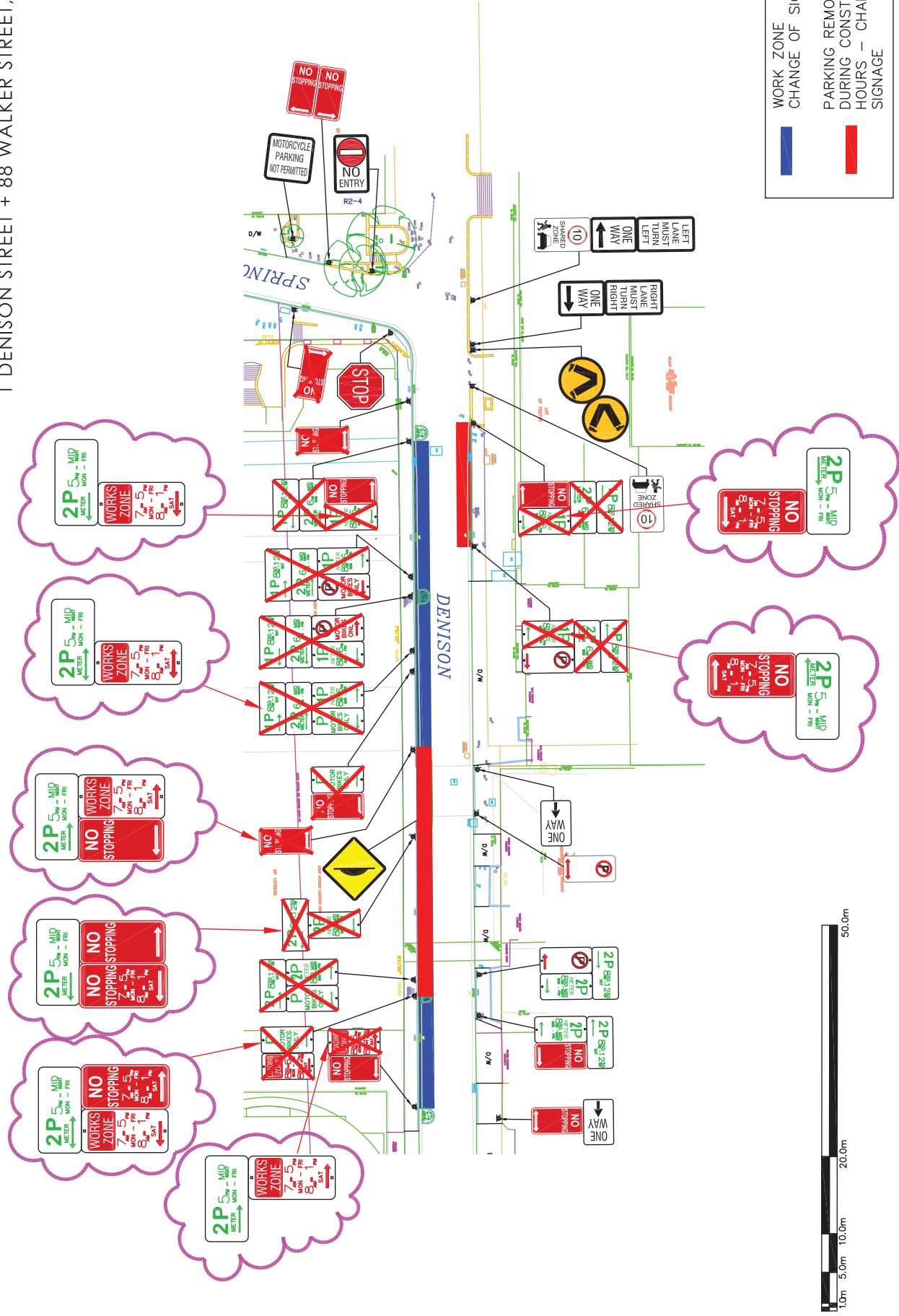


1 DENISON STREET + 88 WALKER STREET, NORTH SYDNEY



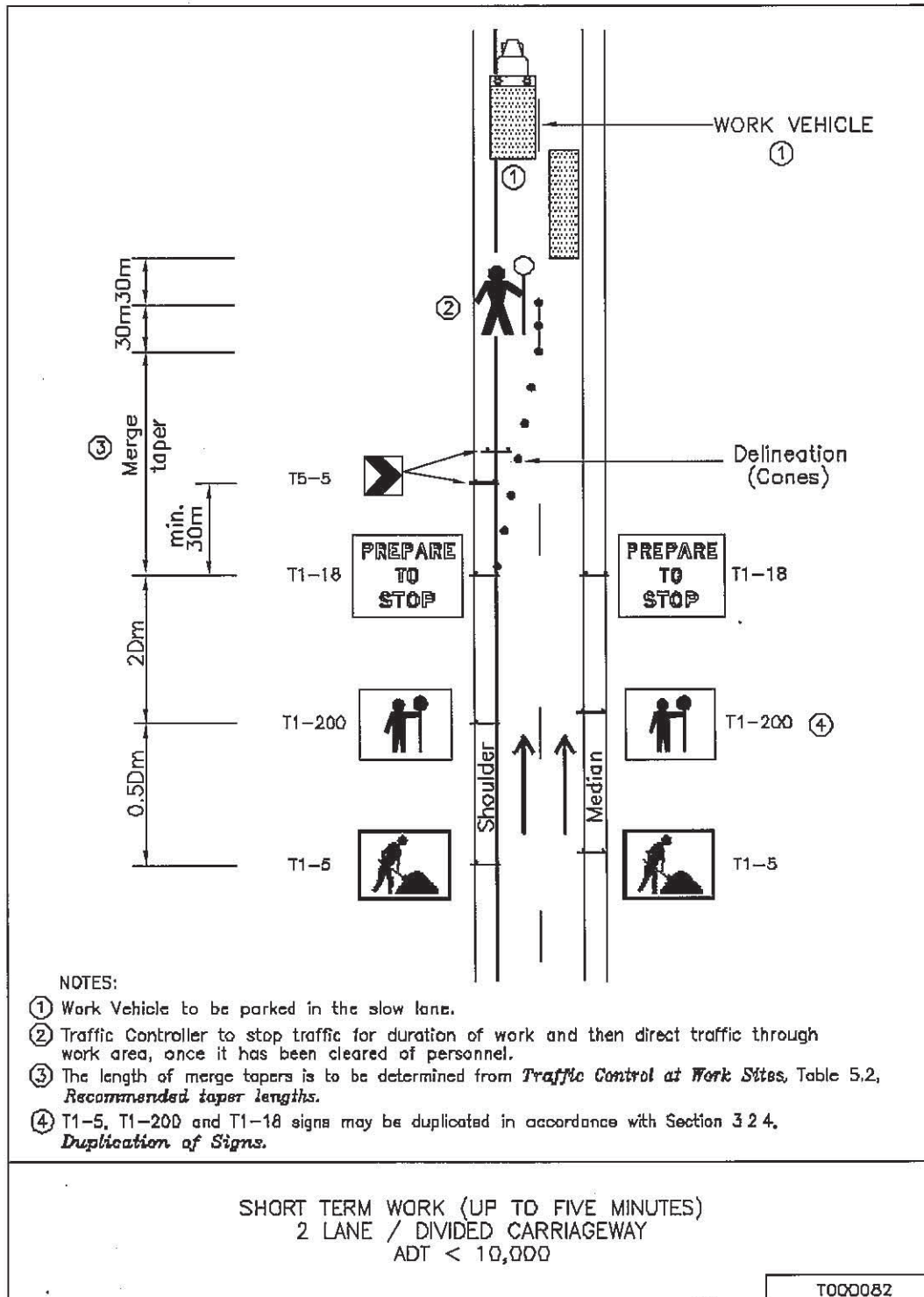
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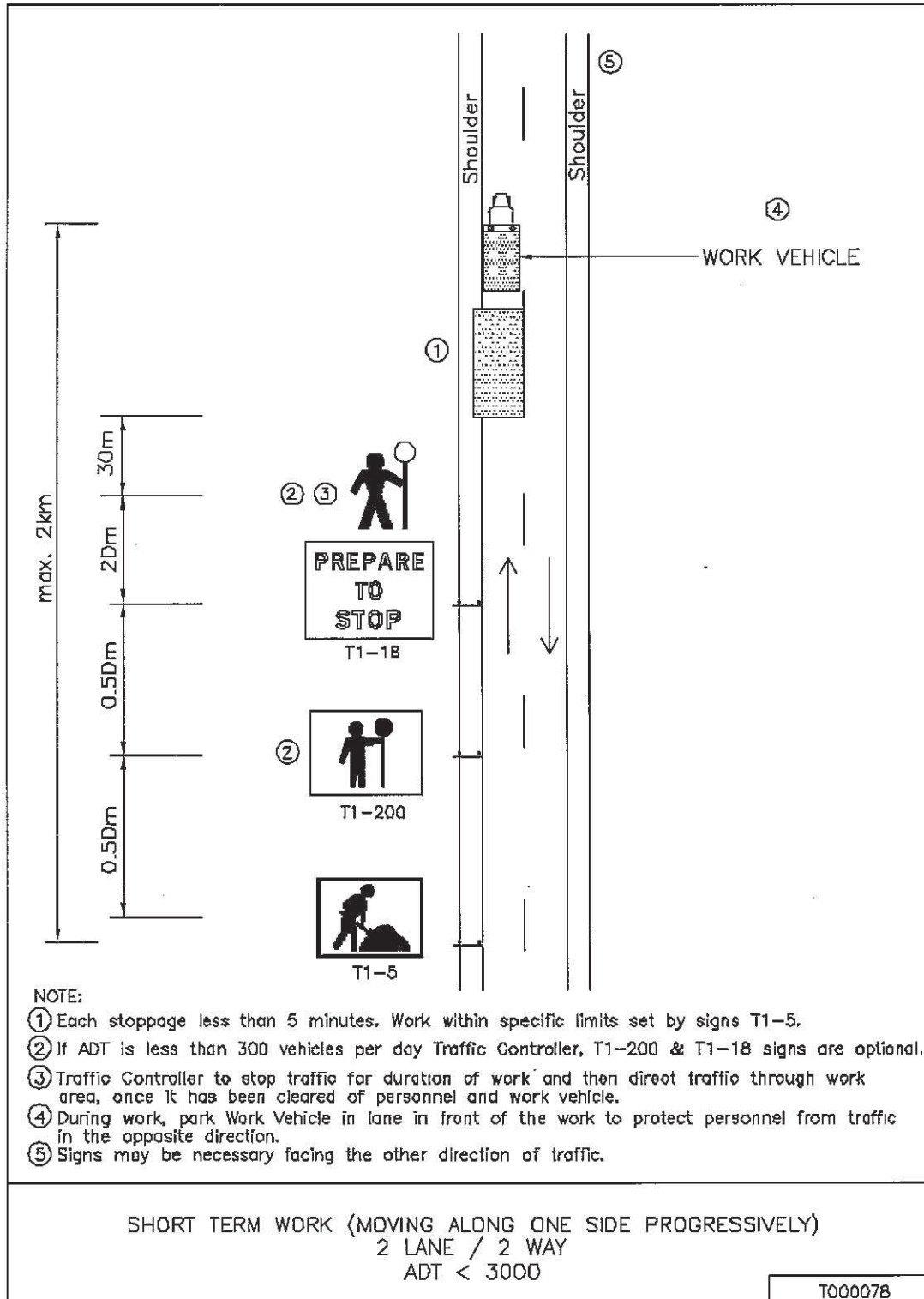


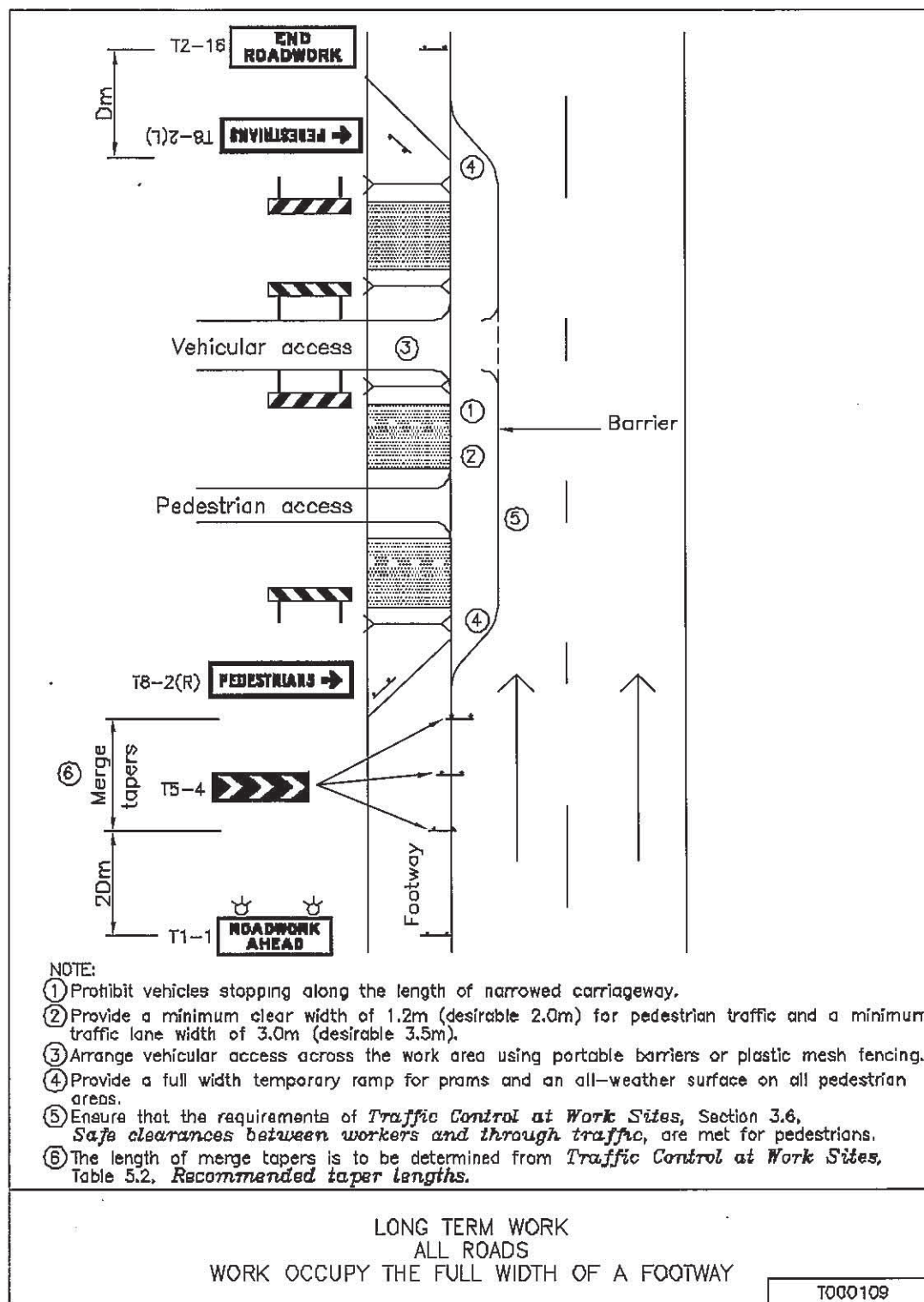
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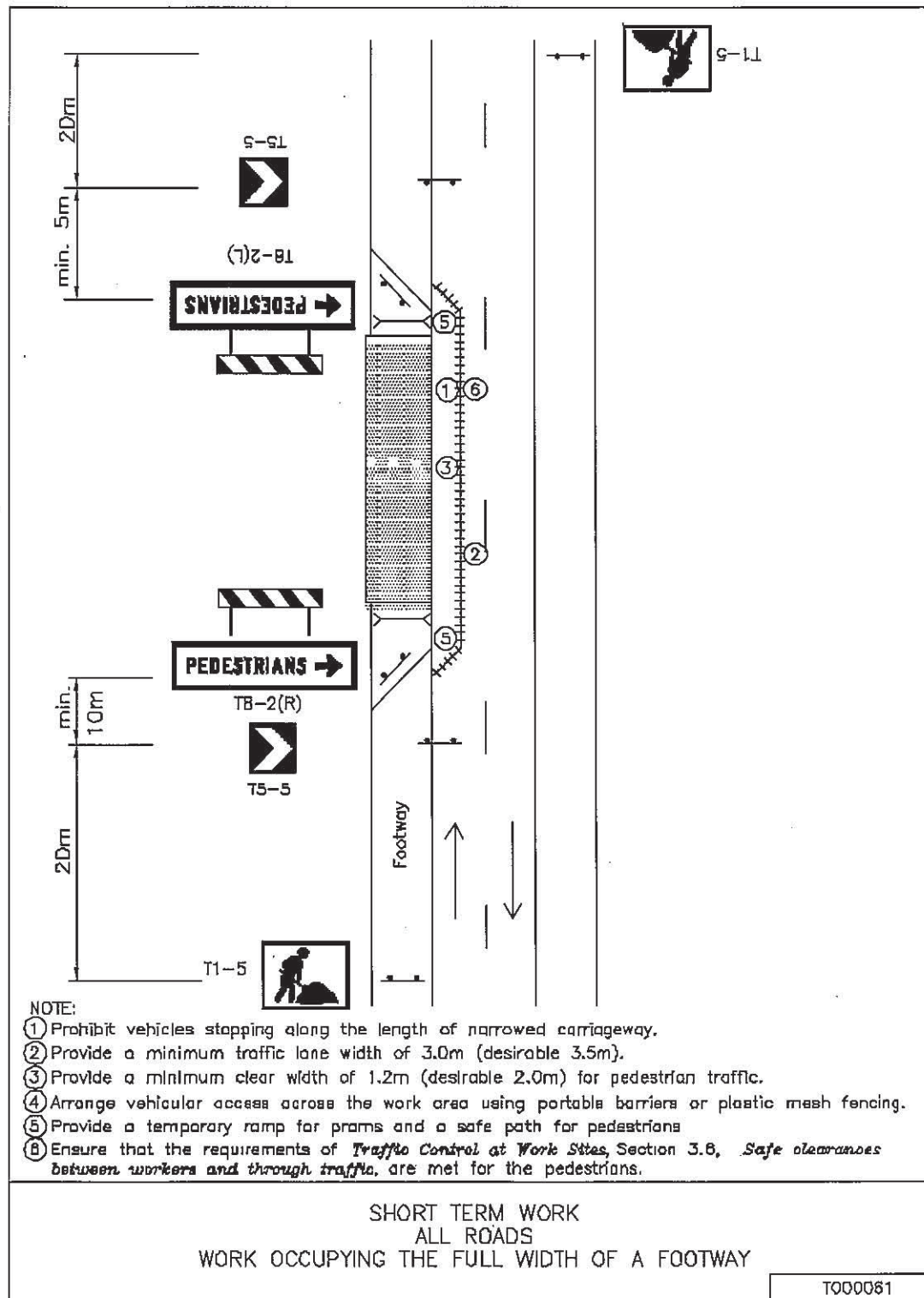
Appendix C Traffic Control Plans (Principles)









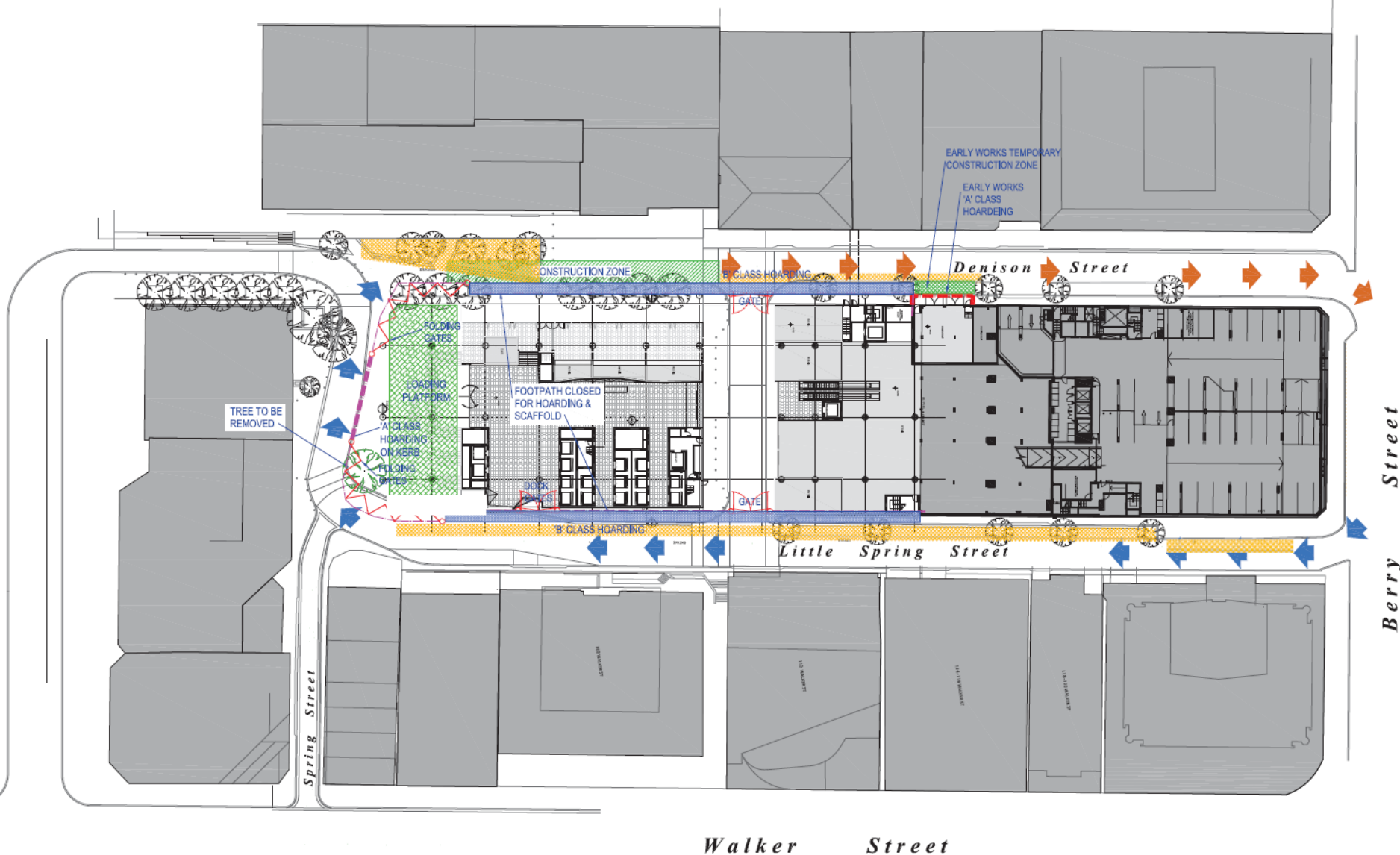


C. Project Planning Sketches

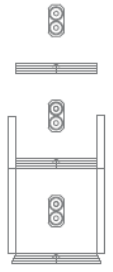


LEGEND

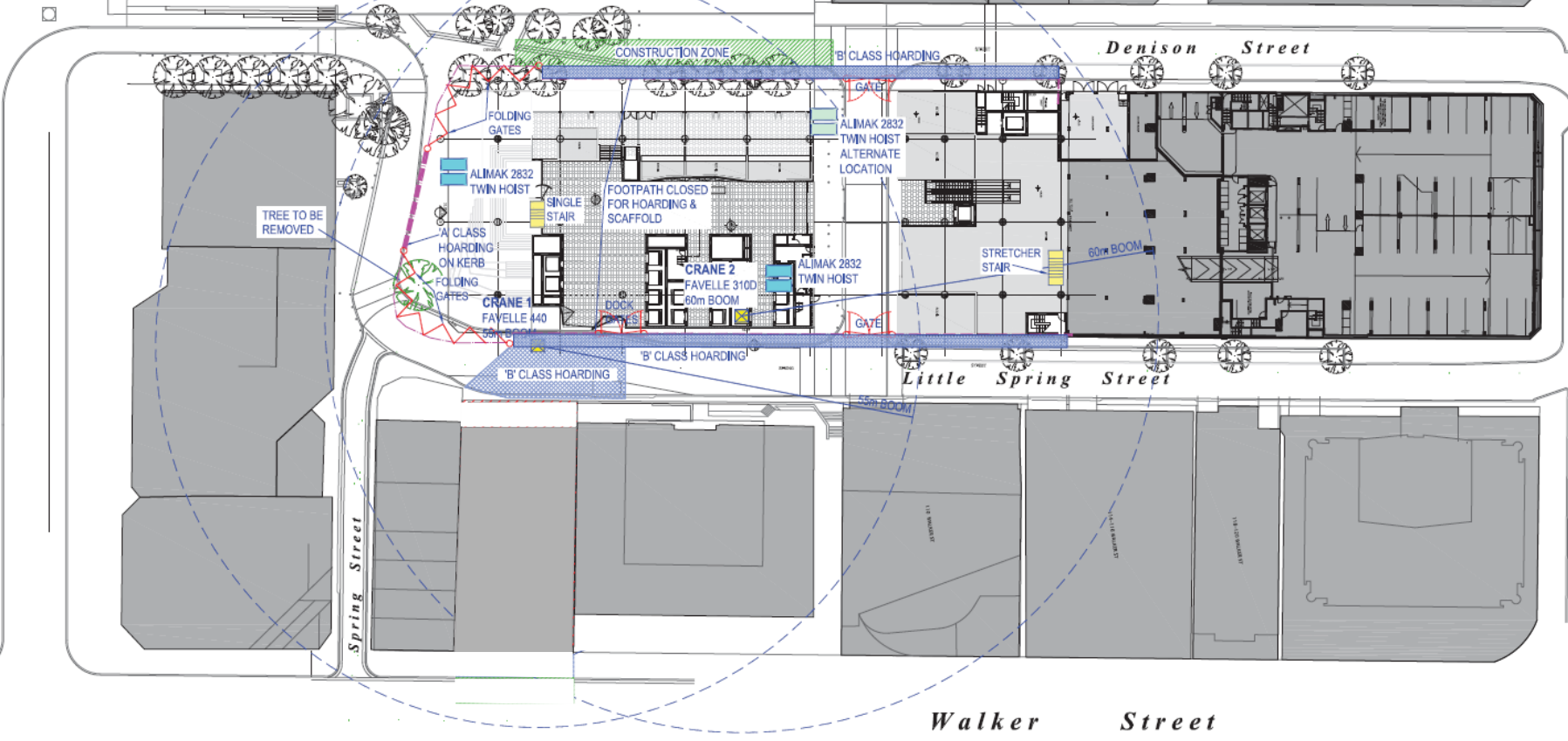
- UNLOADING BAY / CONSTRUCTION ZONE
- 'A' CLASS HOARDING WITH FOOTPATH CLOSED
- 'B' CLASS HOARDING
- 'A' CLASS HOARDING
- ACQUIRED STREET PARKING
- VEHICLE FLOW "LEAVING SITE"
- VEHICLE FLOW "TO SITE"



TRAFFIC FLOW, CONSTRUCTION ZONES & HORDINGS
DEMOLITION / EXCAVATION STAGE

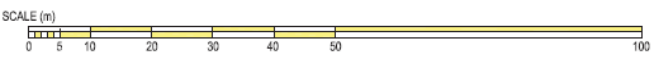
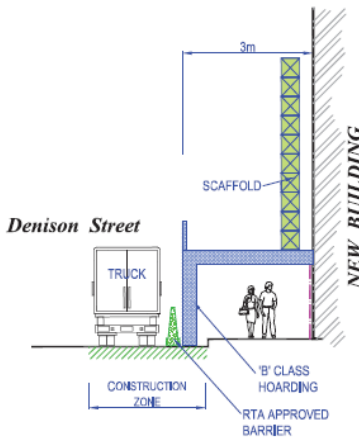
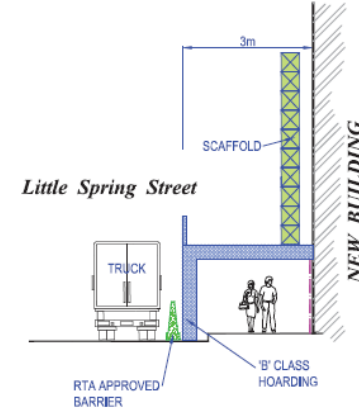


- LEGEND**
- UNLOADING BAY / CONSTRUCTION ZONE
 - 'A' CLASS HOARDING WITH FOOTPATH CLOSED
 - 'B' CLASS HOARDING
 - 'A' CLASS HOARDING

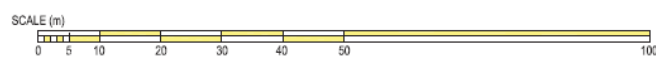
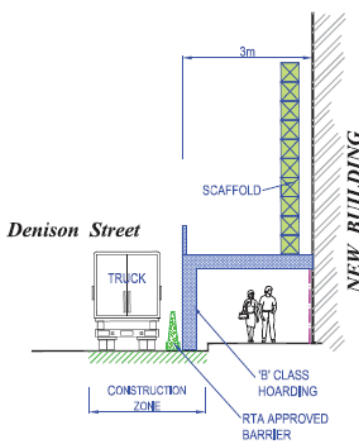
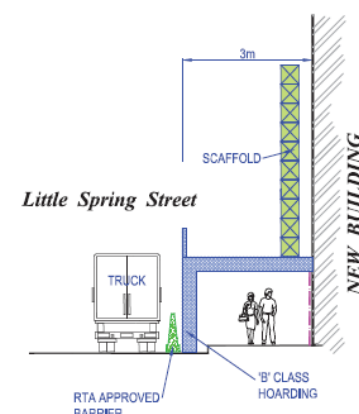
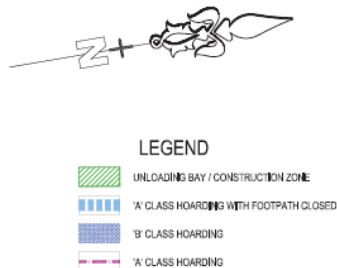
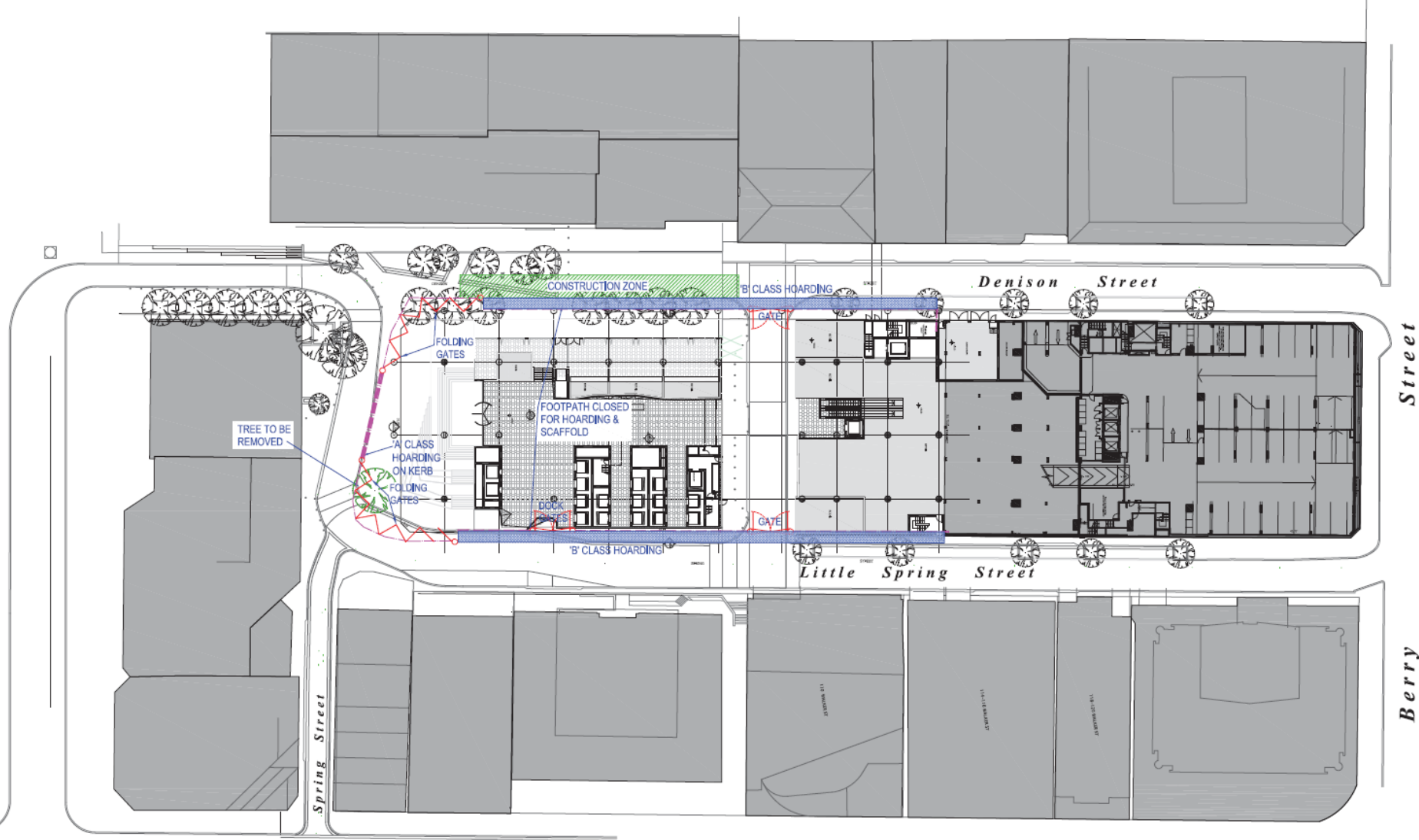


Street

Berry



MATERIALS HANDLING

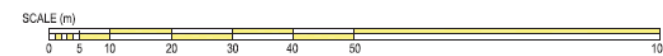
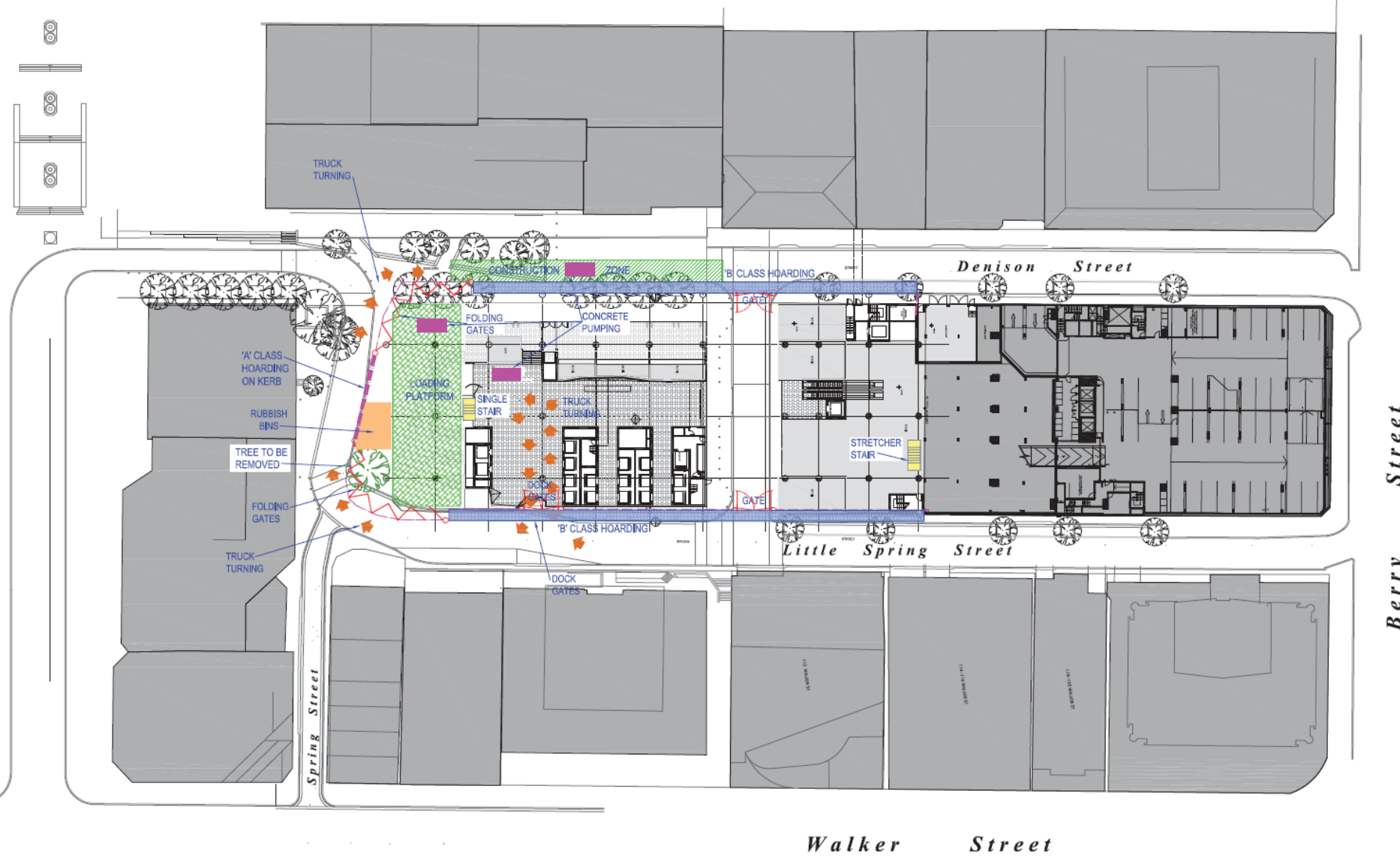


**MATERIALS HANDLING
DEMOLITION / EXCAVATION STAGE**



LEGEND

- UNLOADING BAY / CONSTRUCTION ZONE
- 'A' CLASS HOARDING WITH FOOTPATH CLOSED
- 'B' CLASS HOARDING
- 'A' CLASS HOARDING



CONCRETE PUMPING & SITE AMENITIES EXCAVATION STAGE

D. Workplace Environmental Management Plan

Workplace Environmental Management Plan

1 Denison St
1 Denison Street North Sydney



Discipline	Document No.	Rev #	Effective Date	Description of Change
Environmental	WEMP/ C1Den	1	01/06/2014	Draft

APPROVAL of AMENDMENTS	<i>Health, Safety and Environmental Advisor</i> _____ / /
	<i>Project Manager</i> _____ / /

This Workplace Environmental Management Plan (WEMP) is considered an integral part of Grocon's Management System which provides reference to the Organisational Structure, Procedures and Practices of Grocon which are applicable to this Project and has been reviewed and is approved for use by the National HSE Manager. Each WEMP is tailored to meet project specific requirements and is approved for use when the signature panels are completed.

WARNING: No part of this WEMP may be reproduced in any form, without the written authorisation of Grocon.

Workplace Environmental Management Plan

Grocon Form no. 4040F1: Effective date 03/06/2014: Rev 1: Status AFU: Draft

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1.0 Scope and Application of the WEMP

This WEMP has been prepared to outline the scope of works, services and resources to be provided for the implementation of the Grocon Environmental Management System (QSE Management System) for this Project.

Overarching the environmental elements within Grocon QSE Management System is the Grocon Environmental Policy.

Refer: Section 6 for current Environmental Policy which shall be displayed in all Offices.

The WEMP has been developed to reflect the Grocon QSE Management System's alignment with AS/NZS 14001:2004.

The Environmental Management System implemented on this project shall:

- Assure the client and project stakeholders of conformance of the project works to the specified environmental requirements;
- Provide Grocon management with information to control conformance and promote continual improvement utilising Lessons Learnt;
- Assist the completion of the project to meet programme, budget, environmental requirements;
- Provide the objective evidence necessary to demonstrate compliance with the project Environmental requirements.

This WEMP is documented to outline or reference the resource structure, the responsibilities and authorities of personnel associated with the project and the Environmental procedures to be implemented.

It has been developed to comply with the specific requirements of this project and outlines the following elements:

- Design Development (Environmental in Design);
- Aspect and Impact identification, control and monitoring;
- Project Responsibilities and Duties
- Objective and Targets
- Procurement & Purchasing
- Document Management & Record Control
- Preservation of Products and Materials
- Inspection and Testing of Equipment
- Managing Non Conformance, Corrective & Preventative Action
- Auditing

The Workplace Environmental Management Plan (WEMP) is one part of the Construction Management Plan (CMP) which lists various other plans that may be required for the management of project activities which may include Design, Safety, Quality and Traffic management, etc.

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2.0 Project Description

The new project development will incorporate:

• Demolition of existing building	
• Excavation of 4 basement levels	
• Concrete Structure	
• Services	
• Façade installation	
• Fitout	
• Landscaping	

Note: For further details on the sequence of works and content refer to the Construction Management Plan.

3.0 Scope of Delivery for the Project

The scope of this project includes:

- Design and Construction of the project;
- Ensure the Clients Environmental Brief is met, where applicable;
- Management of all Subcontractors to deliver the trade packages to achieve Environmental Objectives and Targets;
- Environmental Auditing and inspecting;
- Providing all required records to demonstrate Environmental compliance.

4.0 QSE Management System Implementation

4.1 Commitment to Grocon's QSE Management System

Included in this WEMP is a copy of the Grocon Environmental Policy which demonstrates our commitment to the delivery of excellent projects and services for our clients and all stakeholders.

In addition to this, the Grocon project team have environmental responsibilities outlined that through implementation will demonstrate the team's commitment to achieve compliance with the Clients requirements and the delivery of a successful project.

Where Grocon undertakes part of the project works, such as the structure, the requirements of this WEMP shall be applied to the Grocon works in the same way as it is applied to Subcontractors.

Grocon's Environmental Management System is third party certified to AS/NZS14001:2004 which is comprised of company policies, procedures, plans, work instructions and forms, to ensure the consistent implementation of the company's requirements on all projects.

Note: All Procedures are available in real time via the Grocon Intranet to employees. Procedures may be inspected on request, but copies are not distributed externally due to their confidential nature.

4.2 Environmental Management Systems by Subcontractors & Design Consultants

Third parties such as design consultants, subcontractors and suppliers are used on Grocon projects, and where required shall develop and implement their own Environmental Management Systems to ensure that

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the provision of all the products and services they provide are in compliance with the specified project Environmental requirements.

Design consultants shall be required to complete design documentation in accordance with the workplace Environmental legislation.

Subcontractors who operate their own QSE management system shall be required to provide a project specific Environmental Management Plan.

Where design consultants and or subcontractors, do not have a QSE management system, they will be required to comply with Grocon's QSE management system.

Grocon personnel will monitor all third parties' activities and carry out regular checks, which may include reviews, inspection and audits of the third parties QSE Management Systems. Any checking/monitoring of the third parties work by Grocon will not relieve the third parties from their responsibilities under the contract.

4.3 QSE Management Systems Reporting

- All projects shall monitor and record performance against the Environmental objectives and targets as set out in the Workplace Environmental Management Plan (WEMP). These shall be discussed at each month's project team meeting and the results recorded in the meeting minutes and reported in monthly Environmental report.
- The Project Manager, in conjunction with the HSE Advisor, shall ensure that all environmental related incidents and information is progressively recorded in the QSE system, so that each project is able to produce environmental performance reports on a monthly basis. All data shall be complete and entered into the QSE system within 48 hours of the last calendar day each month.
- All Projects shall review the environmental performance at the project Central Safety Committee meetings held each month to identify areas of concern or areas for improvement.
- Each State OHS/HSE manager shall monitor the environmental reports from each project to ensure environmental issues have the appropriate corrective and preventative actions in place.

4.4 Statutory reporting to the relevant Environmental Authority.

- The HSE advisor is required to report Notifiable Incidents to the relevant state EPA Authority after consultation with the State OH&S/HSE Manager. These Incidents shall be reported in accordance with the relevant authorities' requirements which are available from the authority web sites.

Further details of statutory reporting are in section 15.0 Incident Investigation and Notification.

5.0 Legal and Other Requirements

5.1 Identifying legal and other requirements

The legal and other requirements associated with the delivery of the project have been identified during the assessment of risks.

Grocon subscribes to SAI Global, Safety Law and Enviro Law. Relevant stakeholders who require access to changes in legalisation and Australian Standards will be required to register and receive updates by:

- *Electronic notification from SAI Global*
 - <http://bca.sai-global.com/>
- *Safety Law and Enviro Law*
 - <http://www.enviroessentials.com.au/envirolaw/index.php?la=true>

Note: Legislative updates can also be sourced through state or territory WHS/OH&S websites.

Second and third tier Subcontractors will be advised of changes that are relevant to their Environmental Plans and SWEMS via notification from Grocon Site Management through:

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- Safety Environmental Committee meetings – Grocon and Subcontractors
- Sub-Contractor meetings – Subcontractors
- Aconex notification from site – Grocon and Subcontractors
- Email notification from site – Grocon and Subcontractors
- Site Safety Notice Boards – Grocon and Subcontractors
- Site Safety Management Meetings – Grocon and Subcontractors

Refer: 6010A1 Health Safety and Environmental Legal and Other Requirements Matrix

5.2 Emergency Preparedness and Response

Plans have been developed and implemented to specify the actions to be taken in the event of an environmental incident. Such incidents might for example include the release of contamination to the environment through spill incidents, leaks or excess dust or noise.

Emergency evacuation procedures will form part of the induction process and emergency contact /service numbers will be displayed at the workplace.

Refer: 6100P Planning and Response Management Procedure

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Workplace Environmental Management Plan

Grocon Form no. 4040F1: Effective date 03/06/2014: Rev 1: Status AFU: Draft

6.0 Grocon Environmental Policy










ENVIRONMENTAL POLICY

Grocon is committed to undertaking its business in a manner that recognises the importance of environmental protection and sustainability.

The protection of the Environment is a priority in all stages of our works and across all project life cycles including design, construction, manufacture, use and disposal.

Grocon recognises that it has a responsibility for protection of the environment and strives to lead by example, promoting industry best practice and driving sustainable outcomes in all our operations to prevent pollution.

To achieve this and to meet the needs and expectations of our clients, other stakeholders, employees and the community, we will:

- promote the efficient use of resources and the waste management principles of avoidance, re-use, recycling, recovery of energy, treatment, containment and disposal;
- seek to reduce the consumption of resources, including energy, water and materials;
- provide specific training to employees who implement the Environmental Management System.
- establish & review environmental objectives and targets to meet, or exceed, our obligations.

- control construction related impacts including those related to noise, vibration, groundwater, air quality, water quality, land contamination and heritage preservation;
- foster a shared sense of responsibility for optimal environmental performance from top management through to subcontractors and individuals;
- promote environmental awareness among employees and subcontractors via regular training, which includes the definition of roles and responsibilities, Grocon's environmental policy and specific environmental issues relevant to their activities;
- comply with all applicable environmental legislation, regulations, legal obligations and other requirements;
- implement and maintain an effective Environmental Management System that meets the ISO 14001 requirements, to ensure risks to the environment are identified, assessed and appropriately eliminated or controlled;



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Effective Date 30th January 2013

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7.0 Environmental Objectives

PROJECT ENVIRONMENTAL OBJECTIVES					
No.	OBJECTIVE	MEASURE - KPI	METHOD	TOOLS or RECORDS	RESPONSIBILITY
1/ Environmental Planning					
1.1	Determine the Environmental Management requirements for the project	The Workplace will establish and implement a Workplace Environmental Plan	Implement a workplace specific WEMP	4040F1	PM, CM, HSEM
1.2	Each workplace will appoint an Environmental Management Representative	Appointed at the workplace establishment stage	Position Description to contain environmental duties	Position Description issued to individual	PM, CM
1.3	The Environmental Management Representative will be given relevant environmental training	The Environmental Management Representative will have obtained as a minimum a Cert IV in Environmental Management	Learning and Development Application Form External training	P & C Learning and Development Records	PM, CM
2/ Environmental Compliance					
2.1	Develop the Aspect and Impacts Register to address the specific requirements of the project	Pollution is minimised and managed by implementing the appropriate control measures	Environmental monitoring	Environmental Inspection Forms	PM, CM
2.2	Maintain compliance to Legal and Other Requirements	Monitor changes to Legal and Other Requirements	Registered with EnviroLaw	Email Records SWEMs Review Records	HSEA, PM, CM
3/ Environmental Communication					
3.1	All Environmental Management issues shall be discussed at regular meetings	Environmental Management will be an agenda item at SEC Workplace Team meetings	Meetings held at regular intervals	Meeting minutes	PM, CM
3.2	All employees and stakeholders will be aware of the Workplace Objective and Targets	Communicate the Grocon Objectives and Targets	Tender Package Site Induction	Contract Document Induction Records	PM, CM
4/ Waste Management					
4.1	Employ waste management reduction practices at the workplace	Achieve a waste recycle rate of 90%	Waste companies engaged in waste services to have accreditation to AS/NZS14001:2004	Monthly Reports QSE Database Records	PM, CM, HSEA

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8.0 Project Stakeholders

Client/Owner:	Eastmark Holdings Pty Ltd	
Project Manager:		
Builder and ABN/CAN:	Grocon Constructors Pty Limited	ABN: 32 120 476 495
Project Office:		

8.1 Communications with Client and all Project stake holders.

Grocon communicate with our Clients and Project stakeholders using various methods including:

- Aconex mail types including; Emails, RFI's, Site Instructions OFI's, etc. (QSE Database System being developed);
- Conference calls;
- At meetings including Safety, PCG, Design, Stakeholder, User groups, Subcontractor etc.
- Written Reports;
- General written correspondence;
- Face to face conversations.

8.2 Compliments and Complaints

Complaints are deemed be issues raised from outside sources, not issues raised by any of the Project Stakeholders. Issues raised by our Clients or Stakeholders during the project shall be addressed through normal lines of project communications.

Complaints received from the community during the project, or from any source after the completion of the project, shall be recorded in the QSE data base with appropriate actions assigned to the relevant members of the project team.

Compliments may be received in the form of letters of commendation or industry awards and are usually communicated via the Grocon intranet.

9.0 Project Personnel & Resources

The delivery of the Project will be carried out by a team under the management of the assigned Project Manager as detailed in the organisational chart, which is located within the Construction Management Plan.

The Construction Manager and or the (Executive Project Manager, where applicable) in conjunction with the Project Manager will identify and assign adequate resources to facilitate the effective and efficient management of the works. These resources will include skilled & trained personnel for management, performance of the work and verification activities including site inspections and internal Environmental Audits.

The Project Organisational Chart Identifies how the project team functionally interact in order to execute their respective responsibilities and authorities to manage Grocon works, including Consultants, Subcontractors and/or suppliers to achieve contractual requirements.

9.1 Grocon Management Representatives

The Project Manager (PM) has the authority and responsibility for ensuring that the requirements of this WEMP are fully implemented and maintained throughout the duration of the project. The following Environmental related responsibilities are listed for various project positions. The PM is responsible to ensure these responsibilities are communicated to the relevant members of the Project team and ensure that they are covered in the incumbent's Position description.

The Project Manager's (PM) responsibilities are:

- Actively promote and foster a proactive Environmental Culture
- Chair and record an Environmental Aspect and Impacts workshop identifying the key Environmental impacts
- Establish and communicate the project Environmental objectives considering the identified impacts
- Ensuring that all site personnel are aware of their responsibilities related to Environmental and their requirements as set out within this WEMP
- Ensure the level of Environmental systems implemented by all consultants, subcontractors and suppliers is assessed prior to their engagement and commencement of works on the project
- Ensuring that all project activities, either by Grocon or Subcontractors, are regularly inspected by relevant project personnel or authorities
- Make sure evidence of inspections and tests are adequately recorded to verify conformance
- Continually monitor the proper implementation of the Environmental Systems through regular meetings, review of reports and discussions with site personnel
- Manage the assessment of subcontractor progress claims to ensure payments are based on achievement of specified Environmental requirements prior to the approval of each monthly claim
- To ensure conformance management is implemented which includes Non-Conformances, corrective and preventative actions for all identified Environmental issues
- To ensure that a site Safety Environmental Committee is established on site (SEC)

The Site Manager's (SM) Responsibilities are:

- Drive and motivate a proactive Environmental culture.
- To be involved in the Site Safety Environmental Committee & all personnel have environmental training (SEC)
- Attend and drive the implementation of outcomes from the Environmental Aspect and Impacts
- Manage the proper handling, storage and preservation of products & materials for the project
- Oversee the assessment, audit and surveillance of Consultants & Subcontractors
- Conduct team reviews of the effective use of the Environmental Systems
- Manage and oversee the daily recording in the site diary of the QSE database.

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The Contract Administrator's (CA) or Contracts Manager's Responsibilities are:

- Attend and implement assigned actions from the Environmental Risk Assessment workshop
- Conduct Subcontractor assessments to evaluate and confirm that potential Subcontractors possess the ability, resources and capability to meet the Environmental requirements for the project
- Obtain & Review QSE information from Subcontractors prior to shortlisting or recommending Subcontractors/Suppliers for each trade package using the 'QSE Tenderers Capability Statement'
- Ensure the review of contractors QSE documentation and facilitating communication and cooperation between the contractor and Grocon's QSE team prior to the award of each contract
- Conduct & record pre-award meetings with each subcontractor to confirm the subcontractors' ability to meet the QSE requirements for the project
- Only award contracts where adequate QSE compliance can be demonstrated
- Assess subcontractors QSE performance prior to approving monthly progress payments.

Foreman (FM) Responsibilities are:

- Environmental Surveillance of Subcontractors including attending meetings to discuss performance
- Monitor & Ensure calibrated Inspection, Measuring and Test Equipment (IMTE) is used
- Engage Manufacturers to regularly inspect work to confirm compliance to their requirements
- Conduct Environmental tool box talks with Subcontractors and Manufacturers for correct product installation
- Obtain Verification and Conformance Records
- Instigate and record preventative action to avoid the reoccurrence of Non Conformances
- Recommend improvements for the Environmental systems to the Site Manager
- To participate in the weekly safety environmental committee (SEC).

The Health Safety and Environmental Advisor (HSEA) have the following responsibilities:

- Attend and implement assigned actions from the Environmental Aspect and Impact workshop
- Review of Environmental documentation for adequacy and compliance from all subcontractors and suppliers prior to starting on site.
- Input into the Environmental Induction of all project participants and ensure records are maintained
- Control surveillance and the inspection & testing regime for the project
- Maintain Inspection, Measuring & Test Equipment register for Grocon & Subcontractor equipment being used on the project
- Manage all Opportunity for Improvements (OFI's) including Non-Conformances, Corrective and Preventative actions
- Implement preventative action and continuous improvement
- Complete project Environmental reporting within the QSE data base and include as part of the monthly Executive Management Report (EMR)
- To Chair the weekly Safety Environmental Committee.

Off Site Positions

Executive Project Manager (EPM) and OR Construction Manager (CM) have the following responsibilities:

- Ensure that Grocon Workplaces under their control implement this WEMP
- Provide adequate resources to identify and manage project Environmental Issues
- Ensure that a contract review considering the QSE issues relating to the works is undertaken
- Ensure that an Aspect and Impacts Workshop is undertaken at the beginning of the project and is attended by the relevant project team members
- Ensure the identified Impacts have the delegated responsibilities assigned
- Ensure that the Aspect and Impact control measures are regularly reviewed by the Project Team and recorded at team meetings.

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The State Health, Safety and Environmental Manager (HSEM) have the following responsibilities:

- Assist the HSEA and project team to ensure that Environmental system requirements for all consultants and subcontractors are being implemented by the project team
- Monitor the HSEA review process of Environmental document submissions, from subcontractors and suppliers, to ensure adequacy and compliance
- Support the continual improvement of the Environmental System by attending meetings, workshops, audits & reviews with the HSEA, Project manager and Site Manager
- Conduct the initial review and approval of the WEMP for the project
- Review the monthly project Environmental report created in the Executive Management Report (EMR)
- Undertake internal audits on the project against Grocon Procedures or Environmental documents.
- Report any concerns regarding the Environmental management system to the National HSEM.

The National Health, Safety and Environmental Manager (NHSEM) have the following responsibilities:

- Oversee and support the national implementation of the Grocon Environmental management system
- Ensure the Grocon EMS is being applied, resourced and managed on all projects through the state Construction managers and each Project manager.
- Maintain the Grocon EMS certification and compliance to ISO 14001.
- Maintain, Develop and continually improve the Grocon EMS.
- Use feedback and input from EMS users across the business at all levels to ensure the EMS continues to meet business and compliance requirements.
- Ensure internal procedure audits and external certification audits are completed.
- Consider information obtained from interested third parties, to enable the implementation of corrective action and continual improvement.
- Provide support and direction to the State HSEM and the HSEA to ensure that any Environmental system requirements are being implemented by the project team.
- Attend meetings, workshops, audits & reviews with the HSEM & HSEA as required.
- Monitor Environmental reporting by the project teams.
- Lead the national internal audits of Grocon's Environmental procedure requirements.

9.2 Grocon Resources

Grocon is well known for building complex structures and has completed a large portfolio of well-known projects, which were completed using our direct employees. When Grocon directly undertakes the structural portion of a project we utilise our skilled workforce to carry out the work.

9.3 Subcontract & Supplier Resources

Projects are broken down into trade packages and Grocon employs experienced subcontractors & suppliers to undertake each trade package to deliver a completed project.

Each subcontractor or supplier will be engaged through an evaluation process, as described in this WEMP, which shall consider the resources necessary to deliver the scope of works for the relevant package of work being contracted.

10.0 Induction and Training

10.1 QSE System Training

Grocon operates and maintains an electronic QSE system to record the incidents, non-conformances and associated actions related to the Environmental requirements. Relevant Grocon personnel receive training in the use of the QSE system to manage these requirements.

10.2 Inductions

All persons who will undertake work at the workplace or project must complete a Grocon General Induction and a site specific Workplace Induction. Both inductions provide information and awareness related to general and workplace specific Environmental requirements.

Full details of inductions are covered in the Workplace Safety Management plan.

10.3 Environmental Training and Awareness

Grocon supervisors including HSE Advisors and Site managers who will be responsible for implementation of identified controls related to the Environmental Aspects and Impacts may complete relevant Environmental training such as;

- Environmental Awareness training;
- Certificate IV;
- Diploma of Environmental management

All HSE Advisors shall hold or be obtaining a Certificate IV in Environmental management.

QSE training requirements are detailed in 6000P Managing Quality Safety & Environmental Risks procedure.

Where workers are engaged in key supportive Health, Safety and Environmental roles, existing training relevance and currency will be verified and where required new or refresher training will be provided, e.g.:

- Fire wardens
- HSR
- Safety Environmental Committee member
- Spill Kit Training

Grocon provide online training to all employees through the intranet hosted **Learning Seat – GroLearn.** All programs have a built in competency assessment that once completed successfully results in a certificate being generated.

11.0 Subcontractor management

11.1 Contractual Subcontractor Management including pre-tender evaluation

All Tender packages to be issued to the market must include the following documents as a minimum;

Scope of Works:

- Prior to issue this must be approved by the Project Manager, Site Manager and HSEA.

Tenderers Capability Statement 6191F1:

- This document outlines the Environmental criteria required to be met by the tenderer. Once this information is gathered, the Site Management Team must evaluate the information.

Other Documents:

- Grocon General Preliminary Specifications;
- Workplace Environmental Management Plan ;
- Workplace Project Quality Management Plan;
- Workplace Safety Management Plan; and
- Other QSE supporting documents or forms.

Once tenders are received, the Contract Administrator is to evaluate the tenders to gauge those most suited to the successful completion of the package. This evaluation is to include price, programme, previous performance and their capability for managing safety, environmental and quality assurance.

Input from the HSE Advisor and Site Quality Representative shall be sought during the tender assessment.

Once contracts have been awarded, the subcontractor and Grocon management will meet to discuss Grocon expectations and make arrangements for a site meeting of the project teams to establish the requirements prior to starting work on-site.

11.2 Sublet Subcontractor Management

Second Tier subcontractors (those with a contract with Grocon) will be responsible for reviewing all their subcontractors' documentation (third tier subcontractors) and ensuring it is in line with Grocon, legislative and other requirements. Prior to the third tier subcontractor starting on site, all documentation (including evidence of the Secondary tier subcontractor's review) is to be made available to Grocon for review.

Subcontractors Environmental Plans will be audited by the relevant Grocon Supervisor with assistance supplied by the HSEA as part of auditing as outlined in this WEMP. Where non-conformances are identified the Subcontractor will be issued an OFI which must be closed out in the allocated time frame.

11.3 Compliance with Environmental Requirements

Subcontractors who are directly contracted to Grocon may be required to submit a project specific environmental management plan subject to the contract conditions and to the scope of work related to the subcontract.

All QSE tender documents submitted by subcontractors shall be processed as outlined in the 6191 QSE Tenders Capability Statement available from the Intranet.

11.4 Environmental Work Method Statements

The development of Safe Work & Environmental Method statements (SWEMS) is fully detailed within the Workplace Safety Management Plan (WSMP).

The development of SWEMS may incorporate, as required, appropriate controls for identified aspects and impacts which are considered to be high risk. **Refer to section 14.0 of the WEMP.**

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11.5 SWEMS review and implementation audits

Safe Work and Environmental Method Statements (SWEMS) developed and implemented for all high risk construction activities, will be reviewed and have a SWEMS implementation audit conducted.

SWEMS review and implementation audits are required to be carried out by Grocon supervisors as part of the Safety Interaction Program, with full details of this program explained with in the WSMP and available from the Intranet in the following documents;

- 6000 P Managing Quality, Safety and Environmental Risks
- 2025A1 Safety Interactions Position Matrix.
- 6000F5 SWEMS Review
- 6000F6 SWEMS Implementation Audit

Safety Interactions conducted in workplaces will be used to assist Grocon and its employees to identify unsafe practices and to utilise skills provided in training to assist in improving safety culture.

All hazards that are identified and cannot be “See & Fixed”, that is easily and safely fixed, must be reported to the Grocon Foreman responsible for the area. Opportunity for Improvement (OFI) can be raised in the QSE Database where the action requires a specific person to take corrective actions, which are then verified as completed by the OFI originator.

12.0 Workplace Establishment

Obtain information and where applicable provide notification to authorities including, but not limited to:

- Notification / application to Council, WHS / OH&S legislator; Police:
 - Construction Certificate;
 - Hoarding notification;
 - Demolition;
 - Asbestos Removal;
 - Contaminated soil removal;
 - Roadway work zone approval;
 - Traffic Management Plan;
 - Footpath closure permits;
 - Road closure permits;
 - Out of Hours Work.
- Site Clearance:
 - Excavation;
 - Soil removal.
- Environmental:
 - Environmental Protection Agency (EPA);
 - Environmental Impact on neighbouring properties;
 - Environmental Management Plan – Aspects & Impacts.

12.1 Site Hours

Site hours as approved by the North Sydney Council are:

6:30 am to 6:30 pm	Monday to Friday;
6:30 am to 6:30 pm	Saturday;
Sunday Work	Subject to Out of Hours Permit;
Shift/Night Works	Subject to Out of Hours Permit.

Out of hours work is subject to permit approval.

12.2 Emergency Management and Notification to Authorities

Each workplace is required to develop an Emergency Management Plan as part of the Workplace risk assessment as covered in 6000P Managing Quality Safety & Environmental Risks procedure.

Project specific details for consideration in the development of the Emergency Management Plan are set out in the Workplace Safety Management Plan (WSMP).

External notification to any Environmental Authorities will only be via the HSE Advisor (HSEA) in consultation with the Project manager (PM).

Notification of emergency events to the client will be done by the Project Manager.

The Project Manager (PM) or HSE Advisor will report the details of the emergency event to the State HSEM and or the National HSEM as soon as possible.

12.3 Safety Environmental Committee

A Safety Environmental Committee (SEC) will be established at the workplace or project in accordance with relevant WHS/OH&S Legislation, Grocon requirements and in consultation with employees.

Please refer to the WSMP, which provides the details of establishing the SEC.

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12.4 Consultation and Communication

Grocon has a procedure in place which set out the requirements for our workplaces to establish proper Consultation and Communication. Listed below are some of the methods used to affect this process;

- Daily Prestart meetings
- Toolbox talks
- via Workgroup elected Health and Safety Representatives (HSR)
- Through representation on the SEC
- Distribution of information on Workplace notice boards

Refer to 6660P Consultation, Communication and Issue Resolution procedure.

Grocon will provide information to second tier subcontractors through:

- Aconex;
- Subcontractor meetings;
- Safety Environmental Committee Meetings;
- Subcontractors tool box meetings.

13.0 Workplace Specific Environmental Requirements

Detailed Environmental policy and procedures are set out in Grocon's QSE System. This WEMP has been developed consistent with the Grocon QSE System. The policy and procedures in the Grocon QSE System and the site SWEMS apply throughout the Workplace except where specifically indicated otherwise.

13.1 General

- All personnel must conduct their works in accordance with relevant Environmental Legislation, site policies and procedures and this WEMP;
- Statutory Rules and Regulations are to be taken as a minimum guide only;
- SWEMS required as Aspects and Impacts control measures will be audited as specified in **2025A1 Safety Interactions Position Matrix.**

14.0 Aspect and Impact Control Measures

Environmental Impacts identified in the Aspect and Impacts Register will be eliminated or reduced as outlined in **4040F2 Aspect and Impacts Register.**

Environmental Impact monitoring will be undertaken weekly using **4040F3 Environmental Impacts Inspection Report.**

Photographic examples of Environmental Impact Controls are outlined in **4040G1 Environmental Impacts Guidelines.**

15.0 Incident Investigation and Notification

Occurrences are to be reported immediately to the HSEA. Other relevant persons at the Workplace should be informed of the incident/accident/dangerous including the Project Manager, Site Manager, Supervisor/Foreman, Health and Safety Representatives and/or Safety Environmental Committee. The HSEA will notify the HSE Manager. Persons with responsibilities for incident management at this Workplace have been nominated as:

- Project Manager
- Site Manager

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- First Aid

External notification to the Environmental legislator and other authorities will only be via the HSEA in consultation with the PM and HSE Manager.

Notification of Environmental incidents to the client will be via the monthly PCG Report, and as nominated as a contractual requirement: **(for Emergency management refer to section 12.2)**

Details of any:

- Major Environmental incidents;
- Relevant Environmental complaints.

Upon becoming aware of any of the incident above occurring, site management will notify the Environmental legislator by the fastest possible means, e.g. telephone, email, fax or other electronic means. Where notice and details are given by phone, the Environmental legislator may request a written notice on an approved form within 48 hours. In cases where phone notice is given but Environmental legislator does not require a written notice, the Environmental legislator must provide site management with;

- (a) Details of the information received; or
- (b) An acknowledgement of receiving the notice.

Grocon will retain a record of all notices given to Environmental legislator in accordance with the relevant legislation.

16.0 Public Protection related to Environmental Impacts

At different stages of the program development, public protection will require additional control measures to be implemented for various Environmental Impacts where applicable such as:

- Demolition;
- Asbestos removal;
- Excavation & trenching;
- Dust;
- Noise.

These works shall be undertaken by persons qualified and licenced to undertake these works.

As previously described in this WEMP, the Aspects and Impacts related to these works shall be considered as part of the assessment and creation of the Aspects and Impacts register and the identified controls shall be incorporated into the relevant SWEMS to ensure controls are implemented for these Environmental Impacts.

This type of work also requires stringent Safety controls and is detailed in the WSMP.

17.0 Dangerous Goods and Hazardous Substances

Specific procedures for the storage, handling and use of dangerous goods and hazardous substances will be implemented at the Site in accordance with the Grocon QSE System.

Storage, handling and use of dangerous goods and hazardous substances will be in accordance with the relevant Environmental legislation.

The management and control, of these substances shall be handled in accordance with the **WSMP 2040F1**.

18.0 Concrete Pumping

Environmental and Safety requirements relevant to concrete pumping may include:

- Project specific SWEMS to include blow back, cleaning, waste and runoff controls;
- Pump types, placement and capacity shall be considered to eliminate or reduce the build-up of exhaust gases;
- Monthly and six monthly maintenance inspections, as per manufacturers specifications, are to be conducted, documented and records maintained and available;
- All equipment associated with concrete pumping must have fixed compliance plates and/or appropriate certification for their use;
- All concrete washouts must occur in the designated washout area;
- Consider it may be required to remove excess concrete off site.

19.0 Plant and Equipment

All plant and equipment brought on to site must have a Plant Risk Assessment and a Pre-Start Checklist completed and have both approved by the HSEA five working days prior to use on site. All plant and equipment being brought on to site shall be inspected and approved by Grocon for site access.

Environmental concerns for plant and equipment working on site may include exhaust emissions, oil leaks and regular services and maintenance. These items shall be monitored by visual surveillance and by weekly inspections which shall be recorded on to the **4040F3 Environmental Impacts Inspection report**.

Management of Plant and Equipment also requires stringent Safety controls. **Refer to the WSMP 2040F1.**

20.0 Document Management & Record Control

Grocon uses Aconex to manage and control project related documentation & records. The intent is to ensure that all project related documentation & records are managed in a manner that is controlled, accurate, efficient, comprehensive, reliable and systematic.

Grocon also has a QSE system which is used to manage the QSE processes on our projects. This system is also used as a data base to review and store QSE type documents including Safety Plans, SWEMS, Toolbox Talks. These documents shall be transmitted using Aconex.

Whilst Aconex is established for use on individual projects, the QSE system is used as a data base with information, documents and records from current and past projects.

For full details of Document management and record control **refer to the WQMP 3040F1.**

21.0 Managing Non Conformance, Corrective & Preventative Action

Work being carried out that does not conform to specified Environmental requirements is deemed to be non-conforming and will therefore need to be prevented from occurring again on the project.

All Grocon employees are responsible for identifying and recording any non-conforming work activities and where possible "See and Fix" will be applied. In other cases requiring a higher level of control to be implemented, an Opportunity for Improvement (OFI) is to be logged in the QSE database.

The subcontractor shall also maintain their own register which shall record and manage all Environmental Non-conformances, including those of any 2nd & 3rd tier subcontractors. Each Non-conformance raised shall require Corrective and Preventative Actions approved by the relevant authority (Grocon raiser), prior to being closed.

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22.0 Inspection, Measuring and Test Equipment

Grocon shall maintain a central IMTE register (**form 3101F1**) and copies of calibration certificates for all Inspection Measuring & Test Equipment (IMTE) being used on the project which shall cover Grocon's and all Subcontractor's Environmental equipment used on site for Inspection, measuring or testing.

Refer to the **WQMP 3040F1** for full details related to IMTE register.

23.0 Handling, Storage, Packaging, Preservation and Delivery

Grocon will monitor the delivery of incoming goods to ensure proper handling, storage, and packaging, to assist in the preservation of all components or products which will become a part of the completed project.

Generally most products are supplied by our subcontractors as a part of their trade package works and each subcontractor or supplier is ultimately responsible to ensure they manage their products with correct handling, packaging, storage and protection to ensure the products are maintained in good condition until they are incorporated into the project and accepted at handover of the relevant works.

Subcontractors will be responsible to maintain adequate protection of products and materials in storage, during use and disposal. Packaging from materials shall be recycled where possible.

24.0 Auditing

24.1 General

Audits are conducted on the Grocon Integrated QSE Management System for the Construction business, to ensure that all system elements are correctly and effectively applied to achieve compliance with the requirements of the company procedures.

24.2 External Certification Audits

External Certification & Surveillance Audits are conducted annually on our certification for Quality, Safety & Environmental. Grocon's QSE management system is certified by BSI

24.3 Internal Grocon Audits

Internal audits on company procedures are scheduled on our construction projects to provide a systematic check of their correct application. These audits are scheduled by the National Quality Manager in consultation with the National and State HSE manager. An annual audit program will be prepared for all current projects and updated as necessary to monitor the scheduled audits and to include any new projects.

All internal audits will be carried out in accordance with the Grocon procedures available from the Intranet.

24.4 Internal Subcontractor & Consultant Audits

Audits on Subcontractors and Suppliers Environmental Managements Systems (EMS) may be included in the project audit schedule, which shall be developed by the Health, Safety and Environmental Advisor (HSEA) in conjunction with the SQR and Site Manager (SM) and approved by the Project Manager (PM).

(Form 6140F1 Project Audit Schedule available from the Intranet)

Environmental audits on subcontractors will be subject to the scope of works being subcontracted and any relevant Environmental requirements to be met for the subcontract works.

Where Environmental audits are required, they shall be included in the project audit schedule and first round audits shall be scheduled, following the commencement of work on the project to confirm the proper implementation of the EMS on the project.

This document is uncontrolled when printed. Please consult the electronic version for the latest revision.

Second & subsequent round audits shall be scheduled subject to the outcome of an informal risk assessment, conducted with input from the HSEA, SQR, SM and PM, which shall consider previous audit results and the demonstration of acceptable performance of their EMS.

The HSEA and SQR are to maintain the audit schedule three months in advance and will be continually reviewed and updated, considering the letting of contracts and the projects construction programme.

Project audits shall be conducted to identify compliance with the project environmental requirements, legislative requirements, Codes of Practice, Standards and other requirements.

24.5 Conducting Audits and Documentation

All Internal Audits shall be conducted in accordance with Grocon's Internal Audit procedure and Work Instruction available from the Intranet. Audit documents and forms are available from the Grocon intranet for use in conducting and managing audits on projects.

24.6 Recording and Reporting of Audits

The results of all Audits shall be recorded and entered into the QSE data base including any OFI's raised from the audit. The QSE data base is capable of producing audits reports for use at project and business levels.

25.0 Review, Issue and Authorisation.

25.1 Preparation, Review & Authorisation

The First Issue.

1. The HSEA, assisted by the State HSE manager will prepare the WEMP template and include the project specific content.
2. The Project Manager will review the WEMP to ensure it meets the project requirements.
3. The State HSE manager will review the first draft issue to ensure it maintains Grocon requirements.
4. The Construction Manager will review the WEMP for approval.

Complete these details in the **First Issue Approval table** of the WEMP.

Any major comments shall cause the WEMP to be returned for further revision and recommence the cycle.

Minor Revisions after First issue.

1. The HSEA will create revisions of the WEMP to suit minor changes identified.
2. The Project Manager will review the changes prior to approving the revised WEMP.

Major Revisions or change of Intent

Should the WEMP require major revisions (based on the First Issue and subsequent minor revisions) which alter the intent or scope of the Original issued document, then the Project Manager shall seek further review by the State HSE manager and approval from the Construction Manager which shall be recorded in the **First Issue Approval table** for that revision.

Approval of Amendments

All approved WEMP shall be signed by the HSEA and by the Project Manager on the front page. Records of the amendments shall be recorded in the 'Record of Amendments' table in the WEMP.

First Issue Approval Table for revision 1

Step	Activity	Name	Position	Signature	Date
1	Preparation	TBC	HSE Advisor		
2	Review	TBC	Project Manager		
3	Review	TBC	HSE Manager		
Revision - 1 - was issued with Approval by the Construction Manager.					
4	Approval	TBC	Construction Manager		

(Note: No need to obtain HSE Manager Review or Construction Manager Approval after the first issue, subject to Major revisions or change of intent above.)

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25.2 Record of Amendments

The WEMP amendments shall be recorded in the table below. The issue and use of this document must be approved and it is the responsibility of all Grocon personnel to ensure that work is carried out in accordance with this current Workplace Environmental Management Plan (WEMP).

Revision	Date	Comments	Approved By

25.3 Distribution and review by project team

A QSE management plan review shall be completed by each member of the project team. (**Use form 6110F1**). This review shall ensure that each member of the Project team understands their responsibility to carry out the requirements of the WEMP.

The WEMP shall be available electronically within the Project Aconex Document Register once approved. All printed copies unless nominated in the distribution list are deemed to be "Uncontrolled".

Approved copies of all the Grocon WEMP shall be loaded onto the QSE database.