

# SCENTRE GROUP

## DESIGN & CONSTRUCTION

PEOPLE PROTECTING PEOPLE

### Construction Quality & Environmental Management Plan

#### Westfield Hurstville ELP



Document Control:

TEMPLATE REVISION	DATE	PREPARED BY	CHECKED BY	APPROVED BY
1	06/02/2019	DECLAN O'BRIEN		MATTHEW FISK

Revision	Date	Filename	SDC-PMT-PLN-001		
DRAFT	6/07/20	Description	CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN		
		REV Changes			
			Prepared by	Checked by	Approved by
		Name	Tom Jubb	David McFadden	Matthew Fisk
		Signature			
Rev 1	23/09/2020	Filename	SDC-PMT-PLN-001		
		Description	CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN		
		REV Changes	As per planner comments		
			Prepared by	Checked by	Approved by
		Name	Tom Jubb	David McFadden	Matthew Fisk
		Signature			

This plan and any subsequent revisions are controlled documents and shall be controlled by SDC and approved by the Systems Manager before re-issue. The Systems Manager shall define distribution requirements for this plan and referenced document

**Distribution List:**

SDC Project Recipients	TO BE ISSUED BY CDM OR DOC CONTROLLER
Construction Project Manager	
Project Design Manager	
Planner	
Site Engineer	
Project Risk Manager	
Site Manager	
Construction Design Manager	
Services Manager	

Scentre Group Project Recipients	TO BE ISSUED BY CDM OR DOC CONTROLLER
Development Executive	
Centre Manager	
Facilities Manager	
Communications Manager	

External Project Recipients		TO BE ISSUED BY CONTRACTS ADMIN OR CDM	
All Subcontractors			
Local Council			
Joint Venture Partners			
Consultants			

# TABLE OF CONTENTS

<b>1.</b>	<b>INTRODUCTION.....</b>	<b>5</b>
1.1.	PURPOSE.....	5
1.2.	CQEMP STRUCTURE.....	5
1.3.	SCOPE OF THE CQEMP.....	6
1.4.	MANAGEMENT OF CQEMP .....	6
<b>2.</b>	<b>THE PROJECT.....</b>	<b>7</b>
2.1.	PROJECT DESCRIPTION.....	7
2.2.	PROJECT STAKEHOLDERS.....	14
2.3.	PROJECT OBJECTIVES & TARGETS .....	14
2.4.	STAGING & PROGRAM.....	15
2.5.	HOURS OF WORK.....	15
<b>3.</b>	<b>ORGANISATION.....</b>	<b>16</b>
3.1.	OVERVIEW.....	16
3.2.	SITE MANAGEMENT TEAM.....	16
3.3.	QUALITY POLICY.....	17
3.4.	ENVIRONMENTAL POLICY.....	18
<b>4.</b>	<b>CONSTRUCTION MANAGEMENT.....</b>	<b>19</b>
4.1.	APPROVALS.....	19
4.2.	SITE ESTABLISHMENT.....	20
4.3.	SITE SECURITY & HOARDINGS .....	22
4.4.	MATERIALS HANDLING .....	24
4.5.	CONSTRUCTION METHODOLOGIES .....	26
4.6.	TRAFFIC MANAGEMENT .....	26
4.7.	TENANCY IMPACTS.....	27
4.8.	IMPACTED BUILDINGS.....	28
4.9.	DEFECT MANAGEMENT .....	28
<b>5.</b>	<b>QUALITY MANAGEMENT SYSTEM.....</b>	<b>29</b>
5.1.	COMPLIANCE TO OUR INTEGRATED MANAGEMENT SYSTEM.....	29
5.2.	PROJECT PROCEDURES .....	29
5.3.	CONTROL OF QUALITY RECORDS .....	31
<b>6.</b>	<b>ENVIRONMENTAL MANAGEMENT SYSTEM .....</b>	<b>32</b>
6.1.	NOISE & VIBRATION MANAGEMENT .....	32
6.2.	WASTE MANAGEMENT.....	35
6.3.	ENVIRONMENTAL ASPECTS, IMPACTS AND RISK ASSESSMENT.....	36
6.4.	COMPETENCE, TRAINING AND AWARENESS.....	37
6.5.	DUST MANAGEMENT.....	37
6.6.	BIODIVERSITY.....	38
6.7.	STORMWATER AND SEDIMENT CONTROL .....	38
6.8.	CONTAMINATED LAND.....	38
6.9.	GROUNDWATER .....	38
6.10.	EXCAVATION .....	38
6.11.	SPILL PREVENTION AND RESPONSE.....	39
6.12.	AIR QUALITY.....	39
6.13.	ENVIRONMENTAL INCIDENT NOTIFICATION AND REPORTING .....	39
6.14.	SAFETY DATA SHEETS .....	40
<b>7.</b>	<b>COMMUNICATION .....</b>	<b>41</b>
7.1.	INTERNAL COMMUNICATION .....	41
7.2.	LIAISON WITH EPA, GOVERNMENT AUTHORITIES OR OTHER RELEVANT STAKEHOLDERS.....	41
7.3.	COMMUNITY LIAISON AND/OR NOTIFICATION.....	41
<b>8.</b>	<b>APPENDICES .....</b>	<b>42</b>
8.1.	APPENDIX A: CONSTRUCTION METHODOLOGY.....	42
8.2.	APPENDIX B: GEORGES RIVER COUNCIL CONSTRUCTION NOISE GUIDELINES.....	43
8.3.	APPENDIX C: CONDITION 95 EROSION & SEDIMENT CONTROL PLANS .....	44
8.4.	APPENDIX E: CONDITION 94 DEMOLITION EXCAVATION & CONSTRUCTION MANAGEMENT .....	45
8.5.	APPENDIX F: CONDITION 15 CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN.....	46

# 1. INTRODUCTION

## 1.1. PURPOSE

This Construction Quality Environmental Management Plan (CQEMP) describes how Scentre Design & Construction (SDC) shall implement and conduct its allocated site management responsibilities during the construction phase of the Westfield Hurstville Entertainment and Leisure Precinct (ELP) Development also referred to as the project.

The plan also defines the environmental obligations and describes how SDC will achieve its environmental outcomes throughout the delivery of the project, which will be delivered by Scentre Design & Construction (SDC).

## 1.2. CQEMP STRUCTURE

The CQEMP has been developed as part of the requirements detailed in the Integrated Management Plan for Scentre Design & Construction. The relationship between the CQEMP and the IMS is further explained in Chapter 1. This document is the overarching document in the environmental management for the Westfield Hurstville Entertainment and Leisure Precinct (ELP) Development. It is applicable to all staff and sub-contractors associated with the construction of this Project.

PLAN STRUCTURE	DETAILS
<b>Section 1 - Introduction</b>	This section clearly defines: <ul style="list-style-type: none"> <li>Purpose, Scope and context of the CQEMP</li> </ul>
<b>Section 2 – The Project</b>	This section gives a broad overview of: <ul style="list-style-type: none"> <li>Project Description a summary of Line Wide Works, Objectives Targets, Approved</li> <li>Hours of Work and</li> <li>Staging / Program</li> </ul>
<b>Section 3 - Organisation</b>	Defines the organisation, policies, and the site management team roles and responsibilities.
<b>Section 4 – Construction Management</b>	This section outlines in detail the key aspects for delivering the project
<b>Section 5 -Inspection &amp; Reporting</b>	This section satisfies the Quality Assurance and QMS for SDC
<b>Section 6 - Environmental</b>	This section outlines in detail requirement for managing the: <ul style="list-style-type: none"> <li>Environmental aspects of the project</li> </ul>
<b>Section 7 - Communication</b>	This section discusses: <ul style="list-style-type: none"> <li>Internal communication with the project team</li> <li>Community engagement and Notification</li> <li>Liaison with Authorities and</li> <li>Complaints management</li> </ul>
<b>Section 8 – Appendices</b>	this section should contain sub-management plans and standard templates or Authority requirements excerpts / guidelines.

### 1.3. SCOPE OF THE CQEMP

These procedures are submitted to provide direction as to the Scentre Group Design & Construction Ltd (SDC) approach to the management and execution of the Westfield Hurstville ELP Development (the Works).

The intent of this Construction Environmental Management Plan (CQEMP) is to:

- Define the methods and project management elements used by SDC to manage the execution of the project
- Establish the execution philosophy and define the organisation, work processes, and systems necessary for the management of the project. The information outlined in the CMP is used to help ensure that the project will be completed in a timely, efficient and safe manner.
- Comply with the requirements of the Georges River Council recommendations and conditions where applicable
- Include information relevant to the discharge of the Development Conditions
- Provide images and attachments in the document to understand the textual content and for ease of reference
- Assist with the production of site procedures and Contractors method statements in performing the Works.

This CQEMP does not provision for tenant fit-out works as this will be managed by the tenant contractors

#### 1.3.1. SCENTRE GROUP DESIGN & CONSTRUCTION ISO CERTIFICATION

Scentre Design & Construction is ISO certified to AS/NZ ISO 9001:2016 – **Quality**, AS/NZ ISO 14001:2014 - **Environment** and AS 4801:2001 – **Safety**.

This document has been prepared in order to satisfy the requirements set out in the SDC integrated Management System

### 1.4. MANAGEMENT OF CQEMP

#### 1.4.1. ENDORSEMENT AND APPROVAL

The CQEMP shall be prepared by a competent person. The CQEMP shall only be transmitted once reviewed and approved by the Project Manager.

#### 1.4.2. DISTRIBUTION

The CQEMP, sub plans and associated procedures are available to all project Staff and subcontractors / Consultants via Aconex.

#### 1.4.3. CONSULTATION

All team members on the distribution list shall familiarise themselves with this document. SDC shall consult with the relevant stakeholders, local authorities, contractors and consultants on this document.

Stakeholder consultation shall be undertaken throughout the development. Consultation may include community information sessions, small group meetings and face-to-face meetings, where appropriate.

## 2. THE PROJECT

### 2.1. PROJECT DESCRIPTION

#### 2.1.1. EXISTING SITE

The existing building has a total of four retail levels (L1 (G), L2, L3 and L4 located on 443 Park Rd Hurstville. The existing structure was designed and built in the late 1970s and is made up of mostly concrete columns and slabs with elements of structural steel incorporated in strategic locations. The concrete columns are founded on pad footings which bear on rock.

#### 2.1.2. PROPOSED DEVELOPMENT

The redevelopment of the site is defined in two components being enabling works and the main works construction phases. The individual elements that make up these construction phases are detailed below:

##### **Enabling Works:**

- Column Strengthening
- Bus stop relocation
- Services location Cross St
- Footing Upgrades and Settlement Monitoring Installed
- Lift procurement and design
- Lift Shaft Enabling works
- Chiller design and procurement
- Smoke exhaust modification to skylight
- Lift upgrade and new lift installation
- Earthquake bracing installation – all levels

##### **Main Construction Works:**

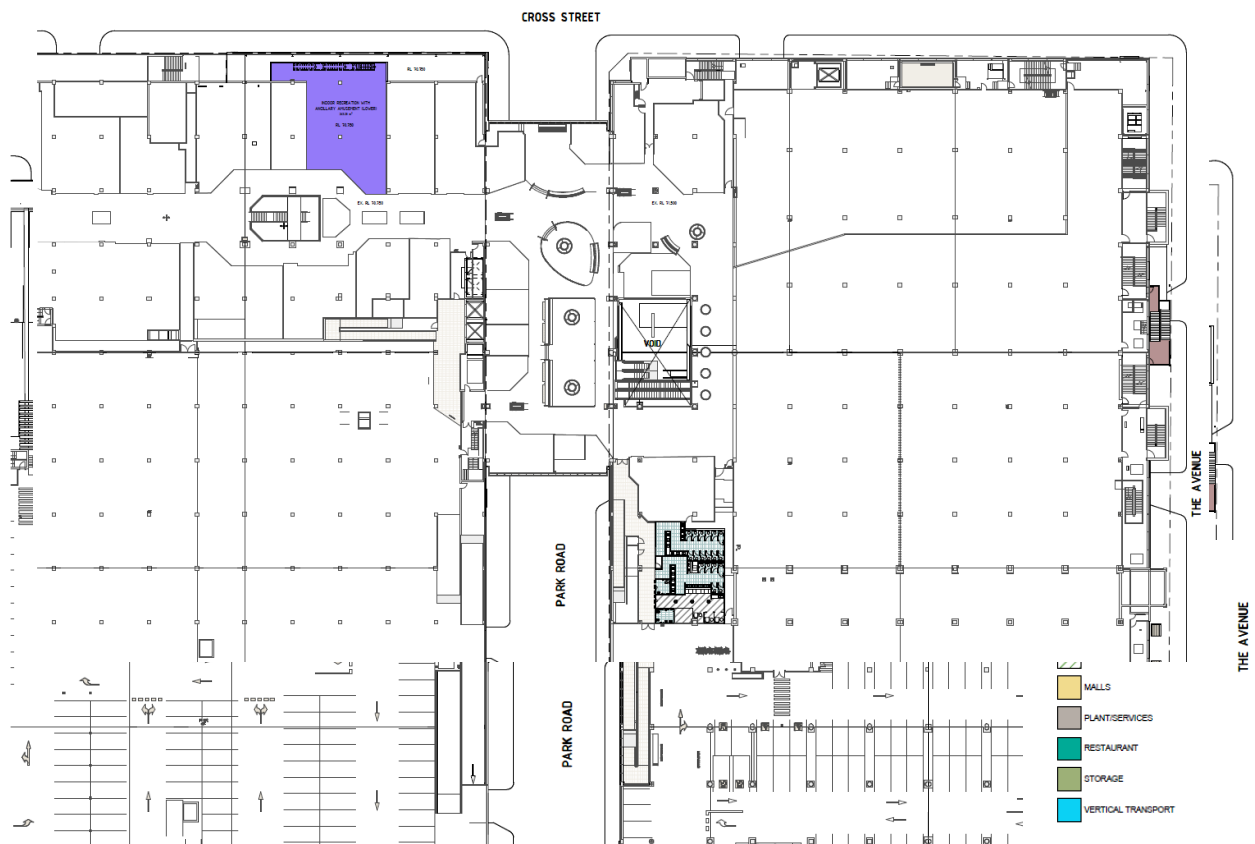
- All remaining works to completion
  - Demolition of Existing ELP
  - Construction of new R4 and R5 structural levels
  - Plant room construction
  - Smoke exhaust modification
  - Landscaping
  - Restaurant fit out
  - Common area fitout
  - Façade works

The project involves the demolition of the current ELP on Hurstville rooftop R4 and sees it reconfigured and expanded to allow for more tenant and shared community space. The location of the construction site within the overall centre is detailed below:



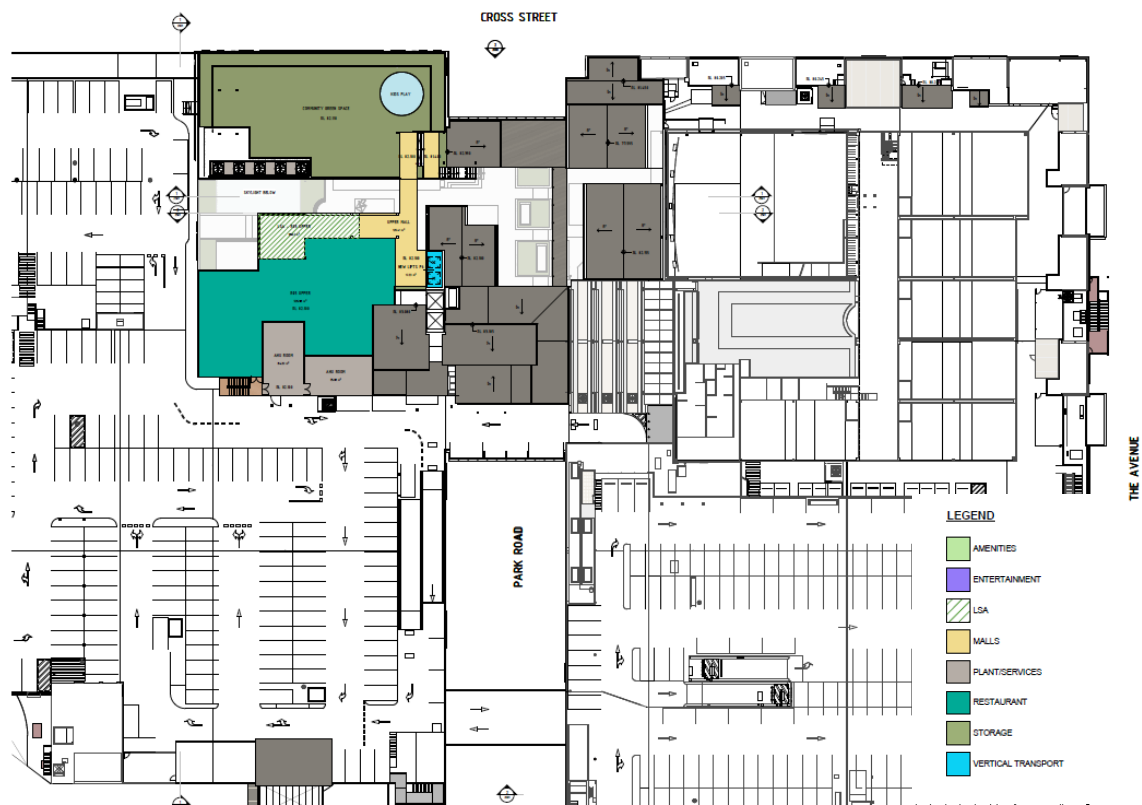


To achieve this vision, there will be structural upgrades required to columns and footings as well as plant relocations and upgrades to accommodate the space. The bulk of the new works occur on Retails levels 3, 4 and 5 – snap shots of the floor plans are below with coloured sections indicating location of the new works:



**Figure 2 – Proposed Site Plan, Retail Level 4**





**Figure 3 – Proposed Site Plan, Retail Level 5**

### 2.1.3. BASEMENT LEVELS P1 – FOUNDATION STRENGTHENING

The foundations underneath the proposed expanded ELP require upgrading to accommodate the additional load from new structure installed on level R04 and R05. These footings will need to be upgraded along with nominated columns prior to new structure works commencing up on level R04.

There are 40 footings in total that require upgrading as are shown on the below snapshot of a sketch from the structural engineer:

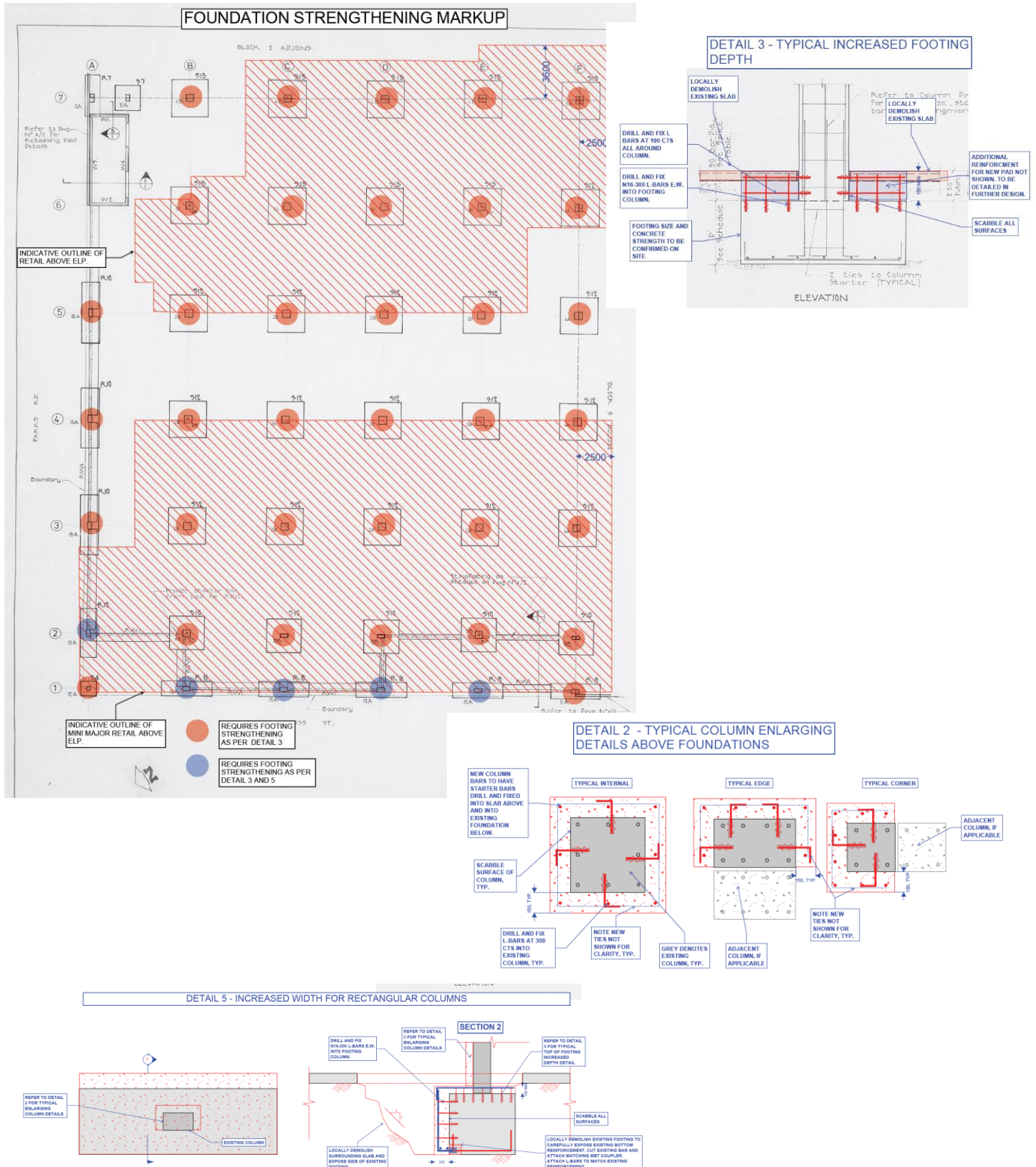


Figure 4 Foundation Upgrades and Details

## 2.1.4. LEVELS P01 TO R04 – COLUMN STRENGTHENING AND EATHQUAKE BRACING

The existing columns underneath the proposed development are 550 x550 for internal columns, 600x 300 for edge columns and 350 x 350 for corner columns. Each of these columns has been assess by the structural engineer through all levels and a strengthening plan has been put together which once executed will accommodate the additional load imposed on the structure by the new development. The column strengthening will mean there are some tenant impacts are experienced on level R1

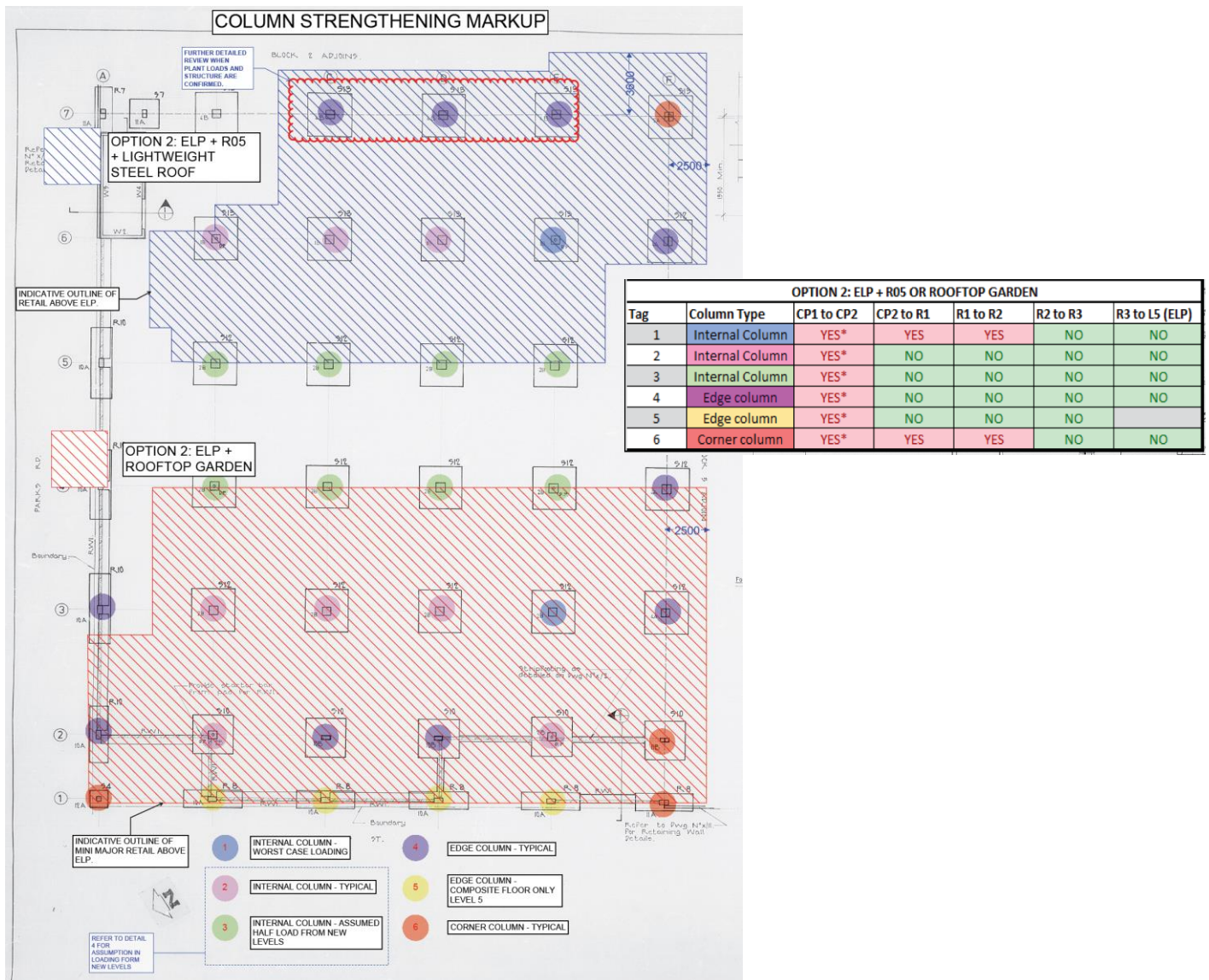


Figure 5 Column Strengthening Plan



The earthquake bracing extent is detail below in pink at the corner of Cross St and Park Rd. The braces are required from the foundation level to the underside of Retail level 2.

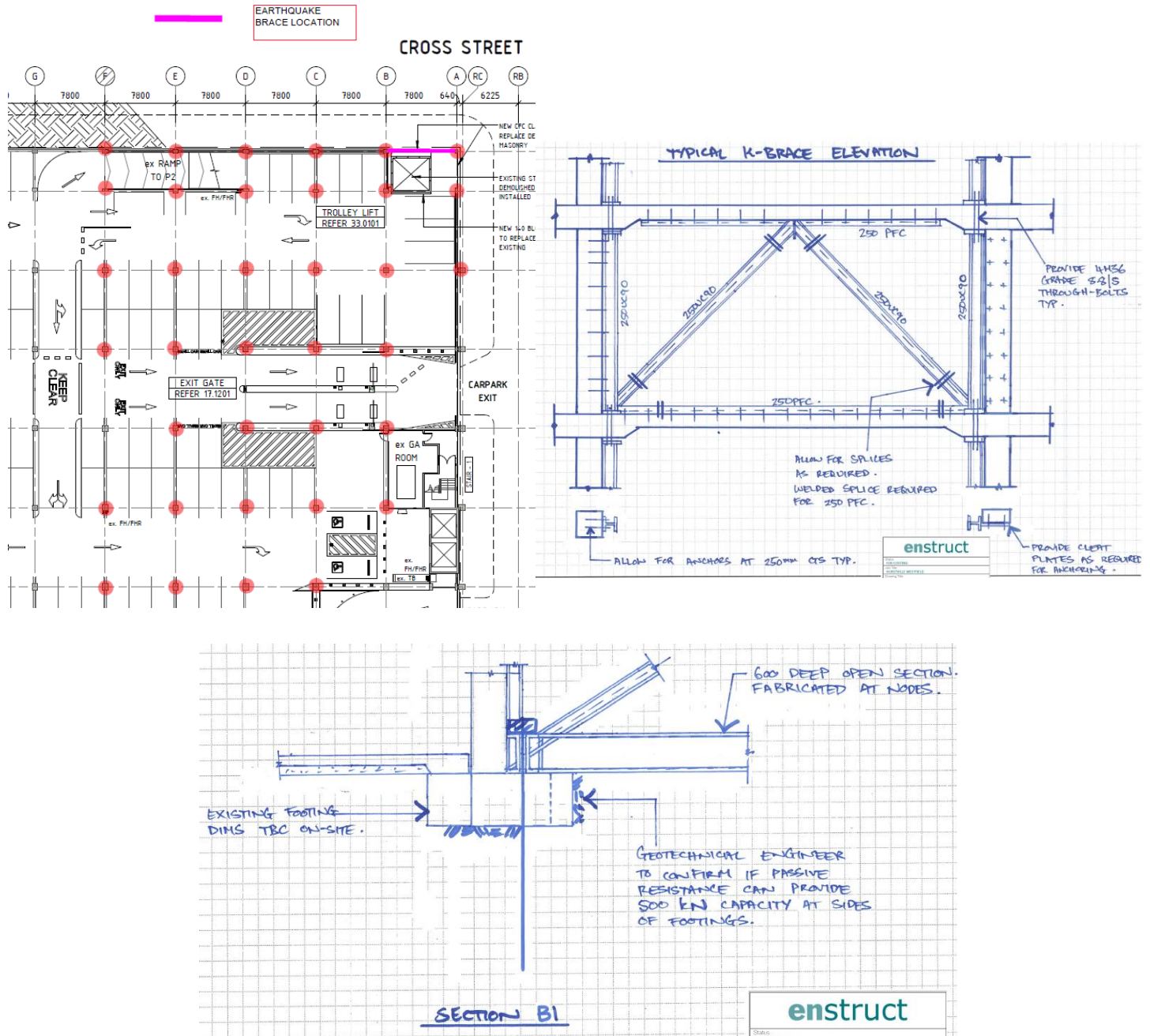


Figure 6 K-Brace Earthquake Bracing Details

## 2.1.5. MAIN CONSTRUCTION PHASE LEVELS R3, R4 AND R5

This development aims to completely configure the existing ELP at Westfield Hurstville and well as substantially increase its footprint on level R04 and R05 to increase the attraction and foot traffic to this part of the centre. The key activities are as follows:

- Demolition of Existing ELP
- Demolition of existing skylight
- Tower Crane establishment
- Installation of B Class hoarding along Cross St and Park Rd
- Bus Stop relocation
- Construction of new lightweight slimdek floor
- Construction of new R05 level
- Construction of new tenancy boxes and roofing
- Construction of Park Rd B Class hoarding and new façade
- Construction of new skylight
- Smoke Exhaust relocation
- Cooling tower and chiller plant relocation and replacement
- Landscaped areas and mall furniture
- Tenancy/restaurant fitout

Below is a concept sketch of what this development aims to look and feel like upon completion. The Vision for Westfield Hurstville is for the Rooftop Dining, Entertainment & Leisure precinct to be an elevated sanctuary with an open green community space. It will be designed with a series of buildings / precincts including a laneway and courtyard space creating informal / formal recreation, open or partly covered areas for comfort with natural building materials.

A flexible space that can be used for different purposes throughout the day and night, one destination, many spaces. Accessible by members of the public, encourage public interaction and multiple recreational activities for the community combined with a compelling dining offer and entertainment making it south west's Sydney's place to be.



**Figure 7 Concept Shop Show New Level R5 Landscaped Area**

## 2.2. PROJECT STAKEHOLDERS

The following authorities & private service providers will be consulted throughout the development. SDC will ensure that the appropriate consultation processes are followed:

- Scentre Group Developments
- Scentre Group Customer Experience
- Scentre Group Facilities Management
- Scentre Group Leasing & Retail Solutions
- Westfield Hurstville
- Georges River Council
- The people of Hurstville
- Sydney Water – Water & Sewerage
- AUSGRID
- Telcos inc Telstra, Optus,
- RMS
- TFNSW
- Environmental Protection Agency
- Principle Certifying Authority – Steve Watson & Partners
- New South Wales Fire Brigade

SDC will communicate regularly with the project stakeholders through an either Centre Management or the Project manager where required using the formal communication processes. Other communications will be less formal and will include project updates in the Westfield Hurstville shopping centre and press releases informing the public about changes to the centre operations or updates on the project.

## 2.3. PROJECT OBJECTIVES & TARGETS

1. The objectives of this CQEMP are to identify the risks and establish obligations and controls in order to manage construction traffic and construction activities during the staged completion of the works and to maintain access or provide alternative temporary means of access to areas impacted by the Development works
2. Maintain certification to ISO 9001, 14001, AS 4801, and other certification schemes
3. Provide products and services efficiently that are technically innovative, defect free and on time.
4. Provide the best possible outcome with the least risk (to us and our client) (including “Consultative approach in all our dealings with customers, employees and suppliers to provide the best possible value and return for the resources expended”)
5. Satisfy the agreed contractual and commercial requirements
6. Provision of product and management services which optimise the development potential and all life performance of our customer assets

## 2.4. STAGING & PROGRAM

It is expected that the overall project construction timeline for the works will be approximately 9 Months depending on weather and other factors. Construction commencement is currently proposed for Feb 2024

<u>CONSTRUCTION ELEMENT</u>	<u>EXPECTED COMMENCEMENT DATE</u>	<u>EXPECTED COMPLETION DATE</u>
Site Mobilisation	05/02/2024	15/02/2024
Enabling Works	21/08/2023	30/10/2023
Main Construction Works	15/02/2024	20/11/2024

## 2.5. HOURS OF WORK

Per standard conditions from the Georges River Council, SDC shall comply with the noise criteria for the typical construction hours of 07.00am to 6.00pm Monday to Friday and 8:00am-1:00pm Saturday. Where resultant site noise levels are likely to be in exceedance of this noise criteria then a suitable proposal must be given as to the duration and frequency of respite periods that will be afforded to the occupiers of neighbouring property

If 'Out of Hours Works' are required SDC will follow the Georges River Council process in obtaining the relevant "Out of Hours" permits.

It is expected that construction hours will generally be Mon-Sat 07:00-1900 and no work on Sundays or Public Holidays.



## 3. ORGANISATION

### 3.1. OVERVIEW

Scentre Design and Construction shall act as principal contractor for these works

### 3.2. SITE MANAGEMENT TEAM

#### 3.2.1. PROJECT MANAGEMENT RESPONSIBILITIES

The specific responsibilities in relation to management of the works are listed below;

It is the Project Manager's overall responsibility to ensure that appropriate site facilities and controls are established and maintained on the Project by allocating personnel and resources as required. The Project Manager should lead the site planning and allocation of tasks tracked on the **SDC\_F002 Project Establishment Checklist**.

The Site Manager(s) must be conversant with this procedure. They are to participate in the site planning and, complete assigned tasks with reference to this procedure, regulations, relevant codes of practice and ensure that the Scentre Design & Construction employees carry out their assigned responsibilities in regard to establishing and maintaining the site.

Site Supervisors are to make themselves conversant with this procedure. They are to ensure that site facilities are established and maintained, within their area of responsibility in accordance with this procedure, regulations and relevant codes of practice.

The Project Risk Management Coordinator is to provide competent assistance in developing and training the relevant site personnel in this procedure as required. The Risk Management Coordinator should participate in planning meetings and monitor completion of tasks allocated on the relevant section of the site establishment checklist.

All other Project staff are to make themselves familiar with, and understand the requirements contained within this procedure.

### 3.3. QUALITY POLICY

## Quality Policy

“As a property owner, our business is anchored in the unyielding discipline we bring to quality on every development ”

**Our Policy Statement**

Scentre Group Design & Construction is committed to:

Maintaining our Management System to AS/NZS ISO 9001:2016 to provide employees and interested parties with the leadership, guidance and instruction to ensure our service provision is consistent throughout all of Scentre Group Design & Construction operations.

Scentre Group Design & Construction will:

- Act with Integrity,
- Ensure compliance with contract documentation, standards, codes and statutory requirements,
- Strive for Excellence,
- Deliver D&C project profits & yields,
- Create extraordinary places through design,
- Maintain total commitment to AS/NZS ISO 9001:2016 Quality management System,
- Ensure that all quality management activities are supportive of construction activities,

Scentre Group Design & Construction is committed to continually comply with the requirements of the management system and continually monitoring, analysing, reviewing and improving the effectiveness of processes through:

- Auditing and assessment of the Management System for compliance and effectiveness;
- The monitoring of progress and performance of processes against established objectives and indicators from reliable data sources;
- Continually develop our capabilities through training, coaching and mentoring,
- Monitoring and evaluating the performance of consultants, subcontractors and suppliers and implementing effective communication with them on quality and compliance issues.

This statement outlines our commitment to meet these standards for the benefit of our stakeholders, adjoining property owners, employees and contractors



Ian Irving, Director of Design & Construction

people protecting people

SDC-QUAL-POL - Quality Policy Statement Rev 1

07/8/13

**Figure 1 SDC Quality Policy**

### 3.4. ENVIRONMENTAL POLICY

## Environmental Policy

**"We believe that extraordinary living centres must, by our own design, enrich the social economic and environmental prosperity of the communities they serve"**

#### Our Policy Statement

Scentre Group Design & Construction is committed to:

Maintaining our Environmental Management System to AS/NZ ISO 14001:2016. Key requirements include:

- Setting objectives and targets that define the reduction of impacts on the environment through conducting risk assessments and hazard analyses;
- Managing our operations in compliance with applicable laws, legislation, regulations, standards and codes of practice that minimise any adverse impact on the environment;
- Conserving resources, minimising waste and seeking continual improvement of processes to protect the environment, and prevent pollution;
- Actively manage construction noise so as to minimise impacts to our local communities
- Communicating with our employees, customers, stakeholders, contractors and the community on environmental issues;
- Providing appropriate training for awareness and education for our people on environmental issues and specifically to individuals with environmental responsibilities
- Being forthright in engaging Environmental Consultants

SDC seeks the combined efforts of all employees and our subcontractors to ensure the effectiveness and success of our approach to environmental sustainability. For our project site activities, our management will also:

- Establish Environmental Management Plans, in liaison with the client (and subcontractors as applicable) setting out the responsibilities and processes to minimise impact;
- Ensure all work practices comply with our environmental management system and legislative obligations;
- Conduct monitoring and evaluation, to ensure the environmental compliance and obligations are achieved;
- Require our subcontractors and suppliers to operate in an environmentally responsible manner and adhere to relevant environmental requirements;
- Regularly review performance, identify and implement corrective and preventative actions that contribute to continually improving the environmental performance of our operations.

We recognise that all employees have a major role to play in protecting the quality of our environment. As such, to achieve our environmental policy commitments, SDC will actively provide for, encourage, and support training in environmental issues and sustainability



Ian Irving, Director of Design & Construction

**people protecting people**

SDC-ENV-POL - Environmental Policy Statement Rev 2

07/8/2019

Figure 2 SDC Environmental Policy

## 4. CONSTRUCTION MANAGEMENT

### 4.1. APPROVALS

#### 4.1.1. LOCAL COUNCIL / DA

A Development Approval is required for the works covering the Demolition, excavation, footing upgrades, level R3, level r4 and level R5 retails works. This section will be updated once the DA is received dealing with key conditions and how they will be managed,

#### 4.1.2. LEGISLATION & RELEVANT GUIDELINES

Key legislation and guidelines relating to civil works for the project:

- • Work Health and Safety Act 2011
- Work Health and Safety Regulation 2017
- Protection of the Environment Operations Act 1997
- Managing Noise and Preventing Hearing Loss at Work Code of Practice 2011
- Excavation and Demolition codes of practice
- Managing risks of plant in the workplace code of practice

Refer to the Scentre Document [Guide to Australian Standards](#) which can be found on my Scentre. This document details all aspects of construction activities against their respective Australian Standards

#### 4.1.3. Construction Certificate

Once the DA is received and design fully developed, this section will talk to the CC requirements for this project.

Once the Notice of Determination has been issued, there are xxxx Construction Certificate which must be obtained before any building work can start. This is issued by the Principal certifying authority and is the responsibility of the Project Design Direct / Project Design Manager to champion and issue to the Construction team. Steve Watson & partners are the nominated PCA. The certificates verifies that:

1. The detailed construction plans, and specifications of the development are consistent with the development consent and complies with the Building Code of Australia.
2. All required contributions and fees have been paid.
3. All development consent conditions that must be satisfied before a certificate can be issued have been met.

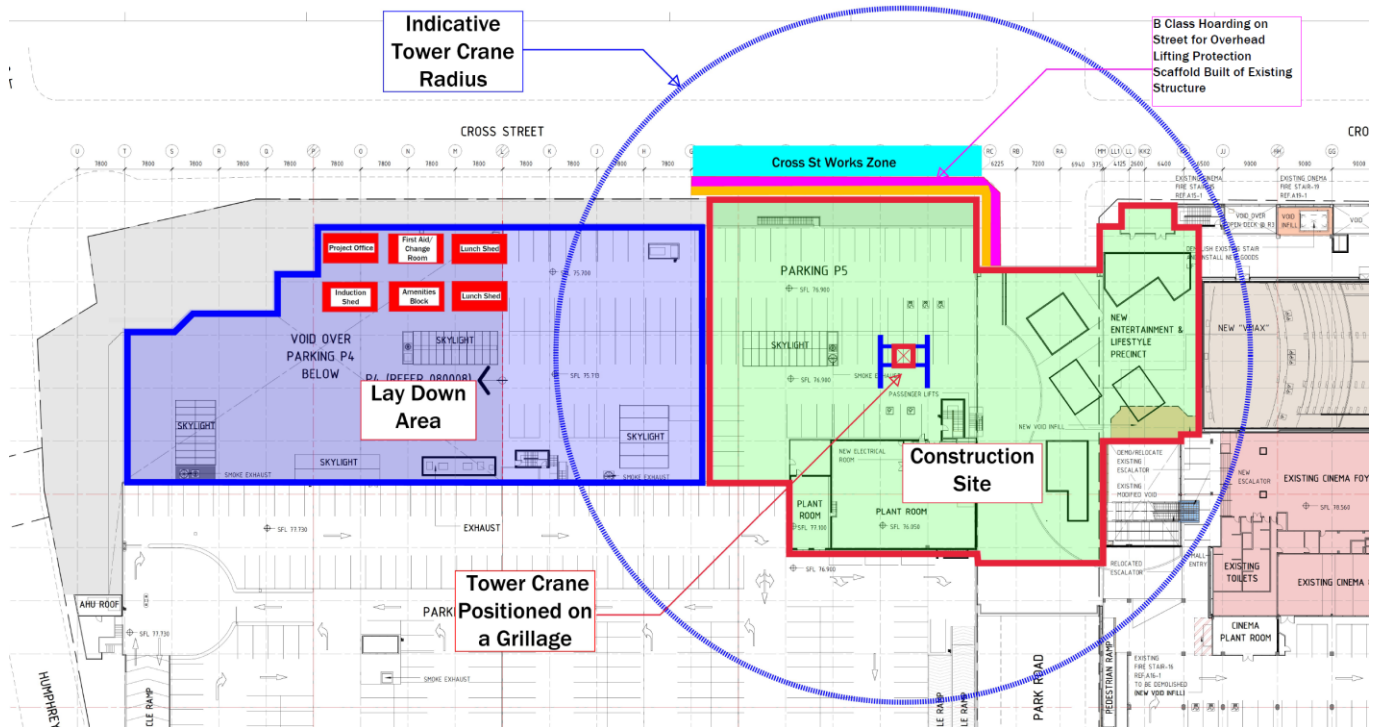
More info on the CC can be found here in [construction certificate application guide](#) which also provides further information.

## 4.2. SITE ESTABLISHMENT

The main site compound and areas with the majority of works is level R04 on the open deck carpark on the corner of Cross St and Park Rd. This is where the project offices will be established, along with tower crane, laydown area, and site facilities. A work zone will be established on Cross St requiring a bus stop relocation pending council approval.

A B class Hoarding will be established along Cross St and around the corner onto Park Rd to protect the public from crane lifts and also to act a platform for scaffold establishment for access to build the new façade.

The below plan details this:



#### 4.2.1. REQUIREMENTS

Prior to site establishment there are associated permits that need to be issued to council for approval and are identified in the next figure.

**Figure 3 - Site Establishment Permits**

The site establishment for the Works will be in accordance with the SDC procedure **SDC P03 – Project Establishment** which covers the following requirements:

- Responsibilities
- Hazards and potential consequences
- Work health and safety risk identification and controls
- Amenities
- First aid provisions
- Induction facilities
- Site access and traffic management
- Site perimeter security fencing
- Emergency management
- Fire protection
- Materials handling
- Falls and falling objects
- Combustible and flammable storage

#### 4.2.2. SCENTRE PROJECT OFFICE AND SITE AMENITIES

The Scentre Design & Construction Office will be established at Westfield Hurstville retail level 4 on the existing open deck carpark. Scentre Design & Construction will be ensuring that the project has appropriate site accommodation & ablution facilities.

All facilities will at a minimum adhere to the Workcover Code of Practice for “Managing the Work Environment and Facilities” and will be located within the construction zones. Work force numbers should not exceed 250 workers at the peak.

#### 4.2.3. ACCESS GATES AND SIGNAGE

Access to the site during construction will be provided to and from Cross St through the carparks and via on-street work zones adjacent to the construction activity

Access to the site from the centre will be minimised as carpark for contractors will be up on level R4 in the existing staff carparking zone provided by the centre.

Vehicles presenting to the site must be booked-in in advance of the deliver by at least 24 hrs to ensure congestion at the access gates in managed and minimised

#### 4.2.4. WORKER ENTRY

Worker entry to and from site will be via level R4 from the open deck carpark.

#### 4.2.5. TEMPORARY SERVICES

Temporary services shall be provided for such as power, water and sewer. These shall be installed by qualified tradesmen.

Refer to [Code of Practice: Managing the work environment and facilities](#) for all rules and regulations pertaining to the supply of drinking water to the workers

### 4.3. SITE SECURITY & HOARDINGS

Traffic controllers will be posted at the site access gates to check deliveries and allow vehicles to enter and leave safely. As with any project which interfaces with the general public and/or a surrounding road network, securing the construction site will be an important consideration. To minimise any potential incidents, it is proposed to develop a strategy based on the following points

1. Construction warning signage
2. Contractor / visitor parking

#### 4.3.1. HOARDINGS

Physical barriers will consist of a class B hoarding to protect the public when lifting overhead. A scaffold to enable façade construction will be establish up on existing structure level R3.

The extent of the solid steel hoarding can be seen in the below figures and shall comply with Georges River Council documentation checklist per below snapshot:

Documentation Checklist			
Documents	Required to be submitted	Applicant	Officer
Site and Location Plan	<b>All Applications:</b> (1:100 or 1:200) – The location and dimensions of the site. Site plan information details for each type off; hoarding, scaffold, shoring and ground anchor. Building entry and vehicle access points. Street features such as the footpath (dimensioned), public utilities, traffic signs, poles, bus stop zones, trees etc.	<input type="checkbox"/>	<input type="checkbox"/>
Floor Plans	<b>Hoarding and scaffold plans:</b> Minimum Scale – The width of the footpath and setback of the hoarding from the kerb line. The overall hoarding dimension, length and width. Compliance with Development consent conditions <b>Shoring and Below Ground Anchors:</b> Boundary location and setback of the shoring. Plan location details of below ground anchors. <b>Note:</b> Shoring & Below ground anchors plans and information may be incorporated to be part of the site or the structural certified plans.	<input type="checkbox"/>	<input type="checkbox"/>
Architectural Plans	<b>Hoardings and Scaffold Plans:</b> Elevations, sections, specification and constructions details of the hoarding & scaffold structures. The height and dimension of the structures. Lighting plan.	<input type="checkbox"/>	<input type="checkbox"/>
Structural Plans	<b>All Applications:</b> The hoardings, scaffold, ground anchors and shoring details must be structurally certified by a practising qualified structural engineer <b>Shoring and Below Ground anchors:</b> Structural engineered designed plans must incorporate internal elevations, sections and building specification. Geotechnical report. Compliance with Development Consent condition	<input type="checkbox"/>	<input type="checkbox"/>
Public Liability Insurance	<b>All Applications:</b> A current Public Liability Insurance Policy (certificate of Currency) to the minimum value of <b>\$20 million in the name of the applicant noting Georges River Council as an interested party</b> . The certificate of currency must also indicate the <b>property address and brief description of proposed works</b> .	<input type="checkbox"/>	<input type="checkbox"/>
RMS Approval	<b>All Applications:</b> Hoarding or below ground anchor applications which are on classified State Road and within 100m of any intersection with traffic lights (even on local roads), require Roads and Maritime Services (RMS) endorsement. Accordingly, RMS consent must be submitted with all subject affected applications.	<input type="checkbox"/>	<input type="checkbox"/>

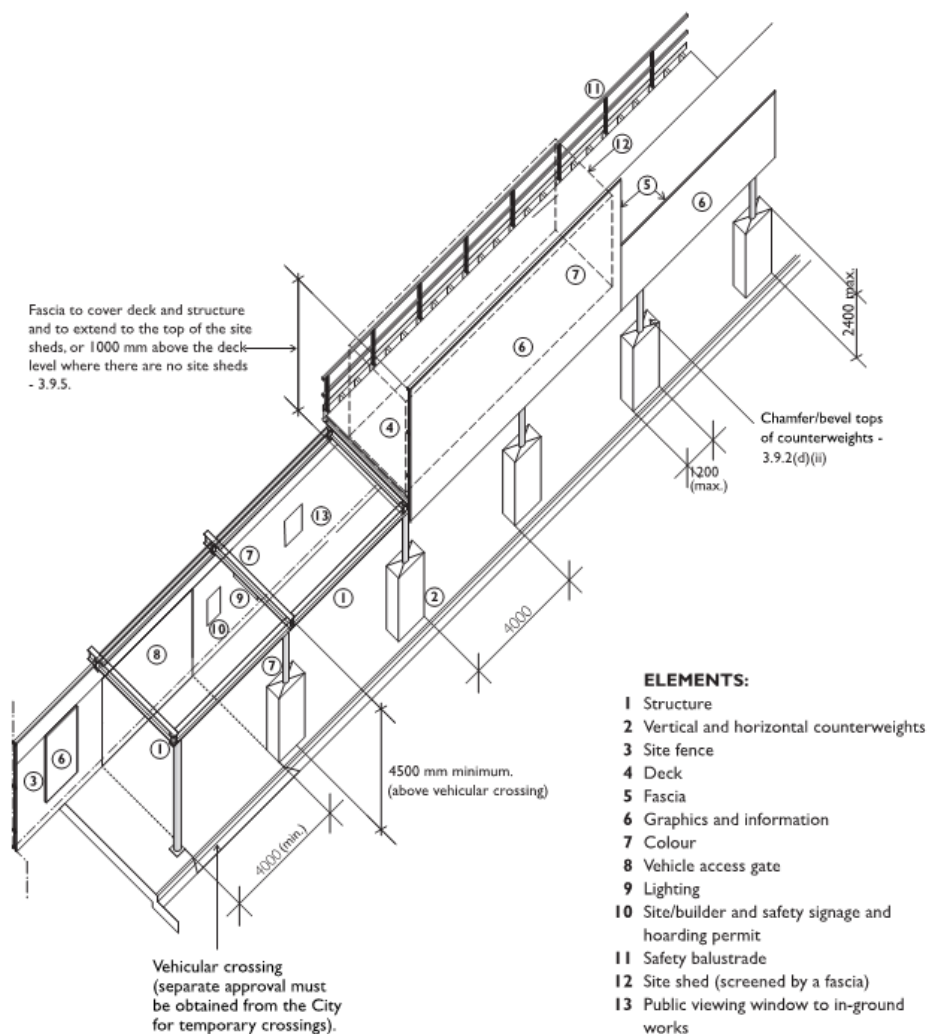


The hoarding will be checked for completeness at the start and finish of every shift and maintained as required to ensure as far as is reasonably practical unauthorised entry. Signage will be posted at regular intervals and at the pedestrian and vehicle access gates

The bracing and panelling needs to be certified by a registered MIEAust structural engineer. The hoarding would also have to be designed in accordance with the following standards:

AS 1725-2003, AS 1158 - 2007, AS 1170 Part 1-2002, AS 1170, Part 2- 2002, AS 1742 Part 3 – 2008

**Figure 4 Table 1 Section 3.4.3 Artwork Requirements, COS Hoarding Guidelines**



**Figure 5 Type B Hoarding Excerpt from COS Hoarding Guidelines pg 63**

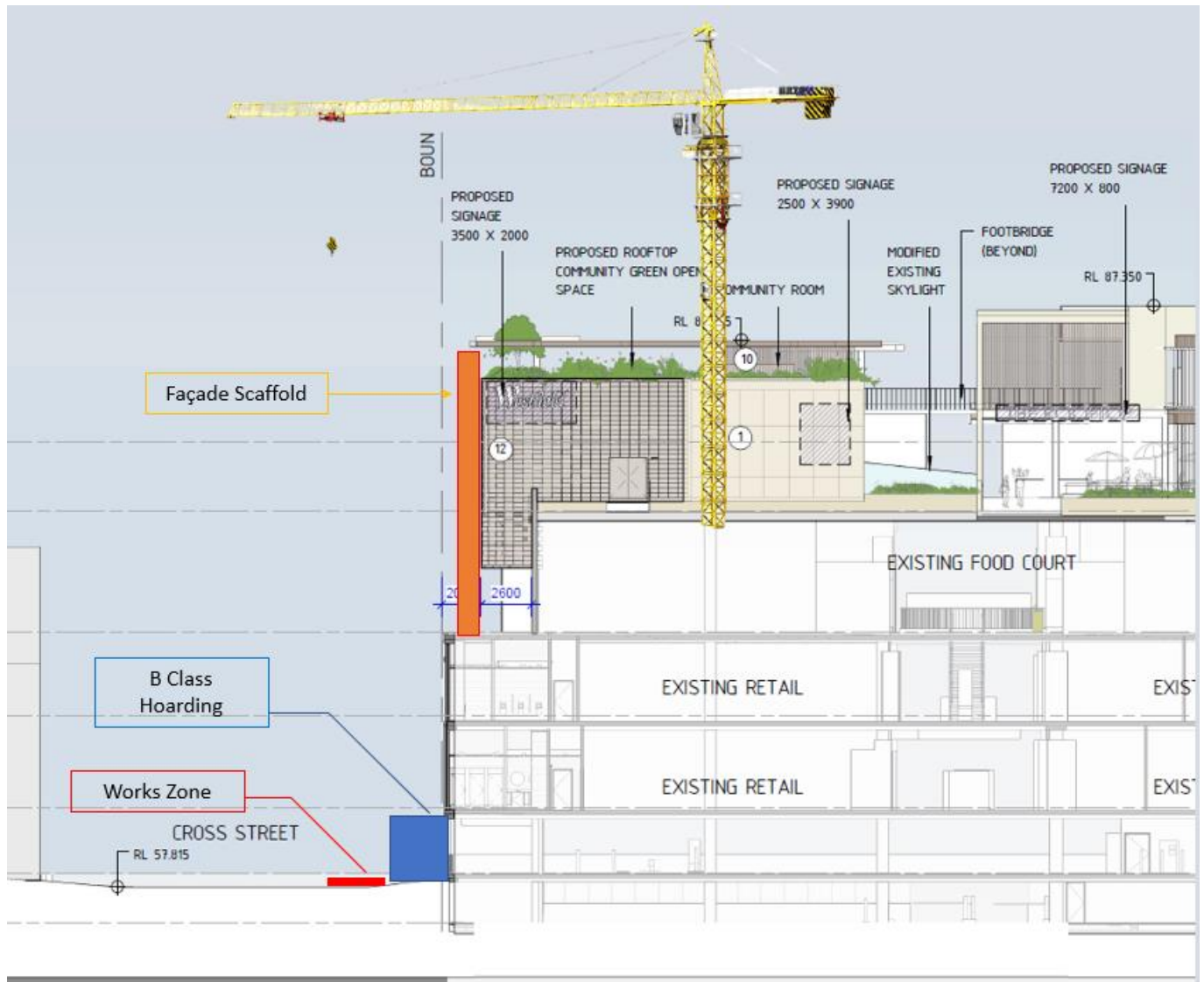


Figure 62 Eastern Elevation of hoarding with scaffold over

## 4.4. MATERIALS HANDLING

### 4.4.1. DELIVERIES AND LOADING ZONE MANAGEMENT

Materials handling is part of the general working environment the SDC site management team is required to consider and manage. On the project the contractors will be required to ensure their task risk assessments cover manual handling and provision of all equipment therein. All manual tasks are to be compliant with the SDC procedure [\*\*SDC\\_PCP10 Hazardous Manual Tasks Materials Storage\*\*](#)

A hazardous manual task, as defined in the WHS Regulations, means a task that requires a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following:

- repetitive or sustained force
- high or sudden force
- repetitive movement
- sustained or awkward posture
- exposure to vibration.

These factors (known as characteristics of a hazardous manual task) directly stress the body and can lead to injury.

Previously this area of Work Health and Safety was known as Manual Handling, this term has been changed to Hazardous Manual Tasks to incorporate manual tasks that may be hazardous, in addition to the traditional “manual handling” type tasks.

As part of the consideration of materials handling hazardous manual tasks need to be considered and the need for manual lifting minimised wherever practical.

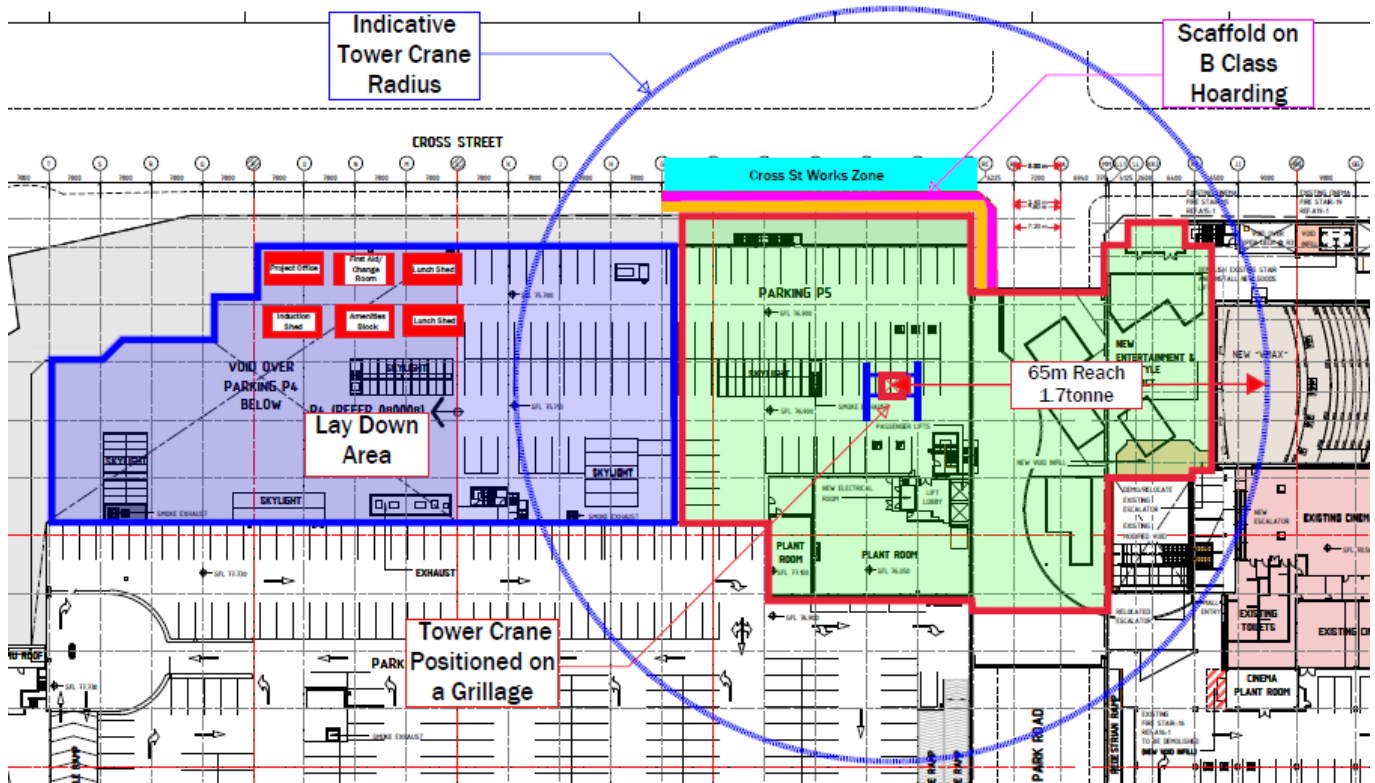
#### 4.4.2. CRANE LIFTING PROVISIONS ON SITE

SDC will provide a hammer head tower crane for the main period of works. The crane will be erected in an single location on a grillage on level R4. The intent of the main works tower crane is to service the demolition contractor with removal of structural steel and other materials. The crane will then assist the formworks and other new structure trades load and position material from Cross St works zone. CASA approval shall be sought and appended to the tower crane permit the crane will be utilised for the following work elements;

- Concrete superstructure
- Steel superstructure
- Sacrificial formwork
- Concrete placement (as agreed with site management)
- Roof works
- Façade works and scaffold
- Loading out of Demolition material
- Loading of blockwork
- Loading of services materials
- Loading of fit-out materials

SDC shall engage a specialist Tower Crane Company to design, erect and operate the tower crane to ensure the lifts are undertaken in accordance with SDC procedures and WHS regulations. The tower crane plan can be seen in the below figures. There will be a segregated lifting zone for the craneage materials where access will only be allowed to authorised persons.

The hook time for the tower crane will be via a booking system with priority given to critical path works. Site management will have authority in delegating the hook time of the crane if work processes over-run their allotted durations



**Figure 73 Phase 2 Crane Radius Detail for Hammer Head Crane**

#### 4.4.3. TELEHANDLER PROVISIONS ON SITE

Given the restrictions with slab loading on all levels, plant will be limited to forklifts and genie lifts / mobile scaffold. All plant will need to be approved by the Structural Engineer. Plant movement will be limited to within the site boundary.

### 4.5. CONSTRUCTION METHODOLOGIES

Refer to Appendix A for our detailed Construction methodology

### 4.6. TRAFFIC MANAGEMENT

A Construction Pedestrian and Traffic Management Plans (CPTMP) will be prepared closer the project commencement. Given the majority of the works are on level R4 this this will mostly talk to truck movements in and out of the centre along with management of the works zone om Cross St.

The enabling works where footing strengthening is required, will require a specific traffic management measures as the carpark and pedestrian circulation will have to be altered significantly whilst these works are being carried out.

The CPTMP will also include objectives that are specific to the location and work activities being undertaken. This CPTMP is consistent with the methodologies and timings required by other areas of this CQEMP and follows the below key objectives;

- Ensure that construction vehicles travel to and from site along designated truck routes
- Ensure minimum disruption to pedestrians and vehicles in Park Rd and Cross St
- Maintain adequate access to businesses adjacent to the works at all times during construction
- Limit the on-street parking of trucks to the designated work zones in Cross St
- Ensure continuous safety of all public vehicular activities, pedestrians, site construction activities and site construction personnel
- Provide construction access driveways / turntables to allow for entry and exit without reversing
- Ensure that all truck movements entering/leaving site are controlled by qualified Traffic Controllers

- Ensure that truck drivers are advised of the construction traffic management procedures at all times

#### 4.6.1. PEDESTRIAN MANAGEMENT

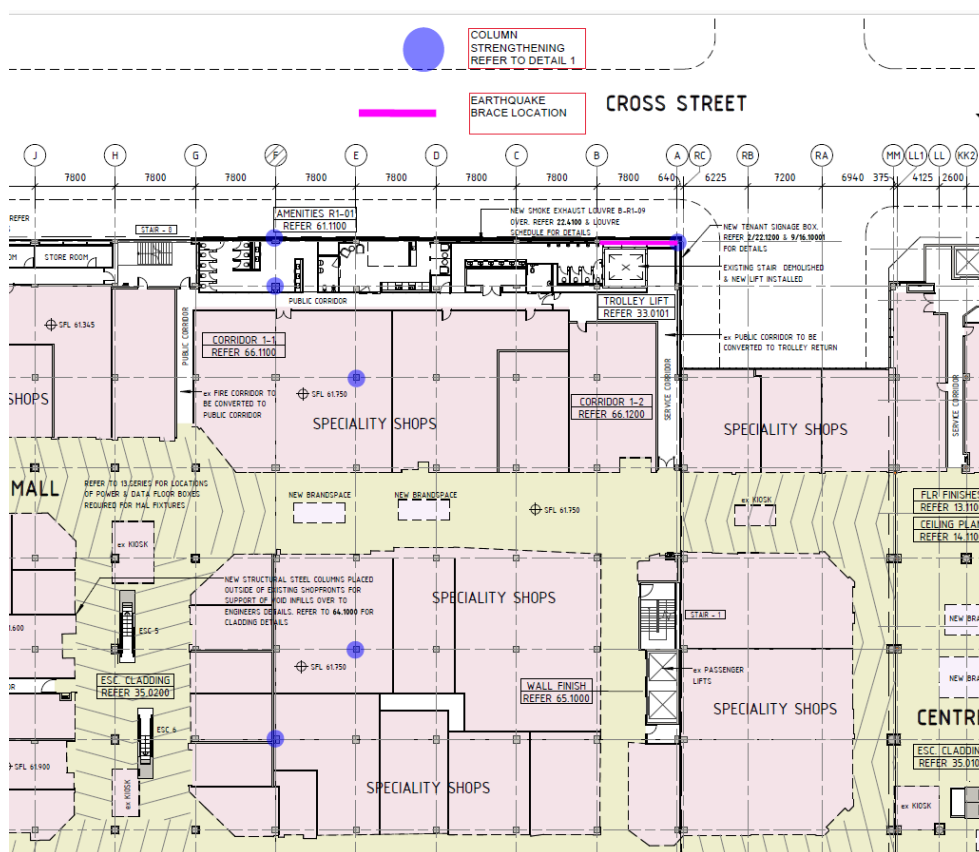
SDC will erect Class B Construction Hoarding over the footpath on both Cross St and Park road for the short distance until the mall bridge covers the road. These hoardings will be supported by steel columns on the footpath. Appropriate signage will be installed and regular inspection and cleaning undertaken by the site team.

### 4.7. TENANCY IMPACTS

The new development will be constructed in a vacant building therefore there are no impact tenancies within our boundary. There are however neighbouring buildings which may be impacted. This is detailed in the following section below.

#### Level R1

There are three columns requiring strengthening within specialty retail on level R1 (Shown with the blue dots). This will involve the removal of column cladding, relocation of any services, column strengthening works and fire spray following by make good works. All of this will be done at night with tenant approval and appropriate security measures in place.



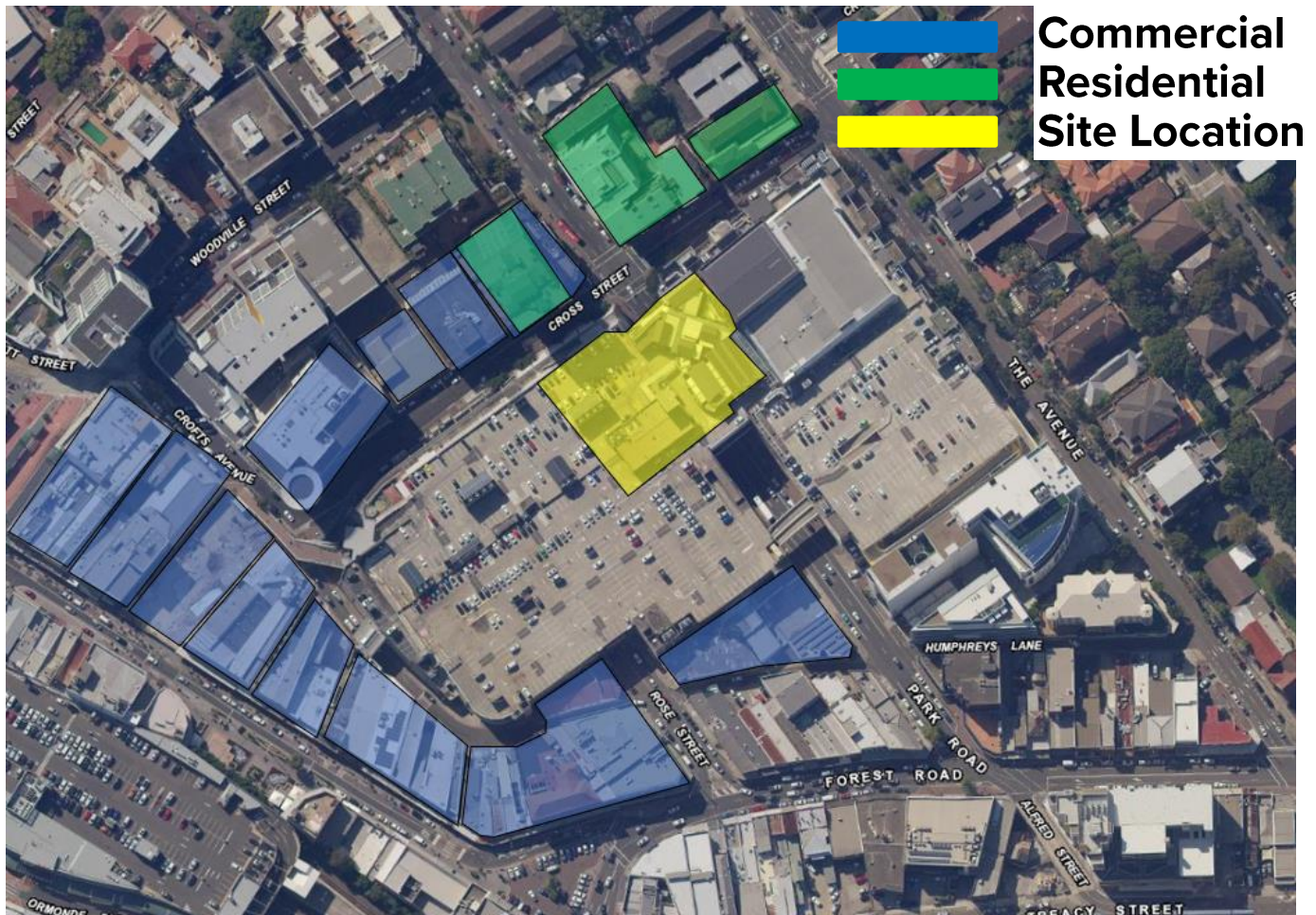
There are also two columns to be strengthened in the female amenities. This is more a patron/centre impact however will still need to be managed at night and appropriate control measures in place during trading hours.

Shown in pink on the above drawings between grids A and B is the location of the earthquake bracing and corner column strengthening. This is located adjacent the male amenities within a service corridor and the impact to tenants should be minimal apart from minor disruption to loading through these corridors when the steel is delivered.



## 4.8. IMPACTED BUILDINGS

Scentre Group in conjunction with centre management have assessed the neighbouring properties that have been engaged to carry out a construction noise and vibration assessment on the surrounding buildings. Nine (9) buildings in total were included in the assessment. Based on the assessment, noise emission from construction activities generally meet the relevant noise emission levels. A Construction noise and Vibration management Plan has been developed that shall be used to minimise impacts on the surrounding properties. Refer to *Construction Noise and Vibration Management Plan* dated 26/7/2019 Rev 0



## 4.9. DEFECT MANAGEMENT

All defects shall be placed on Aconex Field and closed out per the direction of the project manager. Design projects shall satisfy themselves that the works have been completed in a satisfactory manner to Scentre Group

## 5. QUALITY MANAGEMENT SYSTEM

### 5.1. COMPLIANCE TO OUR INTEGRATED MANAGEMENT SYSTEM

Routine inspections and reporting, completion of ITP's and check sheets will be undertaken throughout the duration of implementation of the CQEMP in accordance with the IMS. The inspection reports shall be issued to the subcontractors via Aconex within 24hrs of completing the inspection. Records and copies of reports completed, as part of the CQEMP will be maintained by the SDC for a time period nominated in the IMS

### 5.2. PROJECT PROCEDURES

Project procedures provide specific details for the management of the identified quality issues at the project level, including any relevant forms or checklists. Project procedures will always be subject to evolutionary change throughout the project lifecycle as the expected standard of service provision may change. Project procedures are also used as the provision of compliance confidence within the Project itself. This compliance confidence enables both SDC and all associated stakeholders to ensure all system targets are maintained as enablers to the identified output of the Project.

Prior to the project commencing, it is the responsibility of the Construction Design manager to prepare an ITP and Check sheet matrix to identify what procedures are required for their project. The template can be found on Myscentre Sharepoint in the Templates section.

#### 5.2.1. WEEKLY ENVIRONMENTAL INSPECTIONS

Throughout the construction period, SDC will undertake weekly Environmental Compliance Inspections of their activities. These Inspections are targeted to demonstrate compliance with the CQEMP with a requirement to immediately rectifying any identified issues.

The RMC or Site engineer is responsible for completing the weekly Environmental Inspection Checksheet. This document can be found on the MyScentre Construction Page under [Construction Documentation](#) and can be found in Appendix C

This shall be issued via aconex to all subcontractors and SDC team members upon completion. The total number of inspections completed each month shall be presented to the Project Manager and Risk Manager

#### 5.2.2. INSPECTION TEST PLANS

Inspection and test plans are our roadmaps as to how, what and when checks should be conducted during our developments. ITP's can be found on the MyScentre Construction Page under [Construction Documentation](#)

ITP's are required to be completed by the Site Engineer for **all works**. Hold points are nominated for particular stages of the tasks and shall be adhered to at all times.

ITP's are a non-editable document and failure to complete them will result in a non-conformance

As a minimum, SDC shall include ITP's for the following works for Hurstville ELP:

- Site survey and set out;
- Demolition
- Site preparation and excavation
- Foundations / footings
- RC Slabs
- Structural steel construction works supply, storage and installation
- Insulation vapour barriers supply and installation
- Masonry
- Waterproofing membranes
- Panting
- Roofing supply and installation



- Doors and windows supply, storage and installation
- External Cladding supply, storage and installation
- Glazing
- Timber flooring
- Hydraulic works installation and testing/certification
- Electrical works installation and testing/certification
- Mechanical works installation and testing/certification

### 5.2.3. FORMS & CHECK SHEETS

Forms and check sheets are required to be completed on all SDC projects. It is the responsibility of the Site Engineer to ensure these documents are actioned accordingly for **all works** and appropriately distributed filed however, the Project Manager has the ultimate responsibility to ensure these are being executed.

These documents are in place to ensure the quality control is being administered, the identify areas for improvement and finally, monitor performance in accordance with the SDC IMS. They can be found on the MyScentre Construction Page under [Construction Documentation](#)

Forms and check sheets are non-editable documents and failure to complete them will result in a non-conformance.

As a minimum, SDC shall include forms for the following works for Hurstville ELP:

- Site survey and set out;
- Demolition
- Site preparation and excavation
- Foundations / footings
- RC Slabs
- Structural steel construction works supply, storage and installation
- Insulation vapour barriers supply and installation
- Masonry
- Waterproofing membranes
- Panting
- Roofing supply and installation
- Doors and windows supply, storage and installation
- External Cladding supply, storage and installation
- Glazing
- Timber flooring
- Hydraulic works installation and testing/certification
- Electrical works installation and testing/certification
- Mechanical works installation and testing/certification

### 5.2.4. AUDITS

Audits will be carried out either internal or by an external consultant. in accordance with the IMS and Audit Schedule. There shall be ongoing compliance monitoring with respect WHS, Environmental and quality assurance at regular intervals throughout the project

### 5.3. CONTROL OF QUALITY RECORDS

Records will be established and maintained to provide evidence of conformity to requirements and of the effective operation of the quality management system. Records shall remain readable, accessible and maintainable. Documents to be used in this project are listed below. SDC shall maintain project records per the requirements outlined in the IMS. Electronic records are protected by a backup system, in this case, Aconex shall be the nominated system. Documents required by the quality management system shall be controlled. Records are a special type of document and shall be controlled according to the requirements stated in this sub-section.

A documented procedure has been established to define the controls needed to:

- Approve documents for adequacy prior to issue
- Review and update as necessary and re-approve documents
- Ensure that changes and the current revision status of documents are identified
- Ensure that relevant versions of applicable documents are available at points of use
- Ensure that documents remain legible and readily identifiable
- Ensure that documents of external origin are identified, and their distribution controlled; and
- Prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose

## 6. ENVIRONMENTAL MANAGEMENT SYSTEM

### 6.1. NOISE & VIBRATION MANAGEMENT

#### 6.1.1. OVERVIEW

All works associated with Hurstville ELP will be carried out in accordance with the requirements of the Georges River Council guidelines located on their website. This can be found in appendix B of this CQEMP. An acoustic consultant will be engaged to carry out a construction noise and vibration assessment on the surrounding buildings. Out of that report, a Construction noise and Vibration management Plan will be developed that will be used to minimise impacts on the surrounding properties.

Noise and vibration from all works will be managed so as to minimise effects on stakeholders. Advice given within Australian Standard AS2436-1981 – Guide to noise control on construction, maintenance and demolition sites will be applied. If in the event of noise breach during construction, mitigation measures to be employed will potentially include:

- Stop the offending activity
- Reduce the number of machines
- Use different equipment
- Reschedule the works to a time when the noise will not cause complaint
- Apply noise absorption measures (screens, noise control kits)
- Use alternative methods

Noise management will generally be in accordance with the NSW DEHP environmental noise management criteria. All plant will be regularly maintained, and log books kept ensuring that there are no excess noise emissions. Where it is practical, electric machinery will be used in lieu of mechanical devices.

All subcontractors will be responsible for managing noise and vibration in accordance with their project specific Management Plans. It is proposed to undertake some after hour's works for specific tasks to minimise impacts to pedestrians, vehicular traffic or in the interest of safety. The works that are proposed to be undertaken outside of normal working hours include the following:

- Demolition of balustrades and claddings.
- Hoarding and Gantry works;
- Construction of Steel frame link bridge within mall
- Final Entry works; and
- Footpath works.

Council will occur at all times prior to any works being scheduled. All businesses and surrounding residents will be given notification via email of all the proposed after hours works prior to the works commencing which will include details of the works and the time to undertake each activity. We do not envisage vibration generated by the Works affecting adjoining properties. The removal of council pavers shall be done so by manual means.

#### 6.1.2. TRAINING

Refer to *Construction Noise and Vibration Management Plan Appendix F*

#### 6.1.3. NOISE SURVEY PROPOSAL

Refer to *Construction Noise and Vibration Management Plan Appendix F*

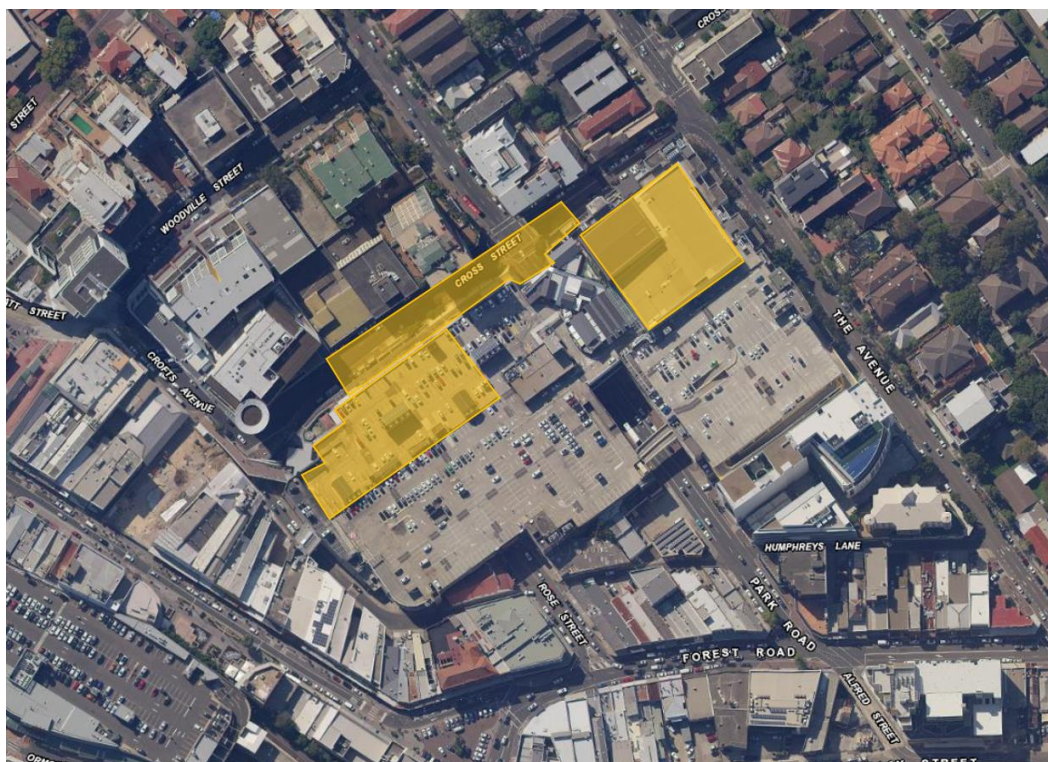
### 6.1.4. DILAPIDATION SURVEY

As works are being carried out in close proximity, a detailed dilapidation survey shall be carried out on the following buildings.

1. Cross St Works Zone
2. Level R4 Carpark and Tenants
3. Basement level carpark

A The survey will focus on existing building defects such as cracking, structure deformation, displacement, but will exclude any loose furniture, tenant fixture and fitting, and any wear and tear or defects from lack of maintenance Damages and defects considered of being visually noticeable will be presented in a photographic record

1. Undertake walk through visual inspections of the denoted areas to identify any existing defect or damage
2. prior to the construction works commencing on site that are outside of the demolition zone. This is structural elements only such as slabs, beams columns and masonry walls
3. External Façade fabric inclusive of glazing, framing, cladding, suspended services etc
4. Surrounding footpaths and crossovers
5. Adjoining infrastructure including walls and roof at the parapets. Refer to buildings listed below as they will require separate surveys



### 6.1.5. NOISE & VIBRATION CRITERIA

The relevant Council conditions which will be imposed will specify the requirements for an acoustic report, and or Noise – General if applicable.

Scentre Design & Construction will adhere to the requirements in the COS Code of Practise for Construction noise per appendix for Construction Noise at all times.

If it is deemed that a noise management report is not required, it is recommended that an acoustic engineer be engaged to brief and train the site team on the COS Code of Practise for Construction noise per appendix A of the CQEMP

### 6.1.6. CONSTRUCTION VIBRATION CRITERIA

Any potential construction vibration, outside the subject site must be limited to:

For human exposure to vibration, the evaluation criteria presented in the British standard BS 6472:1992 Guide to evaluate Human Exposure to Vibration in buildings (1Hz to 80Hz) for low probability of adverse comment

German Standard DIN 4150-3 (1999-02) provides vibration velocity guideline levels for use in evaluating the effects of vibration on structures. Criteria presented below as follows:

**Table 1 DIN 4150-3 (1999-02) Safe Limits for Building Vibration**

TYPE OF STRUCTURE	PEAK PARTICLE VELOCITY ( $\text{mm s}^{-1}$ )			
	At Foundation at a Frequency of			Plane of Floor of Uppermost Storey
	< 10Hz	10Hz to 50Hz	50Hz to 100Hz	All Frequencies
1 Buildings used in commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40
2 Dwellings and buildings of similar design and/or use	5	5 to 15	15 to 20	15
3 Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g. buildings that are under a preservation order)	3	3 to 8	8 to 10	8

### 6.1.7. NOISE IMPACT ASSESSMENT

The predicted noise levels during construction will depend on the following:

The activity undertaken

The distance between the work site and the receiver. For many work areas, the distance between the noise source and the receiver will vary depending on which end of the site the work is undertaken. For this reason, the predicted noise levels should be presented as a range.

**Table 2 Sound power levels of Construction equipment**

Equipment / Process	Sound Power Level – dB(A)*
Rock Hammering	120
Excavator (in clay/soil)	110
Bored Piling Rig	110
Concrete Pump	110
Concrete Vibrator/Slab Finishing Work (Helicopter float)	100
Trucks	100
Materials Handling (Forklifts etc)	100
Crane (Diesel)	105
Powered Hand Tools	95-100

\*Noise levels take into account correction factors (for tonality, intermittency where necessary).

The noise levels presented in the above table are derived from the following sources, namely:

- Table A1 of Australian Standards 2436-2010
- Data held by Acoustic logic or similar studies.

### 6.1.8. WORKING HOURS

Time periods defined by the NSW Industrial noise Policy (INP) are presented in Table 3 It is assumed that these time periods apply for all environmental noise emissions.

**Table 3 NSW INP TIME PERIODS**

NSW INP TIME PERIOD	TIME
Day	7am to 6pm Monday to Saturday 8am to 6pm Sundays and public holidays
Evening	6pm to 10pm all days
Night	All other times

Noise emission from industrial noise sources associated with the development must also comply with the Development Conditions of Consent. This condition requires compliance with the NSW Industrial Noise Policy

## 6.2. WASTE MANAGEMENT

### 6.2.1. WASTE TYPES AND CLASSIFICATIONS

To comply with the waste legislation, Protection of the Environment Operations Act 1997 those who generate waste are responsible for classifying their waste into one of six waste classes.

The waste classes are based on the level of risk they pose to the environment and human health. They are

- 1- special waste
- 2- liquid waste
- 3- hazardous waste
- 4- restricted solid waste
- 5- general solid waste (putrescible)
- 6- general solid waste (non-putrescible)

The [Waste Classification Guidelines](#) comprise four parts:

[Part 1: Classifying waste \(PDF 599KB\)](#)

[Part 2: Immobilising waste \(PDF 310KB\)](#)

[Part 3: Waste containing radioactive material \(PDF 296KB\)](#)

[Part 4: Acid sulfate soils \(PDF 299KB\)](#)

### 6.2.2. CONSTRUCTION WASTE MANAGEMENT

Diversion of construction waste from landfill and on-site operational waste management facilities and to satisfy the requirements outlined in the Cundall Sustainability report, SDC shall aim to divert a minimum of 90% of non-hazardous construction / demolition waste from landfill via reuse or recycling



### 6.3. ENVIRONMENTAL ASPECTS, IMPACTS AND RISK ASSESSMENT

Construction Activities	Aspects	Potential negative and positive Impacts	Risks	Comments
Waste Disposal	Disposal of excess/unsuitable spoil/contaminated material	Incorrect disposal of Wastes (A)		
	Collection of construction wastes for recycling and disposal.			
Dust Suppression	Use of impounded stormwater	Conservation of natural resources (B)		Stripping / construction activities will take place
	Revegetation	Incorrect disposal of Wastes (A)		
Equipment Refuelling	Possible spillage	Soil contamination (A)		Human Error may occur
	Clean-up of spillage	Water pollution (A)		
Landscaping	Soil stabilisation	Prevention of air pollution (B)		
	Planting of native flora	Prevention of water Pollution (B)		
	Re-use of natural resources	Habitat creation (B)		
Construction	Excavation	Noise complaints (A)		Residents 50 metres from site.
	Stockpiling	Dust complaints (A)		Façade to be painted/ paint to be correctly stored and disposed
	Storage of materials	Incorrect disposal of hazardous wastes (A)		
	Formwork	Paint over-spray (A)		
	Steel fixing	Soil contamination (A)		
	Concreting	Uncovering of contaminated material		
	Civil works			
	Erection of structures			
	Installation of equipment			
Removal of contaminated material	Reuse of suitable spoil for backfilling etc	Conservation of natural resources (B)		Recycling of waste will be carried out by suitable contractor
	Disposal of excess/unsuitable spoil/contaminated material	Incorrect disposal of Wastes (A)		
	Collection of construction wastes for recycling and disposal.			
Suppression of Dust	Use of impounded stormwater	Conservation of natural resources (B)		



	Revegetation	Incorrect disposal of Wastes (A)		Stripping / construction activities will take place
<b>Equipment Refuelling</b>	Possible spillage	Soil contamination (A)		Human Error may occur
	Clean-up of spillage	Water pollution (A)		
<b>Landscaping</b>	Soil stabilisation	Prevention of air pollution (B)		
	Planting of native flora	Prevention of water Pollution (B)		
	Re-use of natural resources	Habitat creation (B)		

[1] Risks are numbered 1-10. The 1-3 are low risk, 4-6 medium risk and 7-10 are high risks.

## 6.4. COMPETENCE, TRAINING AND AWARENESS

### 6.4.1. ENVIRONMENTAL INDUCTION

Depending on the nature of the works, a site-specific environmental induction may be required. This is required for works within the following areas but not limited to:

1. Contaminated lands
2. Acid Sulphate Soils
3. Highly sensitive Flora and Fauna
4. Works within authority reserves
5. Works in contact with Lead paint / Dust
6. Works in contact with Asbestos
7. Works in contact with SMF and PCB's

Upon the request of the Risk Manager or Project Manager, an environmental hygienist may be engaged to prepare a hazardous works procedure in association with an induction. The purpose of this document is to provide details and guidance on asbestos and lead dust materials and to detail the requirements to contractors working on site, while ensuring that all practical steps are taken to prevent or minimise the risk of exposure to asbestos and lead dust, as far as reasonably practical

### 6.4.2. TOOLBOX TALKS, TRAINING AND AWARENESS

Toolboxes shall be conducted on a daily basis by the site management team for each trade.

## 6.5. DUST MANAGEMENT

The SDC objectives with regards to the mitigation dust on the project are:

- To comply with all local, State & Federal environmental legislation, codes & guidelines;
- To satisfy the requirements of the SDC IMS
- Establish and maintain good relations with the local community and occupiers and operators of neighbouring sites.
- To proactively Identify & manage environmental risks, and;
- Adopt best practice environmental management procedure wherever possible

### 6.5.1. DUST GENERATION AND SUPPRESSION MANAGEMENT

The following Environmental Control Devices will be established at the commencement of work and will be maintained by SDC and its relevant subcontractors during the course of the works. Measures that may be employed include:

- 1) Site Perimeter – A 1.8m sheeted hoarding will be provided in all areas where external works are occurring
- 2) Demolition – All trucks removing materials from site will be loaded whilst inside the site perimeter, with loads covered before exiting
- 3) Excavation of pavement and removal of finishes – water down working surfaces as required. Minimise stock piling of material. Maintaining stabilised access roads and driveway
- 4) Construction – Maintain a high level of housekeeping to minimise likelihood of windblown dust

## 6.6. BIODIVERSITY

## 6.7. STORMWATER AND SEDIMENT CONTROL

A stormwater and sediment control plan have been developed and shall be implemented prior to works commencing. Refer to PS114169 C060 Sediment and Erosion plan and Details prepared by WSP. This will ensure that stormwater from the development does not enter adjoining properties, and that all water that enters the council stormwater system does not contain silt or other contaminants.

Refer to Appendix C for the Approved ESCP's

## 6.8. CONTAMINATED LAND

A report will be commissioned by a Geotechnical engineer to determine risk and control measures required.

## 6.9. GROUNDWATER

A report will be commissioned by a Geotechnical engineer to determine risk and control measures required.

## 6.10. EXCAVATION

There are local excavations for foundation strengthening works new lift core pits and additional localised deepening for Motor rooms.

It is noted that no additional basements or bulk excavation works are proposed as part of the works. Smaller, localised excavations up to 1.5 m deep are proposed for foundation upgrades. The geotechnical report once received will determine the nature of the ground we are dealing with and how to plan and manage associated risks.

In the event of unexpected finds, personnel shall be removed from the areas considered to be at risk. The project manager shall be notified immediately. As the Design progress with more consultants engaged, a specific Unexpected finds protocol may be developed to address these risks.

All materials to be used in accordance with the relevant Materials Safety Data Sheets.

Refuelling of vehicles and construction plant shall not be carried out without an operator or driver attending all times.

Contaminated stormwater collected in bunded areas shall be pumped out and disposed of by an EPA licensed hazardous waste disposal contractor.

The maintenance and cleaning of vehicle and construction plant shall not be carried out in areas from where washings may be discharged into receiving waters, street gutters or stormwater channels.

Spillages of hazardous liquids should be contained by means of a dry absorbent such as sand, saw dust or oil absorber, which can be transferred to a suitable container for disposal by an EPA licensed waste disposal contractor.

All contaminated material including any material contaminated by the spillage of hazardous substances shall be disposed of in accordance with the following requirements: the waste disposal contractor must hold the appropriate EPA licence.

- the proposed disposal location must be an EPA registered waste disposal facility and have approval to accept the waste.

- An EPA disposal consent number must be obtained before removing the contaminated waste (not required for waste oil/diesel/oily water designated for recycling) from the site.

The EPA 3 docket chain of custody documentation for the transportation of contaminated waste must be completed.

## 6.11. SPILL PREVENTION AND RESPONSE

Accidental spills shall be removed asap by the contractor. 100L spill kits shall be on site at the site entry at all times. The Risk management coordinator shall ensure the spill kit is adequately stocked.

With a view to reducing the risk of an environmental impact due to an incident, the Site Management team will:

- Ensure all staff and sub-contractors are advised of requirements to notify site management
- of such incidents.
- Ensure all staff and sub-contractors are advised of the location of spill kits and how to use them.
- In the event of an environmental incident involving a spill, leak or other impact, the SCR

Environmental Emergency Management Team will contain the incident by completing the following steps:

1. Making the site safe.
2. Assess which component of the incident needs to be controlled first.
3. Notify the Scentre Design & Construction (SDC) Project Risk Manager of the incident.
4. Preventing the situation from becoming worse by identify the source of the incident.
5. Evacuate the area/site if necessary.

## 6.12. AIR QUALITY

Dust shall be kept to an absolute minimum and contained within the site. Refer to the SSMP and specific work procedures for control measures.

## 6.13. ENVIRONMENTAL INCIDENT NOTIFICATION AND REPORTING

### 6.13.1. INCIDENT REPORTING

Incident reporting is undertaken to ensure that in the event of an environmental incident, proper process is in place to record the incident for future improvement of procedures and if required, for further investigation by relevant parties and to ensure that statutory requirements are met by all persons involved in the Project. Environmental incidents are defined as:

- Any incident having caused actual impact, which may include permanent or temporary effects on the Environment.
- Any "pollution incident". A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur.

### 6.13.2. NOTIFIABLE INCIDENTS

There is a duty to report pollution incidents under section 148 of Protection of the Environment Operations Act 1997 which cause or threaten material harm to the environment. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. 'Pollution incident' is defined in the Dictionary to the Act and is reproduced at the end of this document. 'Material harm to the environment' is defined in section 147. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

- Any environmental incidents notifiable to the relevant authority, which includes the, Georges Rive Council and the NSW Department of Environment and Climate Change (NSW DECC), the relevant information to be given includes:
- The time, date, nature, duration and location of the incident occurring or is likely to occur the nature the estimated quantity or volume and the concentration of any pollutants involved
- The circumstances in which the incident occurred including the cause of the incident, if known

- The action proposed or taken to deal with the incident and any resulting pollution or threatened pollution
- Any other information prescribed by the regulations

## 6.14. SAFETY DATA SHEETS

A Safety Data Sheet is a document that provides information on the properties of hazardous chemicals and how they affect health and safety in the workplace. For example, an SDS includes information on:

- The identity of the chemical;
- Health and physicochemical hazards;
- Safe handling and storage procedures
- Emergency procedures;
- Disposal considerations.

The SDS should always be referred to when assessing risks in the workplace. It is worth noting that the Director and officers of the company can be held liable under the POEO Act 1997 should the environmental incident result from negligence on the part of Scentre personnel on-site and severe penalties may result.

Record the Chemical on the form **SDC\_F14 Hazardous Chemical Register**

## 7. COMMUNICATION

### 7.1. INTERNAL COMMUNICATION

A D&C weekly team meeting shall be chaired by the Project Manager which shall cover all topics quality, cost, program and WHS issues of the projects.

Weekly D&C subcontractor meetings shall be chaired by the Project Planner where 2 weekly programmes are discussed with all key subcontractors.

Minutes shall be taken and issued to all stakeholders via Aconex or approved means.

Site Management team will communicate in a series of weekly advisories at various meetings, site inspections and monthly reports. Site Management meetings are held monthly which are formalised in minutes and related actions taken to adjust or implement initiatives, respond to audits and comply with checklists observations and non-conformances. An ongoing environmental agenda is included in these meetings.

### 7.2. LIAISON WITH EPA, GOVERNMENT AUTHORITIES OR OTHER RELEVANT STAKEHOLDERS

The project team shall use an electronic recording / filing method to maintain records of other external correspondence (written, verbal or email), and meetings of an environmental nature to all interested parties. Other forms of external communication include:

- Letterbox drops;
- Advertising activities;
- Community and Stakeholder Management undertaken in consultation with the Client and
- Centre Management.
- Monthly newsletters depending on project size and scale

### 7.3. COMMUNITY LIAISON AND/OR NOTIFICATION

Scentre D&C will utilise existing communication channel in place through Centre Management. Working closely with the surrounding community and stakeholders the Centre Management team will play a key role in ensuring that the community is well informed and engaged in the overall vision and opportunities presented by the project. The role will involve coordinating the day to day community and stakeholder engagement activities, including identifying impacted stakeholders, handling public enquiries and complaints and the production and distribution of stakeholder notices, letters and presentations.

Any changes to traffic flows, roadworks, bus routes, car parking etc will be communicated to the community through regular construction updates. Revised traffic flow information for the general public will consist of clear directional signage with adequate notice and in compliance with Australian Standards. Traffic management Plans will create a clear distinction between public vehicles, construction vehicles & pedestrian traffic and will be a crucial aspect of the project.

The intended pedestrian and traffic interfaces at various phases of the project are covered in further detail in this CMP.

#### 7.3.1. COMPLAINTS MANAGEMENT

A complaints register shall be maintained by the Centre Management team for all community issues that may arise.





## 8. APPENDICES

### 8.1. APPENDIX A: CONSTRUCTION METHODOLOGY



## 8.2. APPENDIX B: GEORGES RIVER COUNCIL CONSTRUCTION NOISE GUIDELINES



### 8.3. APPENDIX C: CONDITION 95 EROSION & SEDIMENT CONTROL PLANS



## 8.4. APPENDIX E: CONDITION 94 DEMOLITION EXCAVATION & CONSTRUCTION MANAGEMENT



## 8.5. APPENDIX F: CONDITION 15 CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN