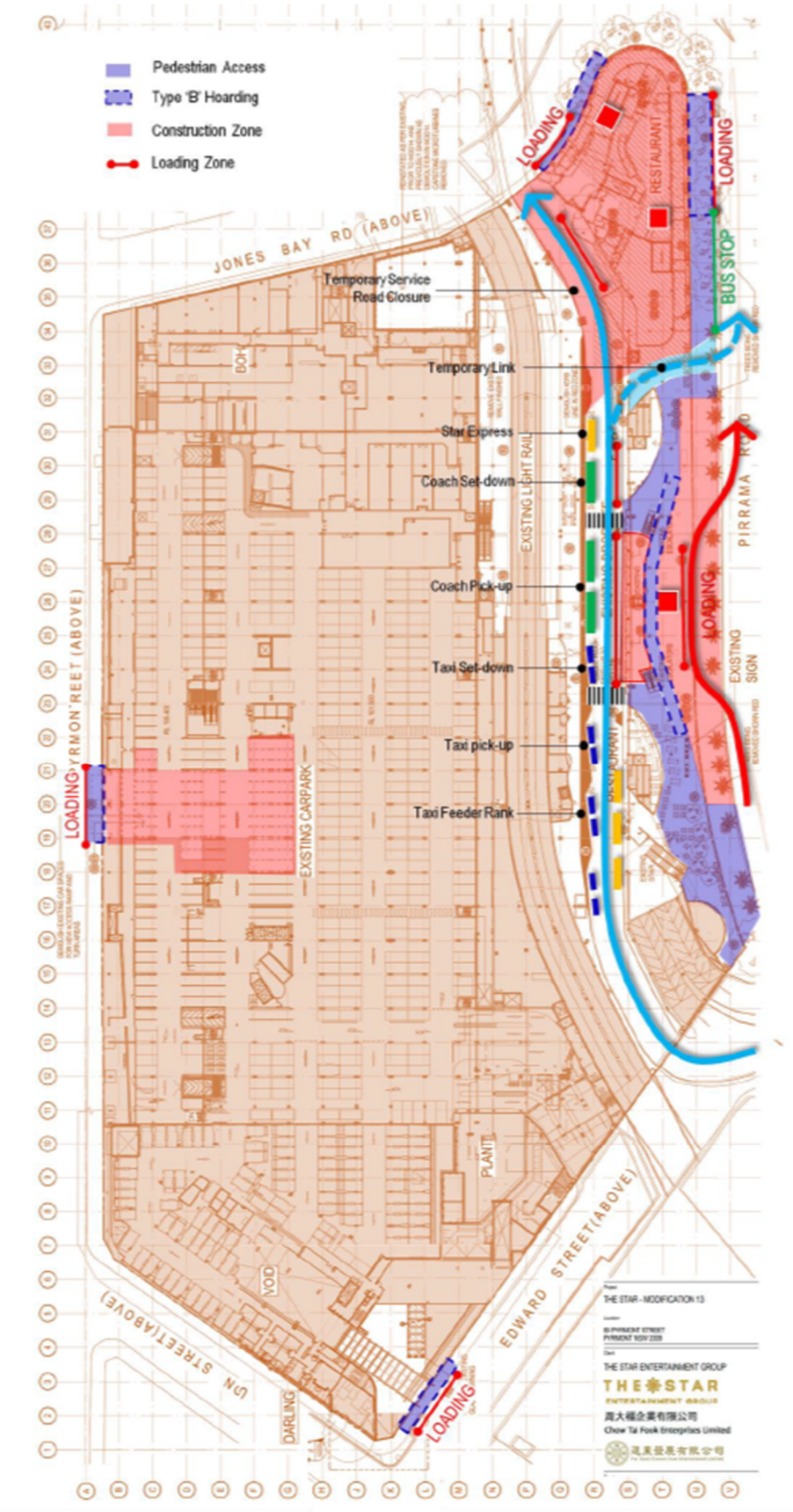

FIGURE 5 CONSTRUCTION & LOADING ZONES FOR MOD 13 PROJECTS

4.3 CRANEAGE & HOISTING

For the tower project, tower crane and hoist positions will be established as indicated in Figures 6, 7 and 8 below.

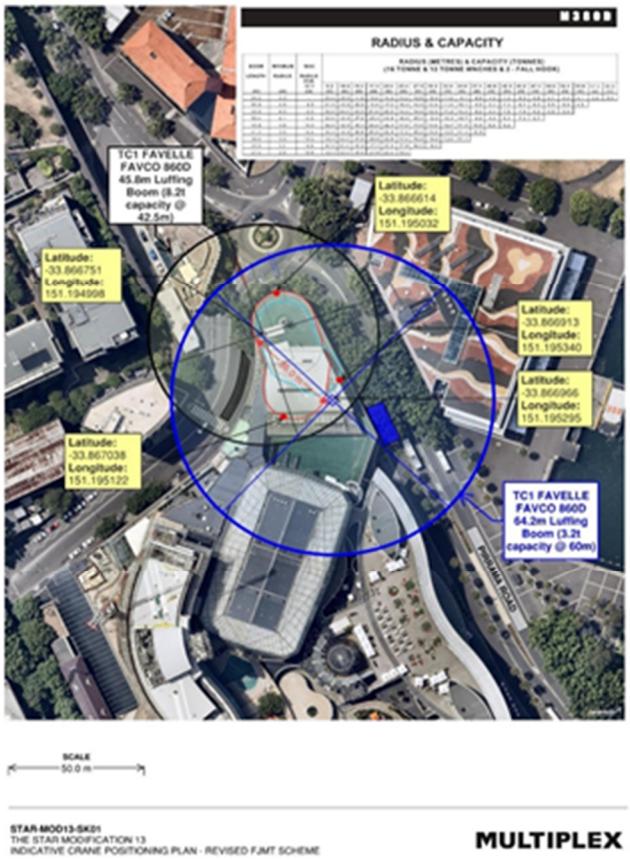

FIGURE 6 CRANE LOCATION PLAN

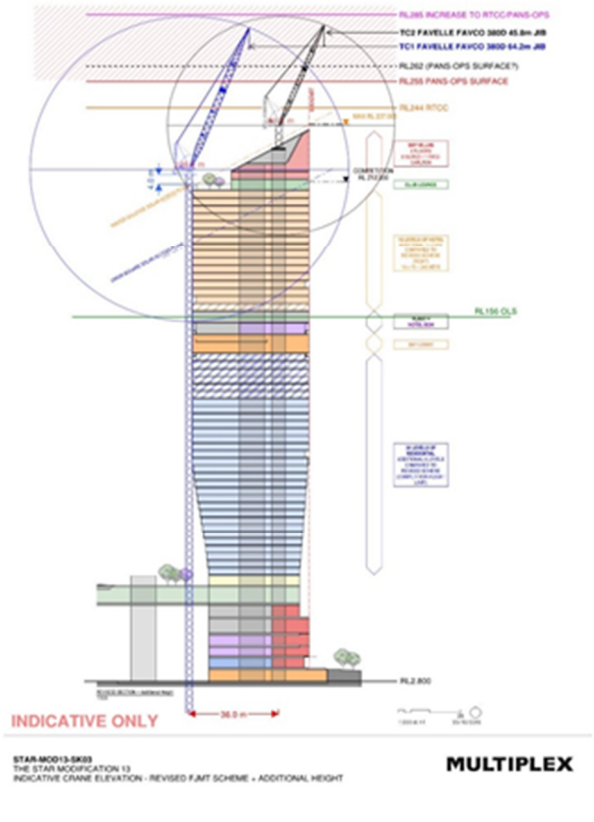

FIGURE 7 CRANE IN SECTION

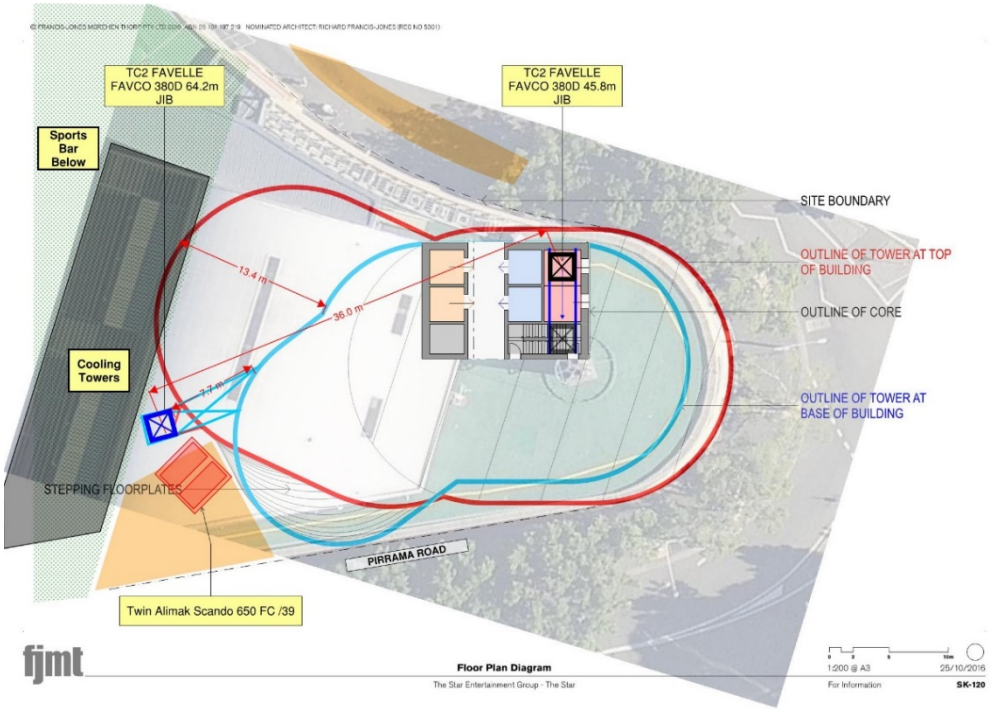

FIGURE 8 CRANE AND HOIST PLAN

4.4 MOBILE CRANES

Due to the size of mobile cranes required, their mobilisation times and the minimal working hours during road closures, mobile cranes will only be used if absolutely necessary. Mobile cranes will be utilised for the erection and dismantling of the tower cranes and smaller mobile cranes may be used during night works if feasible. All crane loadings will be assessed in consideration of the road bearing capacities prior to mobilisation.

4.5 HOISTS AND LOADING PLATFORMS

A twin Alimak hoist will be used to service the tower structure. A jump lift within the tower core will also be used to provide access to the working jumpform deck.
Loading platforms will be utilised along the tower perimeter and along the podium perimeter to facilitate materials handling onto the working decks. These will be rotated upwards as the structure progresses.

4.6 HOARDINGS AND VEHICLE ACCESS

Hoardings will provide effective dust and noise barriers to protect members of the public from construction risks. The Head Contractor will prepare a Hoarding Plan identifying the exact class and location of hoardings, prior to commencement on site. The Head Contractor will submit the Hoarding Plan and drawings to the relevant statutory authority and obtain approval prior to commencing on site. The stamped approval must be submitted to SEGL prior to erection of any hoardings or construction of vehicular access.

Temporary A-Class hoarding, site fencing and gates will be:

- Installed as temporary access for the Head Contractor, as identified in the Hoarding Plan;
- Maintained with security at the entry and exit to mitigate public access to construction areas;
- Installed at the external boundaries of the extent of the project site area; and
- Adopted including signage, in all working areas at all times.

The appointed Head Contractor must comply with the following documents:

- Modification 13 Traffic Impact Statement for servicing the site.

4.7 GANTRIES

Gantries will be utilised along the site boundaries to maintain pedestrian access and safety. All gantry installations, will be subject to Council approvals and permits.

4.8 ACCESS

Site access will be available via the existing basement and loading dock areas. Uninterrupted access will need to be maintained for the building occupants/staff/public and other contractors in the building. During the pre-construction phase of the works, the appointed Head Contractor will organise a meeting with Building Management and Security to notify them of the works being undertaken and the subcontractors proposed. The Site Management Plan to be produced by the Head Contractor, will be issued for review and approval by SEGL. This will include marked-up drawings of the site and work areas and complete contact lists of all subcontractors. As procurement proceeds an updated list will be presented on a weekly basis.

Uninterrupted access will need to be maintained for the building occupants and other contractors within the building. The building is operational 24 hours a day, 7 days a week. Noise and air quality will need to be monitored to ensure existing building occupants are not adversely affected. The Head Contractor must comply with the Modification 13 Noise Impact Assessment and the Modification 13 Air Quality Report.

All visitors to the site must report to the site office, and will be appropriately inducted and registered in a visitors log book.

4.9 SITE ACCOMMODATION AND AMENITIES

At all times the Head Contractor shall maintain a designated area as the project site office, lunchroom change, ablution, first aid and wash down facilities. The location of these facilities will be determined on site with the prior approval of SEGL. The Head Contractor must ensure that common areas (or travel paths through them) are fully protected whilst work is being carried out in relation to this project.

The site accommodation will be set up in accordance with NSW Work Health and Safety Regulation 2011.

5 PROTECTION OF SURROUNDINGS AND PUBLIC AMENITY

5.1 DILAPIDATION SURVEY

Prior to commencing work onsite, a full Pre-Construction Dilapidation Report will be completed by a Dilapidation Survey Consultant for adjacent structure to be retained . The dilapidation report will cover all areas where construction works are occurring and to which the construction certificate applies. A post completion survey will also be compiled for comparison.

5.2 ADJOINING AND ADJACENT NEIGHBOURS

Careful site management, which will minimise disruption and inconvenience to neighbouring buildings and their occupants, is of the highest importance. The Contractor will provide a Community Liaison Officer to work with neighbours, understand their needs and requirements, and, where possible, adjust construction works methodologies accordingly. The adjoining properties and neighbours specifically identified for consultation are identified below.

The surrounding properties include:

- Selected properties along Jones Bay Road
- Selected properties along Pirrama Road

5.3 SURROUNDING PROPERTIES MANAGEMENT

Communication rectification rectification defects rectification defects rectification

Prior to commencement of works, the Contractor will undertake a communication meeting with the stakeholders and surrounding tenants. This briefing will involve an outline of the construction sequence, together with an overview of the staging and timing of the works. This initial meeting will provide an opportunity for input from the stakeholders and tenants before finalising methodology.

To ensure ease of communication between all parties, a protocol will be established to:

- Define lines of communication and appoint a single point of contact for neighbours
- Times for site inspections within the leased premises
- Specific dates for regular communication meetings
- Clarify the escalation process
- Implement the Disruption Shutdown Application (DSA).

5.3.1 COMMUNICATION

It is essential that the stakeholder team is aware of current and future activities within the premises and how these could impact on tenants and customers. Points of contact between the Contractor's project team and stakeholders will be agreed for various scenarios, with stakeholders provided with 24 hour contact numbers. Key personnel from the Contractor's project team will be available to attend stakeholder internal briefings if required to communicate details of the proposed works to their respective team members.

5.3.2 SERVICES INTERRUPTIONS AND IMPAIRMENT

Prior to any services being impaired or work being carried out within an active operational environment, a

Disruption Shutdown Application (DSA) will be made. This process will be implemented on the project to provide advance agreement for specific work activities to be carried out. DSA's will typically be made a number of weeks in advance of proposed work and in line with the agreed project notification durations. Depending on the risk profile of the proposed work, the agreed notification durations may be required months in advance.

The DSA process will be of particular value on the project in relation to the following elements:

- Early works within a tenanted area prior to shutdown of CBW

- Works that may affect the services to a tenanted area
- Activities in the general public realm
- Works that may affect local traffic flow
- Works that may exceed the agreed noise and vibration criteria
- Major services changeovers or shutdowns.
- The benefits to all parties of the DSA process include:
- Proposed works are planned in detail
- Stakeholders are briefed on the proposal
- Stakeholders are empowered and become active participants in the project
- Early dissemination of this information effectively to relevant team members
- Works are undertaken in a more controlled and diligent manner.

5.3.3 COMPLAINTS RESPONSE PROCESS

The complaints response process for the Project will be outlined in the Communication Plan when it is developed. This Plan will describe the Contractor's approach and procedures for communication with internal and external stakeholders, necessary territory authorities, and the public.

5.3.4 EMERGENCY CONTACT

The initial point of contact for the Project for complaints will be the Project Manager and the Site Manager.

Project Manager: TBC

Site Manager: TBC

As other key personnel commence onsite, further names and contact numbers will be issued and displayed prominently on sign boards.

5.4 NOISE & VIBRATION MANAGEMENT

Particular care will need to be taken during the construction of each phase of the project to control noise and vibration. Work methodologies and plant selection for demolition and excavation will be reviewed to determine the most practical and programme-effective solutions for these works. This active approach will mitigate the potential for human discomfort and noise and vibration disruptions to surrounding key stakeholders.

Noise and vibration transfer from the construction process could potentially have an impact upon adjacent building tenants, the public and surrounding premises.

Prior to the commencement of any works onsite a Noise and Vibration Management Plan will be developed by the Contractor in consultation with the Stakeholders to develop strategies for the mitigation of noise and vibration generated by the works.

In order to help meet the noise and vibration requirements of the site, baseline testing will be carried out and existing operational levels identified. Early identification of baseline levels will enable subcontractor methodologies to be specifically tailored to ensure the benchmarks are not exceeded.

Vibration and noise generating activities will be coordinated and undertaken in consultation with the appropriate parties and carried out during the subsequent agreed periods. Work methodologies and plant selection will be reviewed to mitigate the potential for noise and vibration from the new works effecting pedestrians and patrons of Star and adjacent businesses.

Work practices that minimise noise and vibration will be used wherever possible. These include but are not limited to the following:

- Flexible working hours avoiding noisy work during peak business operation times
- Plant and equipment selection to reduce noise where possible
- Plant and equipment fitted with silencers where possible
- Acoustic testing of proposed methodologies prior to commencing work

- Erection of temporary screens to encapsulate dust and noise
- Diligent housekeeping to minimise the generation of dust
- Methodology development aimed at finding alternatives capable of reducing noise and vibration where possible
- Location of major plant such as cranes away from noise and vibration sensitive areas where possible.
- The following items outline some of the Contractors key control measures which will be applied during the
- demolition and construction phase to assist with noise reduction:
- Plant known to emit noise strongly in one direction would, where possible, be orientated so that noise is directed away from noise sensitive areas.
- Machines fitted with engine covers would be kept closed when not operating.
- The height materials are placed either into or out of trucks, would be limited where possible.
- Stationary and mobile equipment including offsite vehicles would be maintained regularly.
- Operation would be limited to occur within the approved hours.
- Continuous training through inductions and ongoing meetings would be provided for operators, labourers, subcontractors and supervisors, to keep minimal noise impacts on local residents and businesses top of mind.
- Notifications of particularly noisy works would be undertaken prior to any planned works commencing. This would include either personal or community meetings with adjoining properties owners and/or tenants, this process will be undertaken in particular prior to Demolition and Excavation phase of the project.
- Regular servicing of equipment , or when an individual plant item are identified as being particularly noisy, would
- be conducted.
- A construction noise monitoring plan for the construction period prior to commencing works would be designed and implemented.
- All complaints in relation to noise would be monitored and recorded.
- An onsite person would be identified as the contact point in the event of noise complaints with contact details provided within the Construction Management Plan.

5.5 MONITORING

The Contractor will engage an independent acoustic / vibration consultant to install and monitor noise and vibration logging equipment at suitable locations. These monitors will be calibrated and programmed to an agreed level with an alarm being triggered in the event of vibration or noise exceeding the acceptable range. This alarm will automatically page the nominated Contractor's liaison officer. In the event of such an incident works will cease in the specific area and be reviewed. If appropriate, alternate methods will be considered and adopted.

- **Noise monitoring**
  Noise monitoring will be undertaken to monitor and help minimise construction noise in order to avoid discomfort to the occupants of surrounding premises.

  The specific noise monitoring methods that will be used will be outlined in the Construction Noise Plan.

Unmanned Noise Monitors

These monitors are programmed to notify 'back to base' and alarm locally whenever noise exceeds the required level. They are also linked back to software programs that are used for monthly noise reports and specific incident reporting. Locations for the monitors are selected strategically based on assessment of the nearest affected receivers. Should they be installed in an unsecure location, typically the noise monitoring equipment would be housed in a steel cage to prevent damage, theft or vandalism.

- ***Manned Noise Monitors***
  Manned noise monitoring will be undertaken to assess specific and new work methodologies when required. Construction methods will be reviewed and changed if required.
  - Noise Reports will be prepared on an as required basis i.e. monthly.
  - Community Liaison will be carried out if required to address any community concerns regarding noise.

- **Vibration Monitoring**
  Vibration monitoring during the demolition and new structure phases will be undertaken in order to monitor potential human discomfort and potential structural / heritage damage in and around the existing building.
  The specific vibration monitoring methods that will be used are identified within the Construction Vibration Plan.
  - Upon establishment of the required vibration monitoring equipment, monitoring will be carried out on a regular

- basis to ensure work is being undertaken within the agreed vibration levels. Working hours, work methods and
- site practices will be reviewed accordingly.
- Vibration monitoring reports will be prepared on an as required basis i.e. monthly or incident reporting.
- Monitoring will be carried out on a regular basis throughout the project. The four main activities of work that are
- expected to provide vibration and noise that will require monitoring are:
- Soft Strip out
- Demolition
- Structural new build works
- Fit-out / finishes
- Heritage restoration works

THE STAR

SAFETY MANAGEMENT

6 SAFETY MANGEMENT

6.1 OVERVIEW

All activities on site will be driven by a desire to ensure no member of the public or personnel are injured or property damaged throughout the project. The Head Contractor's Safety Management Plan must be prepared and provide a comprehensive overview of how health and safety will be managed during the project.

6.1.1 PRINCIPAL (HEAD) CONTRACTOR

The Principal (Head) Contractor of this project is responsible for:

- Preparing, updating and implementing the WHS Management Plan, including all associated procedures;
- Identifying and observing all legal WHS requirements;
- Ensuring that all works are conducted in a manner without risk to workers and the general public;
- Planning to do all work safely;
- Participating in the planning and design stages of trade activities;
- Identifying WHS training required for an activity;
- Ensuring workers undertake identified WHS training;
- Communicating and consulting with workers;
- Investigating hazard reports and ensuring that corrective actions are undertaken;
- Assisting in rehabilitation and return to work initiatives; and
- Dispute resolution.

6.1.2 CONTRACTORS

Contractors who are engaged for this project are responsible for:

- Fulfilling the duties of a person conducting business or undertaking, for their own operations;
- Identifying all high risk construction work associated with their activities and ensuring safe work method statements are developed and implemented;
- Complying with the duties as listed under 'Workers' (see 6.1.3 below);
- Following all safety policies and procedures and site rules;
- Complying with the WHS Management Plan;
- Complying with any direction given to them by the Principal Contactor;
- Undertaking site-specific induction before starting work and signing off that they have completed this induction;
- Ensuring the workers they engage undertake site specific induction; and
- Ensuring they have the correct tools and equipment and these are in a serviceable condition for the task.

6.1.3 WORKERS

All workers on this project (including those employed by Contractors) are responsible for:

- Taking reasonable care of their own health and safety;
- Taking reasonable care that their conduct does not adversely affect others;
- Complying with instruction, so far as they are reasonably able; and
- Cooperating with reasonable notified policies or procedures.

6.1.4 SAFETY COMMITTEE

A Safety Committee will be established during the early stages of the project. The committee will have representatives from the subcontractors and the Principal (Head) Contractor. It will conduct regular inspections of the project, and will be actively involved in reviewing the Head Contractor's Safety Management Plan and making recommendations with regard to health and safety issues. All committee members will be adequately trained in the field of health and safety compliance.

6.2 RISK WORKSHOPS

Risk workshops will be conducted for all major activities prior to the activities commencing. Risks will be allocated to various personnel to be addressed and the risk mitigated prior to the task commencing.

6.3 PUBLIC SAFETY

Works will be undertaken with public safety as a significant consideration. Class A and B type hoardings will generally be erected around the site perimeter and where construction is occurring over or adjacent to public thoroughfares.

Formwork screens will be utilised to secure leading edges during construction of structural elements.
General safety measures will be undertaken as standard practice such as scaffolding around demolition works, adequate lighting, safety signage, provision of site security, flashing lights at vehicle cross overs, and physical barriers between construction works areas and public access areas.

6.4 SITE INDUCTIONS

All personnel involved with the project must undertake a range of inductions prior to commencing on site. These will include:

- Industry medical check-up and clearance to work;
- Client specific site inductions;
- Project specific induction; and
- Construction Contractor induction.

The Head Contractor will prepare and operate a specific site induction for all employees working on the project and ensure that every individual on the project attends a site-specific induction before he or she is allowed to start work.

This induction will be a requirement under the Occupational Health & Safety Plan to be formulated for the project. The site induction sessions will be held on a regular basis and where possible subcontractors will be requested to attend the week prior to the date they are due to start.

The site induction will include specific commentary on the Disruption Shutdown Application (DSA) and Permit to Work (PTW) processes. All employees will be educated on the behavioural and security requirements for the project. Any employee found to be repeatedly disregarding these requirements will be removed from site.

6.5 TRAINING

Personnel working on the project must provide training records as part of the induction process. Personnel are not permitted to work on tasks for which they are not trained.

6.6 HOUSEKEEPING

A high standard of housekeeping must be maintained throughout the project. Areas will be defined for waste storage bins, car parking, and laydown areas.

Hoardings, barricades, bunting, signs, bollards, temporary and permanent lighting will be extensively used throughout the project.

6.7 SITE SECURITY

A licensed security provider will be engaged to provide security services on the project. Preliminary details of the proposed site security methodology for the QQS project are detailed below:

- **Static Guarding** – A fully compliant and professional static security officer will be located at all entry and exit points during construction working hours
- **Compliance Management** – The security contractor will provide a compliance operator to operate the electronic compliance system that will be commissioned onsite.
- **Access Control** – Security guards stationed at the entry points to the site provide access control to the site. Each individual entering the site will have their ID card scanned by the electronic compliance system. This system

provides a record of every employee onsite and ensures that all subcontractors onsite have current and acceptable insurances, are bona-fide companies, and have all appropriate OH&S documentation in place.

- **Occupational Health & Safety** – The security guards at the entry gate control the entry of subcontractors and check that those entering site are wearing the appropriate PPE for working on a construction site.
- **Regular Patrols** - The security guards will also complete regular patrols of the site and will contact the Site Manager should any issues of concern be identified.

THE STAR

PUBLIC SAFETY, TRAFFIC AND PEDESTRIAN PEMANAGEMENT

7 TRAFFIC AND PEDESTRIAN MANAGEMENT, PUBLIC SAFETY

7.1 TRAFFIC MANAGEMENT PLAN

The Head Contractor must prepare a detailed Traffic Management Plan prior to the issue of a Construction Certificate. Describing the specifics of each phase of the project works to ensure vehicle movements to, around and from the site do not affect traffic arterials within the vicinity of the project or pedestrian movements around it.

The Head Contractor will manage traffic associated with the site to minimise the impact on the local area. The Traffic Management Plan will be incorporated in subcontractor agreements and the key points communicated to the workforce through the site induction procedures.

Traffic management and vehicle access to site during construction must comply with the Modification 13 Traffic Impact Statement.

Traffic will generally be managed in the following way:

- Designated transport routes will be communicated to all personal, and enforced;
- Designated peak hour and non-peak hour delivery vehicle waiting areas;
- Strict scheduling of vehicle movement will occur to minimise off site waiting times;
- On-site parking will be provided for up to 200 vehicles, however site workers will be encouraged to utilise public transport;
- Vehicle movements will be compliant with conditions of Consent and broader road-use regulations, particularly with regard to hours of work, materials loading and unloading, and over-sized deliveries and installation
- Stakeholder feedback will be incorporated into traffic plans if appropriate.

7.1.1 SITE CONTROL

Delivery of materials on the site, their storage location and the location of any temporary facilities will be determined in consultation with SEGL and controlled by the Contractor.

The main haulage route will be Pyrmont Bridge Road, Murray Street, Pirrama Road and return via Jones Bay Road, Pyrmont Street and Pyrmont Bridge Road. The construction works are expected to generate up to 24 deliveries per day.

7.1.2 PARKING

- The construction workforce may generate up to 216 private vehicle trips per day. This represents a 29% increase in existing AM peak trips to/from the site and a 16% increase in existing PM peak trips to/from the site.
- It is the intention of SEGL to allocate up to 200 on-site spaces for construction staff in its on-site car park during business hours. The Star has more than sufficient excess capacity, during business hours, to accommodate the increased parking demand.

7.1.3 TRAFFIC PLAN

Prior to commencing temporary modification of traffic arrangements, further approvals will be required from Council Roads Authority or under s68 of the Local Government Act including but not limited to, those applicable such as:

- Application / Notification to Work on Council Property;
- Temporary Lane / Road Closure Application; and
- Application for Permit to Occupy Road • After Hours Application (if required).

7.1.4 ENTRY AND EXIT

Construction vehicle entry/exit to the site will be via the following routes as outlined in the Modification 13 Traffic Impact Statement. This route will provide access to the main delivery locations around the site and will accommodate up to a 19m semi-trailer:

- Pirrama Road (Forecourt);
- Jones Bay Road Construction Zone;
- Jones Bay Road Loading Dock; and
- Pyrmont Street Construction Zone.

7.1.5 LOADING AND UNLOADING

Loading and unloading of materials must be carried out in accordance with the Modification 13 Traffic Impact Statement and within designated areas as mentioned and or as agreed with SEGL and the Head Contractor.

The following loading docks currently service the Star complex:

- Use of loading bays 5 and 6, in the Jones Bay Road loading dock, for construction deliveries;
- Use of the existing Loading Zone along the eastern kerb of Pyrmont Street (Between Jones Bay Road and Edward Street); and
- Proposed construction zones as identified in red hatched zones in Figure 4.

7.1.6 TRAFFIC CONTROL

Licensed Traffic Controllers must wear appropriate high visibility clothing and shall be obeyed at all times when conducting traffic control with a Stop/Slow bat.

7.1.7 SITE VEHICLE MOVEMENT

Movement of traffic on site must be restricted to the designated areas identified in the Modification 13 Traffic Impact Statement. Safety signs in place must be obeyed at all times.

7.1.8 DRIVING SAFELY

Vehicles that drive dangerously on and around the site shall be dealt with in accordance with the Head Contractors Site Induction (Failure to Comply Notifications).

7.1.9 INCIDENTS

Report traffic incidents that occur within the immediate vicinity of the construction site to the Head Contractor management whether or not they relate to the project. All incidents are to be reported to SEGL.

7.1.10 TRAFFIC MONITORING

In accordance with the relevant regulatory conditions, construction vehicles associated with The Star works, shall be monitored to ensure the adherence to the control measures detailed in the Head Contractor's Traffic Monitoring Management Plan. The Head Contractor is responsible for preparing and submitting this plan to the relevant statutory authority and obtaining its approval, then submitting this to SEGL.

The following measures must be included in the Head Contractor's Plan and employed to monitor and record the movement of vehicles accessing the construction site:

- Site inductions for all drivers accessing the site, which includes details of permitted access routes to and from the site, and vehicle management when on site;
- Fortnightly spot monitoring of vehicle movements by the Head Contractor to make sure that local road network, other than Jones Bay Road, is not utilised by heavy vehicles;
- Recording of any breaches identified through spot monitoring, through the Head Contractor's incident management system;
- Reviewing any complaints related to transport routes; and
- A procedure to manage traffic congestion for any potential impacts on neighbouring properties may be

developed, if necessary.

7.2 PEDESTRIAN MANAGEMENT

To allow for continuous public access, materials handling and management of pedestrian safety, some diversions from existing pedestrian routes will be required for large periods of the work. The installation of way finding signage and lighting will be professionally managed to ensure clear pedestrian understanding and preservation of safety and amenity.

7.3 PUBLIC SAFETY

Works will be undertaken with public safety as a significant consideration. Class A and B type hoardings will generally be erected around the site perimeter and where construction is occurring over or adjacent to public thoroughfares.

Formwork screens will be utilised to secure leading edges during construction of structural elements.
General safety measures will be undertaken as standard practice such as scaffolding around demolition works,

adequate lighting, safety signage, provision of site security, flashing lights at vehicle cross overs, and physical barriers between construction works areas and public access areas.

THE STAR

ENVIRONMENTAL MANAGEMENT

8 ENVIRONMENTAL MANAGEMENT

8.1 OBJECTIVES

8.1.1 ENVIRONMENTAL MANAGEMENT OBJECTIVES

An Environmental Management Plan (EMP) must be prepared by the Head Contractor and updated on a continuous basis, as a management tool for the protection of the environment during the works, prior to any works commencing. This is to be in line with SEGL's Environmental Management Objectives and approved by SEGL, prior to the commencement of any works. Refer also to Modification 13 Sustainability Report.

This plan will be a sub-plan of the Project Management Plan, which forms part of the Head Contractor's Management System which is to be certified to:

- AS/NZS ISO 9001:2008 – Quality Management System
- AS/NZS ISO 14001:2004 – Environmental Management System
- AS/NZS 4801:2001 – Occupational Health and Safety Management System
- New South Wales Government Accreditation Scheme.

8.1.2 SEGL'S OBJECTIVES ARE TO:

- Ensure that construction is carried out in accordance with appropriate environmental statutory requirements;
- Ensure that construction is carried out in accordance with the EMP;
- Ensure that construction minimises the chances of environmental degradation;
- Ensure that all employees engaged in construction of the works comply with the EMP plan; and
- Ensure that any necessary corrective actions are performed in a timely manner.

Applying these objectives would require the Head Contractor to evaluate and undertake all works in an environmentally responsible manner. This evaluation process will require the Head Contractor to assess its work activities, environmental potential risks and take adequate measures to ensure that these risks are managed.

8.1.3 OCCUPATIONAL HEALTH & SAFETY

The Contractor will be the nominated "Principal Contractor" as required under the WHS Act. This role will require the careful and controlled management of worker and public safety.

Detailed methodologies are yet to be developed, however typical approaches include job training, toolbox talks, and implementation of emergency management plans, safe work method statements, weekly WHS meetings and audits to confirm compliance.

The Contractor will be required to report on WHS on a regular basis.

8.2 FOCUS AREAS

The Head Contractor's Environmental Management Plan must address any areas of concern through sub-plans including, but not limited to:

- Spill Management. Refer to Modification 13 Waste Management Plan;
- Air Quality Management. Refer to Modification 13 Air Quality Report;
- Waste Management. Refer to Modification 13 Waste Management Plan;
- Noise and Vibration Management. Refer to Modification 13 Noise Impact Assessment;
- Liquid Waste. Refer to Modification 13 Waste Management Plan;
- Water Quality. Refer to Modification 13 Water Management Report;
- Disturbance of Flora and Fauna. Refer to the Modification 13 Arboricultural Assessment;
- Indigenous and European Heritage. Refer to the Modification 13 Aboriginal and Historical Archaeological Assessment;
- Visual Amenity. Refer to the Modification 13 Visual Impact Assessment;
- Refuelling; and
- Groundwater Management. Refer to Modification 13 Water Management Report.

8.3 ENVIRONMENTAL PROTECTION SYSTEMS AND PROCEDURES

In accordance with the Head Contractor's Environmental Management Plan, a number of procedures must be in place to ensure minimal environmental impact occurs during construction activities. These procedures will be applied to all items within the scope of work.

8.3.1 ENVIRONMENTAL MONITORING

Air, water and noise monitoring will be performed in accordance with the EMP prepared by the Head Contractor, and the Modification 13 Air Quality Report, Modification 13 Water Management Report and Modification 13 Noise Impact Assessment.

8.3.2 ROLES AND RESPONSIBILITIES

Roles and responsibilities will be clearly defined amongst the project team so as to ensure that the following objectives are achieved:

- That construction risks are identified, then eliminated or minimised through a combination of Safe Work Procedures, site specific inductions, training (if necessary) and design changes;
- Subcontractors are committed to the adhering of this policy and are constantly updated with training;
- Supervisors, suppliers and subcontractors' environmental performance is appraised and any recommendations made and followed through; and
- Supervisors and subcontractors (especially foreman) understand the processes and procedures of the environmental requirements.

If in the event of an environmental non-conformance ensure corrective actions are actively pursued and actions are implemented to avoid re-occurrence.

8.3.3 HIERARCHY OF CONTROLS

The Contractor will control all risks identified by applying the Hierarchy of Controls as follows:

- Eliminate;
- Substitute;
- Isolate;
- Engineering controls;
- Administrative controls; and
- Personal Protective Equipment.

Where possible, the Contractor will implement risk controls that are high in the order and will implement multiple controls where necessary.

8.3.4 TRAINING

Every employee and subcontractor working on this project will be given instructions as to the importance of environmental protection. The training will emphasise the importance of constantly monitoring environmental protection measures. It will be enforced upon all site team members to immediately report any environmental problems/hazards to the appropriate manager:

- Discuss environmental plan and site procedure with the Head Contractor;
- Ensure relevant sections are discussed with the particular subcontractors at the site induction; and
- Post in the site office the Environmental Incident Management Chart.

8.3.5 AUDITING

The appointed Head Contractor must adopt its standard policy process of internal review that ensures a process of audit is adopted. This is to ensure compliance with SEGL's company procedures, and also compliance with planning approval and the terms of the Construction Certificate.

8.3.6 COMPLAINT HANDLING

A complaints handling and communications plan will be established by the Head Contractor.

8.3.7 EMERGENCY PROCEDURES

Emergency Procedures on site will cover actions to be taken in case of emergencies.

The procedures below are to be followed:

- The first priority is the safety of any persons; checks should be made to ensure that all personnel are accounted for;
- The second priority is to quickly minimise any environmental damage; and
- All emergency action should take place as soon as possible after the event.

Actions to be taken may include:

- The temporary re-establishment of the control structure;
- The taking of appropriate samples to determine the extent of the problem;
- Contact SEGL; and
- Formulate an action plan to rectify any situation.

8.3.8 EMERGENCY CONTACT PROCEDURES

The Head Contractor will provide 24 hour contact details for personnel who are authorised to immediately respond in any environmentally sensitive situation that may potentially lead to pollution of the environment. All calls are to be recorded.

8.3.9 IDENTIFYING HAZARDS AND MANAGING RISKS

The Contractor will systematically identify hazards and assess risks before the project starts by using the hierarchy of control in conjunction with:

- Developing Safe Work Method Statements (SWMS) to control risks associated with high risk construction work;
- Using a risk management form to control general construction risks where necessary;

The Contractor will also identify risks:

- Before buying or re-ordering any chemicals;
- When introducing a new task; and
- When new information is received about tasks, procedures, equipment or chemicals.

All hazards that are identified throughout the project must be reported immediately to the principal contractor.

The Contractor will inform all workers of their risk management procedures and ensure they are trained in risk management

8.4 ENVIRONMENTAL FOCUS AREAS

8.4.1 NOISE CONTROL MONITORING

In relation to noise control and monitoring, the Head Contractor will comply the conditions of Major Project Approval MP08_0098 and also the Modification 13 Noise Impact Assessment.

8.4.2 AIR QUALTIY AND ODOUR CONTROL

Activities carried out on site will be such as to ensure that, all equipment used and all facilities erected are designed and operated to control the emission of dust, smoke and fumes into the atmosphere.

It should be noted that all new kitchen exhausts, as well as those being extended will be treated with a combination of electrostatic, water washing and ultraviolet to ensure no pollutant or odours are emitted. Refer to the Modification 13 Air Quality Plan.

All waste materials will be removed from that site in a manner approved by SEGL's Representative. All rubbish and food scraps will be immediately placed in designated containers fitted with lids, ad disposed of as outlined in the Modification 13 Waste Management Plan.

8.4.3 AIR QUALITY AUDIT

Where non-compliance is discovered during an audit, it shall be immediately corrected. As a minimum, the frequency of audits will need to be determined in accordance with the EMP prepared by the Head Contractor, as prior to, during, and shortly after construction works have been undertaken.

8.4.4 AIR POLLUTION HAZARD

If air pollution constitutes, contributes to or may develop into an environmental hazard, the Head Contractor will implement steps to eliminate or constrain the hazard or potential hazard.

8.4.5 DUST CONTROL MANAGEMENT

Dust control will be implemented in areas of all active demolition and construction. Dust control will also be implemented within the construction zone as determined by the Contractor, and as required for the health and safety of employees.

All works will be undertaken in accordance with a 'Construction Air Quality' sub-plan as part of the Environmental Management Plan. Dust control measures will be implemented as required, and in accordance with Protection of the New South Wales Environment Operations Act.

Dust management will be most critical during the demolition and excavation phases of the project. All subcontractors involved with these works will be required to provide Environmental Work Method Statements that specifically address dust management.

Methods of reducing dust that will be implemented are:

- Encapsulating work zones through the construction of engineer designed full height dust proof scaffolds / hoardings
- Reviewing tool and plant selection in an attempt to select plant with superior acoustic performance
- Utilising concrete saw cutting techniques to reduce dust generation
- Continuous cleaning throughout dust generating work activities
- Ensuring demolition debris skips are covered at all times.
- Site perimeter – Solid panel hoarding will be provided on the boundary during the overall construction phase and perimeter scaffolds clad in shade cloth will be provided during demolition to minimise the escape of dust
- Demolition – All trucks removing materials from site will be loaded whilst inside the site perimeter, with loads covered before exiting
- Demolition and excavation – Working surfaces will be watered down as required with stock piling of material Minimised
- Plant movement within the basement will be minimised with all loads covered before exiting the site and a stabilised driveway maintained
- Construction – A high level of housekeeping to minimise the likelihood of windblown dust and the banning any dry grinding will be maintained.

8.4.6 WASTE MANAGEMENT AND DISPOSAL

All solid, liquid and gaseous wastes disposal must be in accordance with any statutory authority's legislation as well as the Environmental Management Plan prepared by the Head Contractor. This is to be in line with SEGL's Environmental Management Objectives and approved by SEGL, prior to the commencement of any works.

It will be part of the Contractor's philosophy that a tidy site is a safe site, and this principle will be maintained

throughout the construction duration. Rubbish bins/skips will be provided at strategic positions around the site,where all subcontractors will be required to clear their rubbish as it accumulates. These bins will be brought down the building in the construction hoists / builders lifts and loaded via forklift into the large skips for removal from site. A specific Waste Minimisation Plan will be developed in accordance with the Contractor's Environmental Management System to ensure optimum waste management initiatives are implemented.

The Contractor will develop a Waste Minimisation Plan that is included as a sub plan of the Environmental Management Plan for the Project. The aim of this plan is to work at best practice in minimising the amount of waste produced during the development and manage that waste in order to reduce the amount going to landfill.

The Waste Minimisation Plan (WMP) will exceed regulatory requirements and meet compliance with potential Green Star benchmarks set for the Project. In setting such high standards and to achieve waste re-use and recycling onsite, the site-specific Waste Minimisation Plan will be implemented. The Contractor's project team will be trained in the WMP and the subcontractors informed on variations to the required changes from the industry 'business-as-usual' approach.

Subcontract trade packages will be prepared and tendered to ensure optimum recycling through Waste Management achieves the required Green Star targets.All rubbish will be removed from site on a daily basis via wheelie bins and deposited in bins/skips which will be provided at strategic positions onsite. Where space permits, the Contractor will also provide specifically labeled recycling bins for materials such as cardboard and plasterboard to maximise the amount of material able to be recycled.

In addition, all subcontractors are responsible for removing their own packaging and other re-usable items such as pallets from site. Adopting this policy:

- Promotes recycling by subcontractors and suppliers
- Removes unnecessary packaging at the source rather than at site
- Reduces the amount of rubbish being sent to land fill.

Monthly reports detailing the overall percentage of rubbish being recycled will be provided by the waste disposal contractor. This information will enable the effectiveness of the implemented waste management strategies to be monitored and appropriate steps to be taken if necessary to improve.

8.4.7 BUILDERS WASTEAND RECYCLING

SEGL is committed to sustainability leadership in energy and waste reduction within the entertainment sector, and greening their footprint in the communities in which they operate. Sustainability is an ongoing and constantly improving process for SEGL at organisational, operational and at an individual site levels. The Modification 13 works must be designed and delivered in accordance with the Modification 13 Sustainability Report and SEGL's Sustainable Design Guidelines.

The guideline outlines a holistic approach to sustainability specifically for SEGL's assets and sets out the following environmental targets to be achieved in 2016 measured against a 2013 baseline:

- 5% potable water reduction;
- 5% reduction in energy consumption;
- 5% greenhouse gas (GHG) emissions savings; and
- 10% increase in operational recycling rates.

Further to Section 10.4.6.Waste Management, detailed recycling programs will be developed for both demolition and construction phases of the works. The site subcontractors will be required to report on extent of recycling achieved and be subject to Environmental Audits.

8.4.8 HAZARDOUS MATERIALS

Consultant survey works are required in order to establish existing site conditions and identify any remediation works that may be required. This investigation would include:

- Hazardous material (Hazmat) survey of the existing structures
- Any additional requirements for soil classification, sampling and analysis works
- Community liaison plan to be established and contact made with relevant authorities.

In the event that hazardous materials are uncovered once site works have commenced, the following procedures and principles will be followed; this would be consistent for expected and unexpected hazardous materials:

- Notification to client and project stakeholders
- The contractor to develop a remediation management plan
- Advise the client of the most cost and time efficient solutions whilst adhering to industry best practice standards
- Agree strategy and commence implementation.

With asbestos for example, all employees need to be trained in the recognition of asbestos and synthetic mineral fibre (SMF) as part of their employers Safe Work Method Statements (SWMS). Employees would cease work on discovering any Hazmat not identified in the report and then inform their supervisor who would arrange for the appropriate action to be taken.

General procedures for hazardous materials removal (including asbestos) will usually be carried-out as follows, but often specific details and procedures will be developed upon material identification. Detailed work method statements will be produced identifying processors such as:

- The area to be decontaminated to be bunted off at a minimum 10 metre radius
- Asbestos warning signage to be erected to inform people of the nature of the work being carried out
- No Unauthorised Access' signage to be erected
- Water points to be established
- Personal Protective Equipment (PPE) including but not limited to Hard Hat, Safety Boots, Disposable Coveralls,
- Gloves, Masks and Glasses to be worn at all times when in the Hazmat removal zone
- All personnel involved in the removal of asbestos to have attended and completed the approved Work cover
- courses and to be the holders of valid, Work Cover approved asbestos removal licenses
- Tools and equipment appropriate to the type of asbestos containing material to be used for its removal in order
- to minimise the disturbance of the material thus preventing the release of fibres
- Where appropriate, water to be used to keep the material slightly damp thus minimising the chances of dust and
- fibres being released
- All asbestos waste to be wrapped in 200µm plastic and tightly secured
- All asbestos waste to be removed from site and disposed at a licensed EPA asbestos disposal facility
- Asbestos waste to be removed at the end of each shift. Stockpiling of asbestos will not be permitted
- Clearance certificates to be provided on completion of Hazmat Removal.

The protection of all council infrastructure including trees, overhead cables, and existing services will be managed to ensure that all infrastructure is maintained, and in the same condition at the completion of the project.

The following protection procedure will be adopted:

- Ensure all existing services are identified, and terminated or diverted as appropriate
- Ensure movement or placement of construction plant does not damage infrastructure
- At the beginning of construction we will advise adjoining and nearby properties of commencement date,
- possible disruptions and approximate construction time.

8.4.9 SITE REMEDIATION AND HAZARDOUS MATERIALS

Consultant survey works have already been carried out to establish existing site conditions and to identify any remediation works that may be required. As hazardous materials have already been identified procedures and principles have been developed. These procedures and principles will be consistent for expected and unexpected hazardous materials.

They are outlined below:

- Notify client and project stakeholders
- Develop a Remediation Management Plan
- Advise the client of efficient solutions according to industry best practice standards
- Agree strategy and commence documentation of DSA (Disruption Shutdown Applications)
- Communicate DSA to all stakeholders
- Validation of Remediation Action Plan upon completion of hazardous material removal.

Hazardous substances supplied to the project will be approved for use and accompanied by a current Material

Safety Data Sheet (MSDS). All hazardous substances will be registered, correctly stored, decanted, used and disposed in accordance with the MSDS and regulatory requirements. Employees will be trained in the Safe Work Method Statement (SWMS) based on the MSDS and provided with the appropriate Personal Protective Equipment (PPE).

8.4.10 SITE DISCHARGE

Any discharges from the site will be strictly controlled to ensure hazardous materials and contaminants are contained to authority requirements and do not pollute the council storm water system or Darling Harbour.
The contractor will have within its standard procedures, the requirement of spill kits for hazardous materials also including environmental audits that review the usage and storage of hazardous materials onsite.

8.4.11 DEWATERING

The Developer and Contractor are committed to the management of water discharge from the site throughout the duration of the project. To ensure effective management, a 'Water Quality Management Plan' as a sub-plan to the Environmental Management Plan will be implemented.

Key management strategies include:

- Objective – Avoid the release of contaminants to waterways / drainage systems
- Target – All water discharged complies with the Healthy Waters State Planning Policy
- Measure – Water Quality records confirming compliance with pre-discharge limits.

These and other water quality aspects at the Site will be controlled by:

- Weekly environmental inspections
- Water quality recording
- Training for responsible staff
- Tool Box talks for trade staff
- Subcontractor Environmental Work Method Statements.

8.4.12 SILT PROTECTION

A stormwater and sediment control plan will be developed to ensure that stormwater from the project does not enter the harbour without being filtered, and that no water entering the council stormwater system contains silt or other contaminants.

The stormwater and sediment control plan includes but is not limited to providing further detail to the below key control measures:

- Extent/location of silt protection to be installed
- Extent of silt curtains to be installed along Cockle Bay
- Extent/location of sediment basins to be installed
- Regular weekly checks of silt fences, banks and the like
- Specific checks after any significant storm event to ensure integrity and performance of silt protection
- Sediment fences to be repaired as required and excessive sediment deposits should be removed
- Water quality samples must be taken and analysed prior to the release of any water from the sediment pond/catchment
- All water quality data including dates of rainfall, testing and water releases must be maintained in an onsite register
- Maintenance and cleaning of adjoining/surrounding access roads.

8.4.13 LIQUID CONTAMINANTS

Liquid contaminants may be diluted with water to a level of quality acceptable in the sewer system, subject to statutory and local requirements. If not permitted, liquid contaminants will be stored in approved vessels for disposal at approved locations.

Solid or liquid waste must be disposed of in prescribed areas and in the manner nominated by the Head Contractor's EMP as approved and signed off by SEGL.