Contractor Handbook

Campus Infrastructure & Services
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1. Introduction

1.1. Purpose and Objectives of Handbook

The University of Sydney (the University) is committed to ensuring the rights of everyone to a safe working environment are respected and maintained. This is regardless of whether they are workers, students, Contractors (and their workers) or visitors potentially affected by activities on our campuses.

This Contractor Handbook has been developed to outline the requirements for Contractors undertaking works (construction, maintenance, cleaning, technical, consulting etc.) for or on behalf of the University.

As a prior condition to commencing any work within one of the University Campuses, Contractors are required to read through this Handbook to ensure an understanding of the Campus Infrastructure & Services (CIS) Work Health and Safety (WHS) Management Systems and Environmental requirements which provide specific rules for working on site. By reading and understanding this guide, everyone working within the University will be able to play their role in maintaining a safe workplace for all. All Contractor workers are required to be familiar with the necessities of this document and effectively implement its requirements.

Any failure to obey and follow these rules at all times whilst onsite can result in:

- You or others around you being harmed or suffering injuries
- Your immediate removal from the site
- Your company’s removal from the University site
- Your company ceasing contract work with the University
- You / your company being fined and/or prosecuted by SafeWork NSW

All Contractors are required to work to all imposed legislative requirements associated with their scope of engagement.

1.2. Culture Statement

The University has laid out a path towards best practice in health and safety with an ultimate goal of achieving a genuine commitment to health and safety by everyone involved with university related activities, resulting in a positive WHS culture.

The way Contractors carry out their work, their behaviour, their appearance, communications with and attitude to others while on campus is a direct reflection of CIS. It is therefore essential that all Contractors keep this in the forefront of activities. This, along with the purposes and objectives outlined above, should provide a clear indication of the University expectations of Contractors.
1.3. Community Engagement

The University is more than a workplace for our staff and a classroom for our students. We welcome visitors and take particular pleasure in seeing local residents making the most of our cultural, and sporting activities, or simply enjoying the blend of heritage and modern architecture, gardens and public spaces our campuses provide.

We are working to re-emphasise partnerships with our neighbours in the suburbs that surround our campuses. We aim to improve local infrastructure and access to campus facilities, provide employment and education opportunities, and broaden the experience of our students.

Contractors are expected to respect the community that the University operations may influence, understanding that their actions can either positively or negatively impact and reflect upon the University.

1.4. About the University

The University of Sydney is Australia’s oldest University, with over 52,000 students and 5,350 academic staff members (March 2014) plus numerous professional staff. It provides a platform for teaching, learning and research. The University has a large and diverse portfolio of physical assets, which includes buildings, grounds, site services and other infrastructure. These assets are essential to the efficient and effective functioning of the University and support its core teaching and research activities.

The Campus Infrastructure & Services (CIS) Department is located on the University of Sydney Darlington Campus (Building G12, 22 Codrington Street, Darlington). CIS is responsible for the University long and short range campus planning, capital resource planning, project delivery, property management, assets and services management and operations.

1.5. Vision and Values

Our strong shared identity binds our broad range of academic disciplines together as a single university community and shapes our strategy.

Through our Strategic Plan 2016–21, we aim to strengthen our ability to enable the brightest researchers and the most promising students, whatever their social or cultural background, to thrive and realise their full potential to benefit both Australia and the wider world.

We have a range of strategic objectives, with particular focus on a small number of areas that reach across academic disciplines to deliver leadership and change in areas of national and international importance.

1.6. University Campuses

The University has a network of teaching campuses spread throughout the Sydney area. The main Camperdown/Darlington campus is well known as the home of our historic sandstone
buildings, gargoyles and cloisters, lawns and courtyards. But this is just one part of the picture.

Across our campuses are lecture theatres, teaching spaces and studios with state-of-the-art facilities, laboratories with the latest technology, clinical schools to support professional development and experimental farms and research stations to put theory into practice.

Overall, the University consists of nine (9) campuses:

- Camperdown/Darlington Campus
- Cumberland Campus
- Camden Campus
- Burren Street Campus
- Mallett Street Campus
- Sydney Conservatorium of Music Campus
- Sydney College of the Arts (SCA) at Rozelle Campus
- Surry Hills Campus
- CBD Campus

And other remote premises of the University include farms, field stations and Plant Breeding Institutes (PBI). The PBI has access to numerous sites across NSW such as Cobbitty in the Sydney basin and Narrabri in the fertile soils of North-west NSW. These locations give the researchers access to different soils and climate which aids our research objectives.

Maps of the various campuses can be found here:


Summary information about various campuses can be found here:


1.7. Disclaimer

CIS has prepared this Handbook in order to assist Contractors and their employees to work safely on the University grounds and abide by WHS legislation and the University policies relating to people, property, WHS and the Environment. All Contractors must comply with every requirement set out in this Handbook, which is in any way applicable to the activity they undertake for the University.

The University Policies and Procedures identified in this Handbook are subject to change and as such the Contractor is responsible for ensuring adherence to current protocols which are available online. Every effort has been made to explain the local site rules and obligations of Contractors and their workers working at the University. However, responsibility to understand and observe relevant legislation and other legal obligations remains with the Contractor at all times.

The latest version of this Handbook will always be available on the University website here:

2. Getting Started

2.1. Qualification and Approval

The University is committed to providing and maintaining the highest possible standard of health, safety and welfare for its workers (including workers, students, visitors, contractors and labour hire staff) entering any of the Campuses.

The University aims to meet or exceed all relevant health and safety legislation. The University has adopted a risk management approach by identifying, assessing, eliminating or controlling and monitoring all health and safety issues in the workplace. The University is committed to the implementation of preventative strategies that are integrated into day-to-day operational management. To achieve this goal, CIS has set minimum health and safety standards and requires all Contractors to demonstrate their capacity to meet these standards as part of the qualification process to undertake work at the university.

This includes a specific University WHS Policy that encompasses formal evaluation of all Contractors used by the University and subsequent site observations, consultation, audits, inspections and reviews to track WHS performance of Contractors working on site.

University personnel are accountable for workplace health and safety. This responsibility includes the evaluation of the health and safety aspects within tenders, engagement of suitably qualified Contractors, provision of information to new Contractors and monitoring the safety performance of the Contractors.

The intent is to minimise risks to health and safety of Contractors and the University community from any activities undertaken by Contractors engaged to perform works on behalf of the University. This is achieved through the systematic approach to Contractor management by controlling risks associated with Contractor’s works through:

- The design and implementation of systems of work that are safe
- Undertaking hazard identification and risk control activities
- Providing proper and safe equipment and substances
- Providing adequate instruction, training and supervision

As part of the qualification and approval process the Contractor is also required to:

- Produce a copy of their WHS Policy/Plan/System including all safe systems of work statements, as required
- Provide copies of relevant experience, insurance coverage (Workers Compensation, Public Liability, Professional Indemnity insurance etc.), SafeWork NSW registrations and licence information
- Participate in annual review, as required
2.2. Contractor Categories

All Contractors are categorised in the following table depending on the nature of engagement at the University.

<table>
<thead>
<tr>
<th>Category</th>
<th>Scope</th>
<th>Examples</th>
</tr>
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</table>
| 1. Administrative                 | Contractors engaged to work for or on behalf of the University operations.  
Work is generally low risk in nature and not in hazardous locations. | Office cleaners; administration staff; office equipment servicing. |
| 2. Consultative                   | Contractors providing technical advice and services.                  | Engineers; designers; training; IT based technical/systems development. |
| 3. Facilities & Maintenance Services | Contractors engaged to carry out work for operations where the work may at times have medium-high risk and/or be conducted in fully operational areas, or involve high-risk work as defined in WHS Act. | Transport; haulage; routine servicing, maintenance or repair on fixed plant, mobile equipment and buildings; outdoor services (e.g. gardening) and outdoor technical consulting. |
| 4. Specialist                     | Contractors engaged to carry out work that has reasonably medium-high risk work or required a specialist license or authorised permit to perform the work, or involve high-risk work as defined in WHS Act. | Asbestos removalists; electricians; plumbers; demolition; confined space works, farm works. |
| 5. Capital/Construction Works     | Contractors engaged to carry out construction projects where the Contractor has control or management of a designated construction zone.  
Where practicable, these zones are physically separated from operational activities. | Construction Contractors; plant installations; major refurbishments. |

Table 1 - Contractor Categories

This categorisation aids in the management of Contractors and determining additional requirements that the contract manager may stipulate. For example, additional site specific
inductions, applicability of construction cards, copies of licenses/permits/assessments, audits and scheduled reviews, WHS management plans and so on.

CIS Project/Contract Manage will provide direction as to the specific requirements to the scope of engagement.

2.3. Induction and Location-Specific Inductions

All Contractors are required to pass the following inductions prior to commencing work within the University campuses:

- **Contractor Online Induction** (organised through CIS)
- **Contractor location-specific inductions** such as animal farms, telescopes, chemical laboratories, etc. (organised through CIS Project/Contract Manager and carried out by University department/faculty staff) as required
- The **Contractors own induction** and training program

2.3.1. Contractor Online Induction

The Contractor Online Induction is mandatory for all contractors and is organised by the CIS Project/Contract Manager. Induction is available online:


2.3.2. University of Sydney Contractor ID Card

After the successful completion of the Contractor Online Induction workers are eligible for a University of Sydney Contractor ID card. The card can be collected in 2 business days-time from CIS Reception Level 1, G12 Services Building. Workers must bring a current photo ID when collecting the card as a photo identity check is required to issue the card. A photo of the worker is also taken for printing onto the card.

If the worker is unable to collect the card in person, please contact the CIS Helpdesk on 1300 CAMPUS (226 787) to make other arrangements. This card is valid for 3 years from the date of issue.

When working on any campus the Contractor must, on demand, provide proof of induction by showing the University of Sydney Contractor ID card. If the Contractor cannot produce the card, they will be instructed to stop work until such time as their induction status can be confirmed (at the cost of the Contractor). If no induction status can be easily and readily determined the Contractor may be requested to leave the campus.

2.3.3. Contractor Location-Specific Induction

In certain areas, location-specific inductions are required in addition to the Contractor Online Induction.
The Contractor must coordinate with the CIS Project/Contract Manager to determine whether a location-specific induction is necessary. For that, the local point of contact (i.e., often a building manager) must be consulted 48 hours prior to any scheduled works. The local point of contact will be able to advise and coordinate for a nominated responsible person from the location to deliver the induction to the contractor. The CIS Project/Contract Manager will provide details of who to contact.

Records of these inductions will be kept by the responsible department/faculty. The following areas and Faculties are identified as having additional inductions. The local point of contact for these areas and Faculties must be consulted 48 hours prior access:

- The Charles Perkins Centre, including laboratories
- Sydney College of Arts
- Faculty of Engineering and IT, including laboratories, research and development locations, the Australian Centre for Field Robotics and the School of Aerospace, Mechanical & Mechatronic Engineering
- Faculty of Dentistry
- Sydney Nursing School
- Faculty of Agriculture and Environment
- School of Physics
- Faculty of Science
- School of Molecular Bioscience
- Sydney Nanoscience Hub
- F09 (Madsen Building)
- F11 (Chemistry Building)
- Molonglo Observatory Synthesis Telescope (MOST)
- Narrabri Observatory which hosts the University Stellar Interferometer (SUSI)

This is not an all-inclusive list of areas requiring induction. The contractor and CIS Project/Contract Manager must check with the local point of contact prior to commencing any works.

2.4. Gaining Site Access and Campus Security

On (first) arrival, all Contractors must collect their University of Sydney Contractor ID card as indicated above. The card must be with the contractor at all times whilst on campus and produced on request from any University staff member.

Lost University of Sydney Contractor ID cards, access swipes or keys will result in the requirement to pay a replacement fee – which can be between $15 and $575,000 dependent upon the item lost and potential security risk.

Prior to any work being carried out on campus the CIS Project/Contract Manager must ensure that the Contractor is provided information relevant to known risks and hazards of the worksite and associated tasks.

This information is provided as part of the site-specific induction organised by the CIS Project/Contract Manager and local point of contact, the project documentation and project start-up meeting where appropriate.
2.4.1. Sign In / Sign Out

Certain areas require the Contractor to sign in/out on arrival/departure. This information is provided as part of the site-specific induction organised by the CIS Project/Contract Manager/FM Manager and local point of contact.

2.4.2. Security Contact Details

Campus Security is available 24 hours a day to assist with handling an emergency or safety threat. They regularly patrol our grounds and can be reached on:

- Campus Security (general enquiries) – (02) 9351 3487
- Campus Security (24-hour emergency response) – (02) 9351 3333

2.4.3. Restricted Access Areas and Other Specific Hazard Locations

Contractors who require access to restricted or controlled/secured areas will be required to obtain formal authorisation for access.

Restricted and controlled/secured areas may include but are not limited to:

- Laboratories (PC2 and PC3 biohazard labs, research and experimental labs, etc.)
- Plant rooms
- Roofs and roof spaces
- Remote areas
- Chemical stores
- Radiation stores
- Biohazard rooms
- Rooms containing asphyxiant gases
- Microwave dishes – non-ionising radiation risk
- High Voltage substations
- Farms
- Telescopes
- Animal Houses

To assist with identification of restricted areas, the CIS Project/Contract Manager/FM Manager in cooperation with the Contractor, must liaise with the local point of contact, who will be able to provide a list of restricted access areas similar to that shown below.
Each restricted area has a nominated area supervisor, sometimes called “Room Custodian”, “Contact Person” or “Lab Manager”.

Approval to access these restricted areas must be sought at least five (5) working days prior to works commencing with the CIS Project/Contract Manager/FM Manager AND the restricted area supervisor.

**AT NO TIME CAN CIS WORKERS, CONTRACTORS AND THEIR WORKERS ENTER A RESTRICTED AREA WITHOUT PERMISSION FROM THE RESTRICTED AREA CONTROLLER.**

Contractors are not to enter a restricted area unless such authorisation has been obtained, even if another University worker or student provides them with access.

Before work proceeds in a restricted area, the relevant area supervisor will provide specialist advice on requirements for entry and work procedures. This may include working under constant supervision of University personnel.

Some restricted areas are identified with signage located on doorways and access points to these locations. Contractors are required to follow the requirements of signage which will identify hazards within the space, precautions that must be observed and emergency contact persons.

### Image 1 – Example of Restricted Access Areas List

<table>
<thead>
<tr>
<th>Area name</th>
<th>Room number</th>
<th>Contact person</th>
<th>Contact person phone number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Workshops</td>
<td>S112, J07</td>
<td>Mr. Duncan Stenger</td>
<td>9351 2459</td>
</tr>
<tr>
<td>FSAE Car Workshop</td>
<td>S116, J07</td>
<td>Mr Greg Elder</td>
<td>9351 7163</td>
</tr>
<tr>
<td>Student Workshop</td>
<td>S120, J07</td>
<td>Dr. Matthew Dunn</td>
<td>9351 7150</td>
</tr>
<tr>
<td>Halliday Laboratory</td>
<td>S173</td>
<td>Dr. Philip Boughton</td>
<td>9351 5018</td>
</tr>
<tr>
<td>Combustion Laboratory</td>
<td>S147, J07</td>
<td>Prof. Hala Zreiqat</td>
<td>9351 2392</td>
</tr>
<tr>
<td>Biomaterials Laboratory</td>
<td>S197, J07</td>
<td>Dr. Doug Auld</td>
<td>9351 2338</td>
</tr>
<tr>
<td>Tissue Engineering Lab</td>
<td>S183, J07</td>
<td>Dr. Doug Auld</td>
<td>9351 2338</td>
</tr>
<tr>
<td>Server Room</td>
<td>N107, J11</td>
<td>Dr. Doug Auld</td>
<td>9351 2338</td>
</tr>
<tr>
<td>Wind Tunnel</td>
<td>N210, J11</td>
<td>Dr. Doug Auld</td>
<td>9351 2338</td>
</tr>
<tr>
<td>Flight Simulator Bennett Laboratory</td>
<td>N209, J11</td>
<td>A.Prof. Peter Gibbens</td>
<td>9351 7350</td>
</tr>
<tr>
<td>Jabiru (Bird Lab)</td>
<td>N121, J11</td>
<td>Mr John Toddhunter</td>
<td>9351 7137</td>
</tr>
<tr>
<td>Flight Simulator Bennett Laboratory</td>
<td>N209, J11</td>
<td>A.Prof. Peter Gibbens</td>
<td>9351 7350</td>
</tr>
<tr>
<td>Field Robotics</td>
<td>E1E Bldg</td>
<td>Mr Ritesh Lai</td>
<td>9036 6392</td>
</tr>
<tr>
<td>Fluid Mechanics</td>
<td>126, J13</td>
<td>Prof. Steven Armfield</td>
<td>9351 2927</td>
</tr>
</tbody>
</table>
Image 2 - Authorised Entry to Lab Sign

The University's standard ‘authorised entry only’ signage provides basic information about:

- the hazards in the areas
- the safety precautions required when entering or working in the area
- contact details for the area supervisor
- emergency contact details for the building

2.4.4. Keys/Swipe Cards

The CIS Project/Contract Manager/FM Manager will inform the Contractor where to collect the keys/cards. The keys/cards must be returned at the end of every day or, if arranged with the CIS Project/Contract Manager, at the completion of the project of contract.

2.4.5. Permit to Work

For certain activities and for working in certain areas, a Permit to Work must have been requested from the CIS Project/Contract Manager and approved (e.g. roof access, working at heights, work in a confined space, asbestos removal, lead paint removal, excavation etc.). A minimum notice will be required depending on the type of permit required (as specified within each permit), unless it is an emergency situation/call out. The CIS Project/Contract Manager will advise what permit(s) and notice periods are necessary.

Refer to section 4.1. Permit to Work for further information.
2.4.6. Hours of Work

Business Hours

Hours of operation vary across the University and the Campus. It is important to clarify with the area to be accessed but as a general rule consideration should be to the 8.30am-5pm hours.

Contractors may refer to this website for various operating hours of libraries, campuses and faculties.


Work After Hours

All buildings are alarmed after hours. If a Contractor requires access outside of normal business hours, they must receive prior approval in writing from the CIS Project/Contract Manager (will be required to show the approval to Campus Security for building alarms) and access must have also been arranged by the local Point of Contact prior to entry. Additional costs may be incurred if security are called out after hours.

2.5. Vehicles

Contractors and their personnel must observe all parking, road markings, directional and control signage within University grounds. Pedestrians always have right of way and specified speed limits on University grounds must be strictly obeyed at all times.

All vehicles entering the campus must park in accordance with the restricted parking area conditions and posted directions. Restricted and parking area conditions apply 7 days a week 24 hours a day. The parking station operates on a 24 hour basis. Infringement notices will be issued upon any vehicles parked illegally. Fines will not be waived in such circumstances.

Vehicles delivering materials and tools to work site, and displaying a current parking permit, may park in allocated loading zones. These are not intended for all-day parking, with a general provision of 30 minutes maximum stay. Vehicles failing to display a current parking permit, or parked in an incorrect area, will receive a parking infringement notice.

Additional information on parking locations and parking permits available here:


Parking or driving across footpaths and grassed or landscaped areas is prohibited. In instances where the nature of work makes essential to locate a vehicle on landscaped areas the following steps must apply:

- The Contractor must notify the CIS Project/Contract Manager of specified works within five (5) working days
- The Campus Grounds Manager or nominated representative must advise the CIS Project/Contract Manager and Contractor of approved pathway and location for parking

Contractors are reminded that while on the University campuses they are still required to wear seatbelts whenever travelling in a vehicle. Should a contractor be found not wearing a seat belt on campus, then the contract may be subject to review.

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Mobile phones should not be used when driving, except with a hands free device when required for the work and only to answer or make calls and only if the phone is secured in a fixed mounting and does not require you to touch or manipulate the phone in any way.

University traffic and parking policy and procedure can be found here:


2.6. Code of Conduct/Policy

The University Code of Conduct applies to all University staff and affiliates. The Code of Conduct is located here:


2.6.1. University's Indigenous Policy and Targets

We believe in Aboriginal and Torres Strait Islander participation at every level of our study, work and research. It is a core part of our purpose as a university.

As Australia’s first university, we take seriously our position as an iconic institution that has provided Australians with more than 160 years of opportunity. The Wingara Mura – Bunga Barrabugu strategy renews our efforts to provide Aboriginal and Torres Strait Islander peoples with opportunities to join one of Australia’s best universities – and to succeed.

The Wingara Mura – Bunga Barrabugu strategy is an important element of our Strategic Plan 2011–15, which makes the promotion of Aboriginal and Torres Strait Islander participation, engagement, education and research one of our core objectives. As part of our response to the Strategic Plan, and the 2009 Review of Indigenous Education before it, we have already begun the changes that will support the implementation of this new strategy, including:

- growth in Aboriginal and Torres Strait Islander employment at the University
- the appointment of a Deputy Vice-Chancellor (Indigenous Strategy and Services)
- attention given to Aboriginal and Torres Strait Islander matters in areas such as health
- our commitment to forging links with international indigenous communities

Contractors are encouraged to participate or actively promote opportunities for Indigenous Employment and report it to the University.

2.6.2. Smoking

The University has a Smoke-free Environment Policy. Smoking is banned on all campuses, except for within designated smoking areas. Smoking in these areas is only allowed in the immediate vicinity of the "Smoking Area" sign and ash trays are provided for cigarette butts.

This prohibition applies to all University staff, Contractors, visitors, clients, students and any other people entering or using University work areas, vehicles or facilities.
It should be noted that smoking zones have been established on all University campuses however smoking is prohibited by law in certain places, for example, where there is a risk of fire or explosion, in enclosed areas or in food preparation, handling and serving areas.

Further information can be found here http://sydney.edu.au/whs/wellbeing/smoke-free.shtml including where designated smoking areas are located.

Should a contractor be found to be smoking on campus more than twice, then the contract may be subject to review or termination.

2.6.3. Alcohol, Drugs and Fitness for Work

No Contractor is to commence work, attempt to work, or return to the workplace whilst under the influence of, (or in possession of) alcohol or illegal drugs (or prescription drugs where side effect may affect their abilities).

Contractors found to be under the influence, or in possession of alcohol or illegal drugs will be subject to disciplinary action. This action may include cancellation of Contractor contracts and a ban from the University.

2.6.4. Language and Printed Material

Contractors should not engage in offensive or inappropriate language including swearing, wolf whistles and inappropriate comments whilst working on any of University Campuses. Contractors are not permitted to display printed material that may be offensive to others including pornographic, religious or racist images or unsavoury corporate signage/slogans.

Determination of whether any printed materials is suitable for use within the University is at the sole discretion of the University Project/Contract Manager.

2.6.5. Behaviour

Contractors must not be involved in:

- Theft, fraud, possession or removal of the University property or the property of others (actual or attempted)
- Destroying, damaging, defacing or misusing the University premises or property
- The possession of firearms or dangerous weapons on the University premises, including farms

2.6.6. Equal Opportunity and Anti-Discrimination

The Contractor must ensure that the conduct of their workers and/or subcontractors during the contracted works does not compromise or infringe the rights of University staff and students in accordance with the Equal Opportunity Act 1984, and its amendments to the University Sexual Harassment Policy and Grievances Procedure.
2.6.7. Ethical Standards

Contractors are required to note that it is the expectation of the University that its relationship with the Contractor is based on, among other things, ethical standards that are above reproach.


In the event of any evidence being presented that ethical standards have been compromised, the University reserves the right to take all necessary action, including legal, to sever existing arrangements with the Contractor concerned.

2.6.8. Dress Code

Singlets as well as any clothing depicting potentially offensive material are unacceptable. Footwear must be sturdy and suitable to the work activities and may not include thongs or sandals.

High visibility (HiViz) clothing must be worn by all outdoors/construction Contractors and their workers whilst on-site. This requirement does not apply in offices and amenity areas.

Clothing should enable easy identification of the company undertaking tasks.

2.6.9. Children and Visitors

Under no circumstances are Contractors allowed to bring children onto a University work site. All visitors must be approved by the CIS Project/Contract Manager and Site Supervisor prior to arrival.

2.6.10. Animals

Dogs, pets, or other animals are not permitted to accompany Contractors on Campus at any time, unless for companion animal purposes etc. Farm animals (horses, stock dogs) must only be brought onto farms with prior approval.

2.7. Privacy

Contractors must respect the privacy of all University staff, students and visitors with respect to any information seen, heard, printed or electronic.


2.8. Faculty & School Information

Faculty and School Information is located here: [http://sydney.edu.au/about/faculties_schools.shtml](http://sydney.edu.au/about/faculties_schools.shtml)
3. Work Health and Safety (WHS) General Requirements

3.1. Responsibilities

3.1.1. Workers

While at work, any worker must:

- Take reasonable care for his or her own health and safety
- Take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons
- Comply, so far as the worker is reasonably able, with any reasonable instruction that is given by the University to allow the person to comply with this Act
- Co-operate with any reasonable policy or procedure of the University relating to health or safety at the workplace that has been notified to workers
- Ensure that’s other workers are performing their work in a safe manner
- Be mindful of students and other campus users at all times

All persons entering University grounds have a responsibility in the course of performing their duties to:

- Comply at all times with all University contract conditions and requirements
- Use safety devices and protective equipment correctly and not render them inoperative
- Report directly to their immediate supervisor any situation which they have reason to believe could present a hazard and which they cannot themselves correct (e.g. unsafe practices, unsafe equipment, etc.)
- Report any incident or injury to health that arises in the course of or in connection with their work

3.1.2. CIS Project/Contract Managers/FM Managers

Contract managers are responsible for:

- Having knowledge of WHS as it applies to the work being undertaken and have appropriate training for this Handbook
- The implementation of these requirements in their area of responsibility and accountability
- Ensuring the induction of the Contractor, informing Contractors of site specific hazards, or other pertinent WHS information about the location, and ensuring the Contractor implements measures to minimise risk to University staff and students
• Liaising with the relevant local point of contact to obtain up-to-date information on any site-specific induction and other WHS requirements, and communicating requirements to the Contractor
• Ensuring a process of WHS audits and inspections is appropriately implemented for Contractors under their remit
• Consulting, coordinating, and cooperating with any relevant stakeholders when the work may impact the health and safety of any other workers, staff, students and contractors
• Reviewing the risk assessments and health and safety plan developed by the Contractor prior to work commencing
• Working with the Contractor to ensure that specified safety systems and risk control measures are implemented for the duration of the contract works
• Report Contractor incidents and hazards accordingly to the CIS procedure
• Collecting Contractor WHS statistics within the first week of the month for the previous month

3.1.3. University Staff

University staff are responsible for:

• Not placing themselves or others at risk of injury
• Reporting work methods of Contractors that place University staff at risk to the relevant contract manager or campus facility manager
• Reporting any observed hazards as they relate to WHS, Smoking, traffic and parking
• Not giving access to restricted areas to unauthorised workers and Contractors

3.1.4. Contractors

Contractors are responsible for:

• Ensuring compliance to WHS legislative requirements while engaged by the University
• Not placing themselves or others at risk of injury
• Working in accordance with relevant University WHS Policy
• Complying with all requirements (as appropriate) contained within this Handbook
• Ensuring all of the Contractor’s workers and subcontractors who will be directly involved in the contract works have completed the University Contractor Online Induction, any other required site-specific induction(s) and received additional information as part of the project documentation or start-up workshop prior to the commencement of any work
• Obtaining formal authorisation from the CIS Project/Contract Manager and the relevant area supervisor prior to enter a restricted area
• Providing WHS statistics for activities and projects undertaken for the University to the relevant CIS Project/Contract Manager within the first week of the month for the previous month
• Report any WHS incidents to the University PM/CM immediately
Contractors have a responsibility to ensure the health and safety of their staff and University personnel, students and visitors. Contractors are also required to observe the following responsibilities and the information contained in this induction Handbook, in addition to any other requirements which may be identified in the localised induction process.

The Contractor must also, so far as is reasonably practicable, provide and maintain a work environment in which people are not exposed to hazards. In particular, Contractors must:

- Ensure their own safety and the safety of others
- Provide a workplace and safe system of work so that, as far as practicable, workers, staff or students are not exposed to hazards
- Provide workers with information, instruction, training and supervision to enable them to work in a safe manner
- Ensure that all workers and subcontractors workers comply with these instructions and procedures
- Ensure that all statutory law, regulations, standards and Building Codes which are enforceable in NSW are complied with at all times
- Ensure that all Permits to Work have been completed and approved prior to the work commencement
- Consult and cooperate with their health and safety representatives in matters related to safety and health in the workplace
- Provide appropriate protective clothing and equipment as required by particular types of work and/or work carried out in particular locations or conditions
- Practice good site housekeeping to minimise the risk of avoidable accidents, i.e. ensure work areas are left clean, tidy and vacuumed and that all rubbish and redundant materials are removed from site
- Tools and materials must never be left unattended where practicable
- Ensure work areas have appropriate barriers and signage when working on or near a thoroughfare (pedestrian or vehicle) or as required to prevent exposure to the hazard
- Immediately correct any hazard that they are aware of, or if unable to do so, contact the relevant CIS Project/Contract Manager during normal working hours, or Security Services after hours
- Immediately contact emergency services for incidents that are considered serious and or life threatening and report any such emergencies to Security Services as a matter of priority
- Report WHS incidents or hazards accordingly to the CIS procedure to the CIS Project/Contract Manager and provide relevant documentation to identify details and actions of incident
- Report any serious and or life threatening incidents to the appropriate authorities, i.e. SafeWork NSW and advise Security Services and the nominated CIS Project/Contract Manager of details

Contractors must instruct their workers regarding WHS matters and ensure appropriate measures are undertaken to induct staff, i.e. information, education and training. The Contractor must also ensure workers are familiar with their own WHS plans and procedures as well as those of the University as relevant to their scope of work.
The CIS Project/Contract Manager may at any time request copies of such records to ensure compliance with WHS legislation. Copies of Site Meeting Minutes must also be forwarded to the CIS Project/Contract Manager providing evidence of WHS related matters.

3.2. Instruction and Direction from Faculty Staff

Contractor work will at times necessitate communication with Faculty staff. **Contractors are advised that they should not take on additional jobs or tasks out of the scope of their engagement** without prior authorisation from their CIS Project/Contract Manager.

Instruction and direction from Faculty staff should be limited to the information required to understand and safely carry out the assigned task.

3.3. Regulators on Site

The expectation of contractors is that whenever a regulator (such as SafeWork NSW, Comcare etc.) arrive on site, CIS are immediately contacted (within 20 minutes) so a determination can be made if a CIS representative needs to be there. Contact with CIS should be direct to the CIS Project/Contract Manager and notification to the CIS Compliance Manager immediately on:

cis.whs@sydney.edu.au

The reason for this requirement is:

- Ensure CIS are appropriately informed of the nature of the visit
- Enable CIS to respond to questions that might be out of scope of the project or beyond the knowledge of the contractor, e.g. safety or compliance programs that the contractor may not necessarily be aware of
- Ensure the appropriate information is provided to the Regulator about the matter
- Ensure the Regulator is not overstepping any powers and that any Notices issued (either to the contractor or University) are issued in accordance with the legislation

Decisions by Regulators can have an impact on an organisation like the University, potentially affecting costs, altering elements of process and strategy, and of course affecting reputation.

3.4. Supervision, inspection, auditing and performance monitoring

3.4.1. Supervision

The Contractors must provide adequate supervision to workers to the satisfaction of legislative requirements and University desires. A **Contractor Supervisor must be nominated, present on site and supervise and control the works at all times.**
Directions and explanations given by the University to the Contractor must be deemed to have been given to sub-Contractors and their personnel.

3.4.2. Inspections & Breaches

The University treats all instances of WHS and Environmental negligence very seriously. Failure to wear protective clothing or safety equipment when it is necessary is an example of WHS negligence. Another example is the incorrect use of handling of hazardous materials.

The Contractor, as a Person Conducting a Business or Undertaking (PCBU) has a duty of care to provide and maintain a safe workplace for their workers, University staff, students and others and consequently has a responsibility to conduct workplace inspections on a regular basis. The Contractor must make available copies of WHS inspection reports when requested by the CIS Project/Contract Manager.

Contractors are advised that the CIS Project/Contract Manager(s), nominated representatives or University WHS Manager may carry out periodic and spot/unannounced WHS inspections on any University premises. These inspections form part of the University WHS Policy ([http://sydney.edu.au/whs/policies/index.shtml](http://sydney.edu.au/whs/policies/index.shtml)). The Contractors WHS representative may also accompany the inspection during this process.

CIS Project/Contract Managers or their nominated representative must conduct random WHS observations of Contractor conformance to WHS plans or permit to work conditions. Non-conformances relating to WHS will be recorded and conveyed to the Contractor for rectification and used as part of the review process for Contractor performance.

University staff identifying that a Contractor or workers are undertaking activities in an unsafe manner, are responsible for reporting the unsafe practice to the relevant CIS Project/Contract Manager, WHS Manager or nominated representative immediately advising them of the unsafe practice being undertaken.

Contractors must take immediate remedial action on any safety hazard, defect or any other issue associated with WHS matters identified during such inspections. Contractors must comply with any written instructions issued by the CIS Project/Contract Manager relating to WHS.

If repeat incidents are observed, the Contractor may be instructed to cease work until the situation has been rectified and the work site and/or operational procedures are deemed safe.

3.4.1. Audits and Reviews

The University may upon request review information relating to the Contractor’s WHS systems of work. This information may consist of the following:

- Site WHS Plan and system components
- Safe Work Procedures and Method Statements
- Certificates for Plant
- Certificate of Operations and Training Records
- Licences, i.e. for high risk works
• Risk Management Procedures
• Incident reports, internal and notifiable
• Evidence of compliance with Environmental Protection Agency (EPA) Code of Practice
• WHS audits, inspections and schedules

3.4.2. WHS Performance Monitoring

Contractor WHS performance is monitored throughout the progress of the contracted work, and should a Contractor not be performing their WHS duties as per the contract, the responsible CIS Project/Contract Manager will take steps to remedy the situation.

Contractors are required to provide WHS statistics on a monthly basis, including lead and lag indicators, for activities and projects performed for the University. The CIS Project/Contract Manager is responsible for gathering these statistics and the Contractor is responsible for providing them within the first week of the month for the previous month.

The CIS Project/Contract Manager or Principal Contractor must also monitor the WHS performance of Contractors by:

• Monitoring the work of Contractors for compliance against legal requirements
• Monitoring and following up on corrective actions where non-conformances are identified
• Reviewing accident and incident reports, third party reports and complaints
• Monitoring and Review of the Contractor’s Monthly WHS Statistics
• Reviewing the Monthly Contractor Performance Report
• Auditing Contractor performance against the requirements of relevant approved safe work method statements
• Regular meetings with the Contractor to record any health and safety performance issues

3.4.3. Compliance and Non-Conformances

Non-compliance with the requirements of this Handbook, University WHS guidelines, the Contractor’s SWMS, or other known conditions and requirements may be recorded on the Corrective Action Request Form. Corrective actions will be determined and documented on this report. Contractors will be issued with a copy of the Contractor Corrective Action Request Form and will be required to respond to the University (or as required to the Principal Contractor) regarding their progress in addressing corrective actions.

3.4.4. Disciplinary Action

Generally, CIS will operate on a three-strike basis for each contractor. Contractors are informed that a failure to comply with the requirements of any corrective actions may result in suspension of personnel or termination of the Contract or additional actions.

CIS reserves the right to immediately suspend and/or remove personnel and/or terminate contracts regardless of any previous non-conformances or noted issues the contractor may
have recorded, for any serious breaches of the provision of this handbook or failure to adequately respond to reasonably requests by CIS.

All compliance issues, non-conformances and disciplinary issues are taken into consideration when reviewing the performance of a contractor with respect to future contract opportunities.

3.5. Managing Risks to Health and Safety

All Contractors are required to identify reasonably foreseeable hazards associated with their work that could give rise to risks to health and safety and then manage the associated risks.

All Contractors must work through the hierarchy of control when managing risk under the WHS Regulations. In controlling risks the priority is always to eliminate risks to health and safety so far as is reasonably practicable. Where it is not reasonably practicable to eliminate, it is a requirement to minimise those risks as far as is reasonably practical.

Where the risk cannot be eliminated, the risks must be minimised by doing one or more of the following:

- **substituting** (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk
- **isolating** the hazard from any person exposed to it
- implementing **engineering** controls

If a risk then remains, the remaining risk must be minimised, so far as is reasonably practicable, by implementing **administrative** controls.

If a risk still remains after the above has been implemented, the duty holder must minimise the remaining risk, so far as is reasonably practicable, by ensuring the provision and use of suitable **personal protective equipment**.

**Note:** A combination of the controls may be used to minimise risks, so far as is reasonably practicable, if a single control is not sufficient for the purpose.

Refer to Figure 1 for information on hierarchy of control reproduced from *Code of Practice How to Manage Work Health and Safety Risks (2011).*
3.5.1. Maintenance of control measures

Once a Contractor has implemented a control measure to eliminate or minimise risks they must ensure that the control measure is, and is maintained so that it remains, effective, including by ensuring that the control measure is and remains:

- fit for purpose
- suitable for the nature and duration of the work
- installed, set up and used correctly

3.5.2. Project Safety Management Plan

Contractors are required to develop a Safety Management Plan for each project and communicate the plan to the relevant CIS Project/Contract Manager before commencement of works. Expectation is that the Safety Management Plan contains:

- Brief description of the scope of work / summary of major activities / high-risk works / specialist tasks
- A project specific risk assessment incorporating controls
- Identify person(s) with WHS accountabilities on the project
- Include specific inductions, local points of contact, permits, licenses to perform works, SWMS and procedures relevant to the work, consultation process
- Required site inspections, frequency and timing and specific areas targeted for inspection
- Plan for managing work area, segregation of work area, delivery of materials, rubbish out etc.
- Site specific emergency / evacuation plan (and impact / coordination with building occupants if the site effects them)
- Arrangements for incident and hazard reporting

3.5.3. SWMS and Documented Risk Assessments

Hazards identified, evidence of a risk assessment and the controls recommended must be documented and provided to the CIS Project/Contract Manager (or where appointed Principal Contractor) as part of the Project Safety Management Plan. Often this will be in the form of a safe work method statement (SWMS).

A form of risk assessment must be provided by all Contractors categorised as 3, 4 or 5 (refer Section 2.2) or where any Category 1 or 2 Contractor temporarily undertakes work that would under normal circumstance equate to works of a Category 3, 4 or 5 Contractor.

It is also mandatory to provide a SWMS to the CIS Project/Contract Manager, or to the designated Principal Contractor, prior to the commencement of work for high risk construction works (refer to definition in Section 8). SWMS must comply with the requirements of the WHS Legislation 2011 (NSW).

3.5.4. WHS Management Plan

The Work Health and Safety Act 2011 (NSW) requires that the Principal Contractor of a construction project greater than $250,000 in value prepares a written WHS Management Plan for the workplace before work on the project commences.

In essence, a WHS Management Plan should outline the Principal Contractor’s WHS structure, roles, responsibilities and authorities, methods of consultation, induction and training, risk management process, subcontractor’s management, injury management and continuous monitoring and review.

The size and complexity of a WHS Management Plan will be relative to the size and complexity of the project and particularly to the amount of high-risk work being undertaken. However it must include:

- Names, positions and health and safety responsibilities of all persons involved with the work whose roles involve specific health and safety responsibilities
- The arrangements in place, between any persons working at the site, for consultation, cooperation and coordination of activities in relation to compliance with their duties under the WHS Act and Regulation
- The arrangements in place for managing any health and safety incidents, including reporting and incident notification
- Any site specific health and safety rules and the arrangements for ensuring that all persons are informed of those rules
- The arrangements to collect and assess, monitor and review safe work method statements
Structuring a WHS Management Plan around the following headings will help ensure that these mandatory aspects of a WHS Management Plan are documented. Importantly, it will also assist builders and/or construction companies in ensuring that other important requirements under WHS legislation have been considered and addressed in respect of the project concerned:

- Project Description
- WHS Responsibilities
- Consultation, Induction and Training
- Identify Hazards, Assess and Control Risks
- Managing Subcontractors
- Managing incidents
- Monitor and Review of Plan

The Principal Contractor must provide the WHS Management Plan to the CIS Project/Contract Manager at the project commencement, and after each review of the plan. The CIS Project/Contract Manager, nominated representatives or University WHS Manager may carry out periodic and unannounced audits of the WHS Management Plan.

3.6. Consultation, Coordination and Cooperation

A safe workplace is more easily achieved when everyone involved in the work communicates with each other to identify hazards and risks, talks about any health and safety concerns and works together to find solutions. All Contractors must consult, so far as is reasonably practicable, with workers who carry out work for them and persons who are (or are likely to be) directly affected by a WHS matter.

The objective of consultation is to make sure everyone associated with the work has a shared understanding of what the risks are, which workers are affected and how the risks will be controlled. The exchange of information will allow the duty holders to work together to plan and manage health and safety.

Co-operation may involve implementing arrangements in accordance with any agreements reached during consultation with the other duty holder and involve not acting in a way that may compromise what they are doing for health and safety.

Co-operation also means that, if Contractors are approached by other duty holders wanting to consult with them on a health and safety matter, they should not obstruct communication, and respond to reasonable requests from other duty holders to assist them in meeting their duty.

The co-ordination of activities requires duty holders to work together so that each person can meet their duty of care effectively without leaving any gaps in health and safety protection. Contractors should plan and organise activities together with the other duty holders.
This will include ensuring that the measures each party puts in place work effectively together to control the risks. Contractors should identify when and how each control measure is to be implemented and ensure control measures complement each other.

Co-ordination of activities may include the scheduling of work activities so that each duty holder carries out their work separately. It may require work to be arranged in a way that will allow for necessary precautions to be in place or pre-conditions met before particular work is done.

In situations where Contractors share responsibility for health and safety with another person, the requirement to consult, co-operate and co-ordinate activities with other duty holders will help address any gaps in managing health and safety risks that often occur when:

- there is a lack of understanding of how the activities of each person may add to the hazards and risks to which others may be exposed
- duty holders assume that someone else is taking care of the health and safety matter
- the person who takes action is not the best person to do so

The outcome of consulting, co-operating and co-ordinating activities with other duty holders is that each party understands how their activities may impact on health and safety and that the actions taken to control risks are complementary.

Talking to, and co-operating and co-ordinating activities with others who are involved in the work or things associated with the work will make the control of risks more likely and assist each duty holder comply with their duty. It can also mean that health and safety measures are more efficiently undertaken.

The University encourages a process of continued consultation, coordination and cooperation between CIS, Contractors and the occupants of the workplaces that Contractors may be working in, or others impacted by the works. This is seen as a key step in establishing and maintaining appropriate levels of communication and keeping clients (e.g. faculty staff, students, visitors) up to date with works and scheduled activities in their workplace.

Common examples of consultation, coordination and cooperation at the University are:

- Various contractors who are involved in the same work at the same time at a workplace will need to consult, co-operate and co-ordinate activities with each other as they may each affect the health or safety of their own workers or the workers of other business operators or other people at or near the workplace
- An installer of plant at a workplace and the person with management or control of the workplace (e.g. faculty staff) should consult, co-operate and co-ordinate activities with each other in relation to when, where and how the plant is to be installed to control any health and safety risks
- A landlord or managing agent should consult, co-operate and co-ordinate activities with the tenant (for example, in relation to emergency plans and procedures) or with a contractor carrying out maintenance or repair work

Contractors may also establish WHS Committees or have elections for health and safety representatives as required.
Refer to the *Code of Practice WHS Consultation, Coordination and Cooperation (2011)* for practical methods for achieving this in the workplace.

### 3.6.1. Coordination and Exclusion Zones

Various contractors, sub-contractors, and workers of the University and other businesses may work on the same site and therefore their activities are likely to overlap and interact with each other. **All stakeholders must coordinate activities to ensure each person is made aware of what the others are doing, to identify the hazards and risks and decide who is best placed to take action to control the risks. This must be undertaken continuously to ensure that any change is identified, the situation reassessed and additional control measures implemented if required.**

An effective control measure is putting in place exclusion zones within the work site to prevent workers to be exposed to a hazard. Exclusion zones, or ‘No go’ areas, must be implemented to highlight the risks of entry to an area where there is an unguarded hazard, or to areas where work is being undertaken overhead and there is a risk of falling objects. They require clear signs warning people not to access the hazardous area and highly visible barriers securely fixed to prevent displacement.

Relevant information and instruction must be provided about exclusion zones with adequate supervision to ensure that no unauthorised worker enters the exclusion zone.

### 3.6.2. Scheduled Events

When undertaking works within the University of Sydney, the Contractor shall be mindful that they are working within an Operational Environment, which includes, but is not limited to, a number of Scheduled Events that take place.

**The Contractor shall make themselves aware of these Events by communicating with the University Project Manager/Contract Manager.**

The Contractor shall schedule works accordingly to ensure the safety of those attending the Event and assist with the coordination of the Event where necessary.

### 3.7. Design Standards and Signage Manuals

The University has a number of Design Standards and Signage Manuals that are applicable to Contractors performing these activities.

**Design Standards** include:

- Documentation standards
- Mechanical Services
- Building Management and Control Systems
- Communications Cabling Standard
- Electrical Services
- Lighting Services
- Security Services
Vertical Transportation Standard
Essential Fire Safety Measures
Hydraulic Services
Roofing and Guttering
Landscape
Advanced Utilities Monitoring System
Excavation
Asset Identification and Labelling
Sustainability Standard
Sustainability Framework
Building and Architecture Standard
DDA and Access Standard

**Guidelines** include:

- Asset Barcode Register
- Asset Codes
- Asset Registration
- Asset Registration Template
- Building Design Guidelines
- Grounds Design Guidelines

**Signage Manuals** include:

The *Internal Signage Manual* provides guidance on our standard approach to the use of information and way-finding signs on campus. The manual provides integrated and accessible information through consistent typography, graphics, sign types, and placement. All internal signage is designed to be modular, flexible, and cohesive in form and graphic standards. The manual also requires the design of signs to be compliant to integrate with external signage.

The *External Signage Manual* documents external information and directional signage for the Camperdown and Darlington campuses. The document sets out design parameters, types and locations of signs, the entire system and hierarchy of signage, sign schedules, graphic standards, and construction drawings.

The *Interpretive Sign Guidelines* is a framework for the provision of signage which details the history, identity and other interpretative information relating to a place, site, function or event that occurred in the general location of the sign.

**Designs Standards, Guidelines and Signage Manuals are available online:**
3.8. Preventing Unauthorised Access, Use of Barricades, Fencing, Hoarding and Signs

3.8.1. Preventing Unauthorised Access

Principal Contractors and persons who have management or control of a workplace have a number of obligations regarding the control of access to workplaces, such to:

- Ensure signs are installed that:
  - Show the Principal Contractor’s name and telephone contact numbers (including an out of hours telephone number) show the location of the site office for the project, if there is one, (CIS have Project Sign templates to use, see examples on following pages)
  - Are clearly visible from outside the workplace, or the work area of the workplace, where the construction project is being undertaken

- Ensure, so far as is reasonably practicable, that the workplace is secured from unauthorised access, having regard to all relevant matters, including risks to health and safety arising from unauthorised access to the workplace, the likelihood of unauthorised access occurring and, to the extent to which it cannot be prevented, how to isolate hazards within the workplace.

On the University sites, it is a requirement that work zones are clearly demarcated. For construction works (minor and major) this may include controlling workspaces on multiple levels of a building, having signage (e.g. danger: no authorised entry; warning: construction zone, etc.), barricades, fencing and hoarding in place and ensuring that locations where University workers, students and visitors would otherwise come into contact with workplaces are secured from unauthorised access.

3.8.2. Use of Barricades, Fencing, Hoarding and Signs

All construction and maintenance work is to be isolated from other activities, students, guests and staff of the University. Where this cannot be controlled by closing off the area of the building or using signage to temporarily prevent access to an area, then barricades or more substantial hoardings are required to be used. If at any stage during construction or maintenance work, or from past experience, a chosen method of isolation is found not to be successful, then a more appropriate control is to be implemented.

Isolation of all works helps ensure the safety of all persons on the work-site, or passing by on campus. The Principal Contractor must supply, erect and maintain any necessary barricades, fencing and handrails appropriate to the work they are doing, including signage to suit specified works, and or as directed by the Contract Manager. Unless directed otherwise, use of 1800mm high metal mesh proprietary barricade is required.

University branded signs are free-issue and can be organised through the CIS Project/Contract Manager.
Standard for Barricades and Fencing

All temporary fencing and hoarding must be manufactured, installed, and certified by a qualified person, to the requirements of Australian Standard AS 4687 Temporary fencing and hoarding. This includes conducting a location-specific risk assessment of the installation, taking into consideration wind, shade cloth and signs installed, ground level, ground surface, traffic in the area, etc. Copy of the fencing or hoarding inspection certificate must be provided to the CIS Project Manager.

Additional control measures must be implemented where necessary, based on the risk assessment. This includes installation of bracing, heavier base plates, removing accessories (e.g. shade cloth, signs, etc.), etc.

Where possible, temporary fencing should be braced to a stronger structure, e.g. hoarding or building, to assist in strength of installation.

Temporary fencing should be inspected on a regular basis e.g. daily or weekly, to identify and rectify any potential hazards.

Guidelines for suitable types of fencing include:

- It should be difficult to gain access under the fence and to scale the fence
- They should be able to withstand the anticipated loads to which it may be subjected, such as wind forces, persons attempting to scale and vehicle impact loads
- Where a fence is comprised of discrete panels, the joints should not weaken it and should provide the same level of security as the panels
- Gates should not represent a weak point and the closed gate should provide the same level of security

At the end of work day, the site is to be secured by means of physical barriers to prevent public access.

Particular care must be taken to check and secure the barricades and fences whenever contracted workers leave the work area. This may include providing temporary lighting on the site, if deemed necessary by the Principal Contractor or directed by the Project Manager.
Standard for Signs

Safety signs are placed throughout University campus to protect your health and safety. The Principal Contractor is required to supply and display appropriate safety and warning signage at the construction workplace for the duration of the project.

Safety signs of different colours and shapes should be used to indicate different safety hazards. Restricted sites need to be signed in accordance with Australian Standard AS 1319 Safety Signs in the occupational environment.
3.9. Personal Protective Equipment (PPE)

PPE appropriate for the work hazards is to be provided by the Contractor. The PPE and clothing must comply with relevant sections of the *WHS Regulation 2011 (NSW)*, Codes of Practice and Australian Standard specifications.

Any PPE required is to be listed in the control methods on the Contractor risk assessment or SWMS document. PPE generally includes hard hats, safety shoes, respirator, gloves, safety glasses, etc.

Contractors must provide suitable protective clothing and equipment appropriate to the task. Contractors must ensure that protective equipment is maintained and used by their workers (including sub-Contractors) in relation to hazards associated with their work.

Documentation related to selection, use and maintenance should be available for inspection by the responsible CIS Project /Contract Manager.

A blue sign indicates that appropriate safety equipment must be worn, depending on the nature of work undertaken and the hazards involved.

High visibility (HiViz) clothing must be worn by all outdoors and/or construction Contractors and their workers whilst on-site. This requirement does not apply in offices and amenity areas.

For all University Construction sites the minimum PPE requirements are:

- Head protection such as hard hats
- Safety boots, e.g. steel-capped
- High visibility clothing or vest
- Gloves
- Safety glasses

Not exclusive of construction work, the following PPE should be provided where it has been identified by risk assessment:

- Sun protective hats, sun protective work clothing (long sleeved collared shirts, long pants), sunglasses and SPF 30 or higher broad spectrum sunscreen
- Hearing protection if the noise levels are not within the appropriate levels (e.g. ear plugs or ear muffs should be worn when working with or near jackhammers, grinders, explosive-powered tools or pile driving)
• respiratory protection (e.g. respirators, face masks or cartridge filters should be worn where there is a risk of exposure to hazardous chemical vapours, fumes, dust or fibres)
• body protection (e.g. aprons, safety harnesses, lanyards, shock absorbers and inertia reels)

3.10. Sanitary Provisions/Use of Amenities

The Contractor may at times have shared access to toilets on the campus on which the works are being undertaken. As these toilets will continue to be used by the wider University community, the Contractor is responsible for using and maintaining these toilets in an appropriate and clean manner.

Most Capital Works projects will out of necessity have their own ablutions setup and serviced. Contractors with such ablutions must ensure that controls are in place to prevent accidental discharge (e.g. overflow) and that the servicing of them does not impact on University staff, students and visitors.

Where ablutions are unable to be shared or setup within the project perimeters alternative locations must be discussed and organised through the CIS Project/Contract Manager.

3.11. Housekeeping, Storage of Equipment and Leaving the Work Area

*Contractors must maintain a high standard of housekeeping while at the University.* This means ensuring that the layout of the workplace allows, and the workplace is maintained so as to allow, for persons to enter and exit and to move about without risk to health and safety, both under normal working conditions and in an emergency.

It is the responsibility of the Contractor to maintain their materials; tools and other equipment in an orderly manner on-site so as to reduce risks and to ensure these are secure and tidy prior to leaving each day.

Equipment and plant that is not in use must be left in a state that does not create a risk to the health or safety of any person.

*All debris and waste resulting from Contractor activity is to be removed by the responsible Contractor. Working areas, stairways, passages and safety exits must be kept clear of obstructions at all times.*

If required, working areas must be barricaded off and appropriate warning notices erected. All materials and debris must be lowered and not dropped from elevated locations and platforms.

Contractors must avoid tracking dust and debris through operational areas, corridors and lifts etc. to help maintain a clean working environment. Where this is not feasible it is expected that the Contractor will provide floor protection or coverings that are appropriate for the work.
3.12. Plant, Tools and Equipment

Contractors must provide all necessary tools, equipment, PPE and access equipment that may be required to undertake the work. Only with the specific approval of the CIS Project/Contract Manager are Contractors to use the facilities, plant or equipment owned by the University. Contractors must also ensure they (including their workers) are appropriately trained in the use and maintenance of plant and equipment used.

All Contractors are to manage the use of plant and equipment as directed in the following sections of this Manual, and as per the WHS Regulations 2011, Chapter 5 Plant and Structure. Specific reference is made to Subdivision 2 Additional control measures for general plant and Subdivision 3 Additional control measures for certain plant.

The Contractor must ensure that all plant and equipment used is:

- fit for purpose
- suitable for the nature and duration of the work
- installed, set up and used correctly

3.12.1. Performance standard

The following standards apply to all Contractors with regards to plant, tools and equipment:

- Only used by qualified or suitably trained personnel
- Use plant, tools and equipment for the purpose it was designed for and within its specified capacity limits
- Operators using plant requiring certificates of competency or licence must carry them on their person at all times while on site
- Ensure any safety features or warning devices are maintained, tested and used as intended
- Always seek instruction before using an unfamiliar piece of plant, tool or equipment
- Report any damaged plant, tools or equipment and do not use it until it has been repaired
- Where guards are provided, they must be kept in place
- Never distract the attention of another worker when operating plant or equipment
- Always use appropriate personal protective equipment
- Never use compressed air for cleaning clothing, plant or equipment
- Quantities of fuel, oil, solvents, cleaning fluids should be stored in approved containers in a cool, ventilated and where necessary, bunded, areas
- Report ALL hazards, unsafe conditions and work practices

3.12.2. Hand Tools

Picks, shovels, axes, crowbars, hammers, wrenches, files, screwdrivers etc. must be checked regularly. Use of an approved wrist-stop or lanyard to secure the tool is mandatory where there is a risk of it falling and injuring people below.
3.12.3. Mobile Plant

Contractors must assess the use of mobile plant with regards to the surrounding environment and the potential for impact on the health and safety of others. Contractors should consider risks such as:

- the plant overturning
- things falling on the operator of the plant
- the operator being ejected from the plant
- the plant colliding with any person or thing
- mechanical failure of pressurised elements of plant that may release fluids that pose a risk to health and safety

Contractors must ensure mobile plant does not collide with pedestrians or other powered mobile plant. Without limiting this requirement, if there is a possibility of the plant colliding with pedestrians or other powered mobile plant, the Contractor must ensure the plant has a warning device (e.g. flashing lights, audible reversing alarms, horn, etc.) alerting anyone nearby who may be at risk from its movement and that appropriate traffic management procedures are implemented. In public areas, a spotter must be organised for each mobile plant movement: this person should be in visual contact with the driver at all times and wear high visibility clothing.

All guards, operator controls, emergency stops and warning devices (where fitted) must be maintained in a clean state so they are easily recognisable and will work to best effect.

All mobile equipment such as front-end loader, dozers, backhoes, forklifts, etc. must have keys removed; blades, tines and buckets lowered onto the ground and must be chocked or blocked when not in use.

3.12.4. Explosive Power Tools

All explosive chargers for explosive powered tools must be kept in an approved, locked box. All operators of explosive powered tools must be trained and competent in using the tool. A warning sign must be displayed at each location the tools are used. Suitable protection must be worn when using the tools.

All work with any explosive tools or high vibration equipment must be approved by the CIS Project/Contract Manager prior to commencement of work.

3.12.5. Lasers

Lasers may only be used by licensed persons. Lasers must be used with the following precautions:

- Up to Class 3A only to be used on the construction site
- Positioned so as not to be at eye level of workers in the area
- Warning signs must be erected
3.12.6. **Compressed Air Equipment**

Always use care when working with compressed air. If compressed air enters the blood stream through the skin it can be fatal.

Wear suitable eye protections to guard against airborne substances, ear protection where excessive noise is likely to occur and/or respiratory protection where dust is present. Never, under any circumstances, should compressed air be directed towards the body of a person.

Where compressed air equipment will be used for prolonged periods suitable signage must be displayed.

3.13. **Traffic Management**

Contractors using vehicles, powered mobile plant or other load shifting equipment for their activities on the University campuses must carry out risk assessments and consider the following:

- Separating pedestrians and vehicles
- Vehicle routes
- Safe crossings
- Parking areas
- Loading and unloading of vehicles
- Forklifts and other powered mobile plant
- Reversing vehicles
- Signs and road markings
- Lighting

In shared areas (e.g. Eastern Avenue), a **spotter must be organised** for each vehicle movement: this person should be in visual contact with the driver at all times and wear high visibility clothing.

Where the Contractor is required to use vehicles, powered mobile plant or other load shifting equipment they must develop and implement a traffic management plan. The traffic management plan should include details of:

- the desired flow of pedestrian and vehicle movements
- the expected frequency of interaction of vehicles and pedestrians
- control measures for each expected interaction including illustrations of the layout of barriers, walkways, signs and general arrangements to warn and guide traffic around, past, or through a work site or temporary hazard
- how short term, mobile work and complex traffic situations will be managed
- responsibilities of people managing traffic in the workplace
- responsibilities of people expected to interact with traffic in the workplace
- instructions or procedures for controlling traffic including in an emergency

A traffic management plan should be monitored and reviewed at regular intervals or following an incident to ensure it is effective and takes into account changes at the workplace.
3.13.1. Road Closures

Requests to close roads must be made to the Campus Security Unit. Contractors must apply to security.traffic@sydney.edu.au using the Request for Road Closure form.

Requests will be assessed on the following criteria:

- safety concerns
- importance and need for closure
- impact
- available alternatives to closure

If it is necessary to close a road, adequate signs and barriers must be erected as directed by the Campus Security Unit. The Contractor is responsible for the erection and maintenance of required signage and barriers, at their cost.

Unauthorised road closures may result in the road being re-opened without further notice.

3.14. Essential Services

Essential services include the supply of gas, water, sewerage, telecommunications, electricity, chemicals, fuel and refrigerant in pipes or lines. The Contractor must manage the risks to health and safety associated with essential services at the workplace.

All construction work that is carried out on or near:

- Pressurised gas distribution mains or piping
- Pressurised water mains or piping
- Chemical, fuel or refrigerant lines
- Energised electrical installations

is considered as high risk construction work and a SWMS must be prepared before this work commences.

Before work commences, Contractors must confirm the services are at or near the location where the work is to be done that could create a risk if contacted or damaged. Services may be underground or hidden in floor slabs, behind walls, in wall cavities or even within wall render.

Contractors must locate and identify shut-off valves for essential services when cutting into slab, ground or wall. This must be communicated to workers and incorporated in the Project Safety Management Plan and Emergency Procedures.

The CIS Project/Contract Manager will make available all known information of the area.

Contractors must apply for a Permit to Dig for all excavation and ground penetration works to a depth greater than 150mm.

3.15. Electrical Safety

Prior to the commencement of any work involving electrical lines and/or equipment, Contractors must contact the CIS Project/Contract Manager (or where appointed the Principal Contractor) who will define the scope and limits of the work.
Contractors must ensure that all electrical items are tested and tagged according to the WHS Regulation 2011 (NSW) and associated codes of practice and standards, specifically:

- Electrical practices for construction work
- Low voltage electrical work
- AS/NZ 3760 In-service safety inspection and testing of electrical equipment

Suitably qualified, licensed and trained personnel must carry out all electrical isolations. Work on any isolated equipment must not commence without tagging and locking the equipment out.

All works to electrical systems must be documented and the Contractor will send a Certificate of Compliance of Electrical Works (CCEW) to the responsible CIS Project/Contract Manager.

The Contractor must refer to the Code of Practice Managing Electrical Risks in the Workplace when electrical risks are identified in their scope.

### 3.15.1. Electrical Leads

All electrical leads must be:

- Tested and tagged by a qualified person
- Supported clear of the ground or floor wherever practical
- Only connected to the nearest power outlet
- Removed from the power outlet when not in use
- Protected if passing under doors, through doorways or across open areas (e.g. taped down to prevent trip hazards)
- Must be kept as short as practicable and in good order
- Joints must be made with approved plugs and sockets or junction boxes

### 3.15.2. Residual Current Devices (RCD)

An RCD is an electrical safety device designed to immediately switch off the supply of electricity when electricity ‘leaking’ to earth is detected at harmful levels. RCDs offer high levels of personal protection from electric shock.

Contractors are required to manage any electrical risk associated with the supply of electricity to ‘plug in’ electrical equipment by the use of an appropriate RCD in certain higher-risk workplaces.

Contractors must comply with AS/NZS 3012 Electrical installations - Construction and demolition sites in relation to RCD requirements for construction and demolition sites.

Common examples of electrical equipment requiring an RCD include:

- Hand-held electrical equipment, for example drills and saws
- Electrical equipment that is moved while in operation, including jackhammers, electric lawn mowers, floor polishers and extension cords
• Electrical equipment that is moved between jobs in ways that could result in damage to the equipment, for example electric welders, electric cement mixers, portable bench saws and extension cords

Additional RCD requirements may be included in AS/NZS 3000 Electrical installations, local building and electrical safety laws.

3.15.3. High Voltage Works
Requirements for electrical work on high voltage equipment after switching, isolation, short circuiting and earthing are specialised requirements. Only competent electrical workers who have received appropriate training in high voltage electrical work are permitted to work on high-voltage electrical equipment.

High voltage works have specific requirements that will be detailed in Contractor scope of works and may require assistance of supply authorities.

3.15.4. Shut Downs
Contractors must notify the CIS Project/Contract Manager in writing at least 10 working days prior to any power shutdown required. The notice will clearly specify which parts of the electrical system will require shutdown as this will form a part of the CIS Communication that is required to be circulated to affected buildings prior to the event.

This notice has to be approved by the CIS Project/Contract Manager prior to commencement of works.

3.15.5. Electric Welding
Welders and assistants must wear suitable protective clothing and equipment. Welders must wear insulated footwear where danger of electric shock exists (damp or wet conditions). Any person assisting a welder must be competent and experienced in that area of work.

Welding screens must be used to prevent sparks from flying into adjacent areas and to screen nearby students, staff and workers from welding flash.

All electrical welding cables must be inspected weekly and maintained in good condition. There must be no bare wires and connections must be solidly made so that no sparking or hot spots will occur.

3.15.6. Working in the vicinity of overhead and underground electric lines
Contractors required to work in the vicinity of overhead and/or underground electric lines must follow legislative and code of practice requirements for such associated matters as:

• Risk management processes
• Approach distances
• Operating cranes and mobile plant
- Tree and vegetation management
- Scaffolding work
- Agricultural work
- Low voltage overhead electric lines near structures
- Transporting high loads

3.15.7. High voltage substations

A Contractor needing access to a high voltage Substation area must abide by all applicable Acts and Regulations. Access must be arranged through University Facilities Officer, who will arrange access permits.

The Contractor must obtain written permission prior to accessing any high voltage substation and must abide by the following criteria:

- Obtain a Contractors permit to work from the CIS Project/Contract Manager
- Regulation under the Electricity Act 1996
- AS/NZS 3000 Electrical Installations (Australian/New Zealand Wiring Rules)
- WHS Regulations 2011 (NSW), Part 4.7

All electrical work completed by a Contractor must have an ‘Electrical Certificate of Compliance’ completed and forwarded to the CIS Project/Contract Manager. Also refer to the Facilities Management Unit for Electrical Compliance Protocol which provides guidance on compliance with relevant State legislation concerning Electrical Certificates of Compliance (ECOC).
4. Work Health and Safety (WHS)  
Special Requirements

4.1. Permits to Work

Before particular work commences, a Work Permit or approval must be obtained. Work permits are required for the following tasks:

- Hot works (including welding)
- Dust works (creating excessive dust)
- Working at heights (including scaffolding, use of EWP, etc.)
- Accessing rooftops and roof spaces
- Working in confined spaces
- All excavation and ground penetration works to a depth greater than 150mm
- Fire systems interruption
- Isolation of services (power, water, gags, data, HVAC, etc.)
- Asbestos removal
- Lead Paint removal

For other permits, Contractors must obtain the permit through the CIS Project/Contract Manager (or where appointed Principal Contractor).

Where CIS has permit templates and forms available they must be used unless otherwise directed by the CIS Compliance Manager. In the certain circumstances the contractor will be able to use their own permit systems, or those of a principal contractor, and this will be through consultation and agreement with the CIS Compliance Manager.

Each work permit details a checklist of minimum requirements and conditions for the safe conduct of the work by the Contractor. Specific permit requirements will be communicated to Contractors as required and as part of issuing these permits. No work can be commenced until the appropriate permits or approvals have been obtained and approved by CIS.

It is the responsibility of the Contractor to liaise with the CIS Project/Contract Manager to obtain approval of the Permit to Work.

On completion or suspension of works where a permit has been issued, these permits must be returned to the CIS Project/Contract Manager (or where appointed the Principal Contractor).

4.2. High Risk Work

Contractors performing any work that is considered ‘high risk’ must ensure that they comply with the requirements of WHS legislation for high risk work. Any Contractor performing work of this nature will be required to provide proof of training, competency level and/or valid licence, safe work method statements and where required a completed permit for the work.
Refer to Section 8 Definitions within this Handbook for a list of all activities defined as high risk work.

4.3. Prevention of falls, working at heights and accessing roofs

Contractors must ensure that the Code of Practice Managing the Risk of Falls at Workplaces is adhered to when work is carried out at heights.

The Code provides practical guidance material and advice on ways to eliminate and minimise the risk of falls from height in workplaces and prescribes circumstances in which the provision of physical fall prevention is necessary. Guidance is also provided on adopting a risk management approach to fall prevention for working at heights, as well as guidance on risk assessment processes, preparation of SWMS and examples of physical fall prevention measures that are required when working at heights, so far as is reasonably practicable.

4.3.1. Rooftops and Roof Spaces

Access to the roof and roof spaces is only permitted when a Roof Access Permit has been authorised. The CIS Contract/Project Manager is responsible for organising application of the permit.

As part of the permit process, consideration must be given to the following:

- Obtaining details of the Roof Register and relevant Roof Safety Report:
  - Each building that has been inspected has a report containing important information about risks, control measures in place, and precautions to be taken when accessing rooftops and roof spaces.
  - These reports are currently available by logging into the CIS Roof Access Register page (link shown below), then searching by Campus or Building Code.
  - [https://staff.usyd.edu.au/cis/CIS_Emergency/Roof%20Access%20Register/Forms/AllItems.aspx](https://staff.usyd.edu.au/cis/CIS_Emergency/Roof%20Access%20Register/Forms/AllItems.aspx)
  - Login: cis_con Password: C0ntr@ct
  - If the website is not available, the Contractor must contact the CIS WHS Manager cis.whs@sydney.edu.au or 02 9114 2699 to obtain the required roof report.

- Any specials hazards specific to the Faculty, or any other risks e.g. fragile roof, skylights, power lines, asbestos and hazardous materials, radio frequency radiation, work on/near cooling towers, weather, etc.

- Potential for the works to impact anything outside the work zone

- Risk of falling objects

A Roof Access Permit can only be authorised if the risk of fall from heights, with control measures agreed with the permit, is eliminated or minimised so far as is reasonably practicable AND IF the works do not include erection, alteration or dismantling of a scaffold or use of an EWP, workbox, BMU, temporary guardrails, safety mesh, work
positioning system (restraint system), or a fall arrest system. Otherwise a Working at Heights Permit must be used in place of a Roof Access Permit.

4.3.2. Working at Heights

A Working at Heights Permit must be obtained to undertake any works where there is a risk of fall from heights. The CIS Contract/Project Manager or Principal Contractor is responsible for organising application of the permit.

A Working at Heights Permit must completed IF:

- The risk of fall from heights, with control measures agreed in a Roof Access Permit, is not eliminated or minimised so far as is reasonably practicable; OR IF
- Erection, alteration or dismantling of a scaffold is conducted; OR IF
- EWP, workbox, BMU, temporary guardrails, safety mesh, work positioning system (restraint system), or a fall arrest system is used as a control measure.

Any worker carrying out works at heights must be competent to carry out the task, and trained in Working Safely at Heights.

Scaffolding

Where scaffolding is required to be erected, it is to be located on solid foundations and care taken to secure work tools and materials, to prevent damage to scaffolding planks and prevent components from falling and striking persons below.

Scaffolds must be erected, maintained, repaired and dismantled by suitably qualified scaffolders. Any scaffold from which a person or object could fall more than four metres, or suspended/cantilevered/spur/hung scaffold must be erected, altered and dismantled by or under the direct supervision of a licensed person.

Scaffold from which a person or object could fall more than four metres or suspended/cantilevered/spur/hung scaffold, must be inspected with written confirmation by a competent person when completed and before use (e.g. Scaff Tags).

Scaffolding must be protected on site to prevent damage from vehicles moving in the immediate work vicinity. Furthermore, all scaffolding will be secured properly to prevent any unauthorised access to the scaffold during and after working hours. All lifting equipment and scaffolding must conform to relevant legislation governing the erection, use and maintenance of such equipment.

Elevating Work Platforms (EWP)

As captured in the Working at Heights permit, Contractors must have a high risk work licence for operating boom-type elevating work platforms with a boom length of 11 metres or more. Plant must be in good condition, serviced and inspected as per manufacturer requirements, and fitted with appropriate safety controls.

Contractors working in travel towers, boom lifts or cherry pickers must wear a properly anchored safety harness at all times.
Fall Arrest Systems

As captured in the Working at Heights permit, the fall arrest system and use of the system must comply with standards and that the fall arrest system must be inspected and certified.

Prior to the works, Contractors must establish and test emergency and rescue procedures and ensure they are effective. Relevant workers must be provided with suitable and adequate information, training and instruction in relation to the emergency procedures.

Ladders & Lifts

Contractors will undertake work from ladders in accordance with the Code of Practice Managing the Risk of Falls in the Workplace (SafeWork NSW, 2015) and where applicable Australian Standard 1892 (parts 1 & 2). No straight or extension ladders are to be used on University Property. Contractors must inspect ladders prior to use to ensure that they are in good condition for safe operation. Contractors must:

- Use ladders only for works of a minor nature
- Secure all ladders at the top and bottom
- Ensure that only one person works from a ladder
- Do not over reach when using a ladder
- Do not carry out any cutting or work involving the use of power tools from a ladder

4.4. Fire Prevention

Fires must not be lit on campus at any time. Fires must not be lit on farms unless approval has been granted and appropriate fire control measures are in place.

In the event of the fire alarm sounding, the Contractor and their representatives must evacuate the site, following exit signage and the directions of the University Fire Wardens to the assembly point nominated. Contractors must make themselves aware of campus and building and/or evacuation plans.

This information is available on the University website Campus Maps [http://sydney.edu.au/about/campuses/index.shtml](http://sydney.edu.au/about/campuses/index.shtml)

Evacuation plans are currently available by logging into the CIS Emergency Preparedness site [https://staff.usyd.edu.au/cis/CIS_Emergency/Evacuation%20Plans/Forms/AllItems.aspx](https://staff.usyd.edu.au/cis/CIS_Emergency/Evacuation%20Plans/Forms/AllItems.aspx)

Login: cis_con Password: C0ntr@ct

The Contractor’s representatives must not re-enter the building until advised by the Fire Wardens that it is safe to do so. It is the CIS Project/Contract Manager’s responsibility to ensure that all Contractors and their workers are advised of the University Emergency Evacuation Procedures.

This does not dissolve the responsibility of the Contractor to ensure workers are provided with adequate information in relation to emergency evacuation procedures. Where possible, the Contractor must nominate a Site Warden. In the instance where the Contractor has not nominated a Site Warden, Security Services personnel must act in this capacity.
The CIS Project/Contract Manager must be advised prior to the first site meeting of the name and contact details of the Site Warden. It must be the Site Warden’s responsibility to check the site area(s) in the event of a fire alarm to ensure that the Contractor’s representatives have evacuated the area in accordance with the University Emergency Evacuation Procedures

4.4.1. Fire Extinguishers

In some cases where Contractors are required to provide fire extinguishers they must comply with AS/NZS 1841 Portable fire extinguishers. Supply and installation must meet AS 2444 Portable fire extinguishers and fire blankets - Selection and location.

Fire extinguishers need to be regularly inspected and maintained in accordance with AS 1851 Routine service of fire protection systems and equipment. Located in university buildings, fire extinguishers and associated hose reels are identifiable by relevant signage in the corridors.

Fire extinguisher types must be used to suit intended purpose. To allow for instant recognition of the most suitable fire extinguisher, identification discs are to be displayed on the can to indicate the particular types of fire it can be used on.

4.4.2. Hot Works

The Contractor must ensure that fire alarms are isolated by contacting the CIS Project/Contract Manager to submit for a fire system interruption at least three working days PRIOR to the commencement of the isolation (refer to Section 4.12).

To conduct hot works (including welding, grinding etc.), Contractors must complete a Hot Works Permit, however this is a self-managed permit and no formal approval is needed from a CIS Project/Contract Manager.

Adequate fire protection must be present, with suitable fire extinguishers attached to, or near work area. Welders must use screens to protect all personnel from welding flashes and any hot waste produced during the welding process. Workers undertaking the hot works should wear the correct personal protective equipment.

Contractors must only use their own fire extinguishers and not rely upon the University fire extinguishers.

A fire watch for 30 minutes must be required after the hot work activities have ceased and then the CIS Project/Contract Manager must be advised on completion of the fire watch and sign off on the Permit.

The requirements of any NSW Fire Brigade (rural or otherwise) fire bans must be adhered to at all times.

4.4.3. Gas Works

Gas Work is defined as work on consumer piping, fittings, components, appliances, flues, sub-metres, apparatus and other devices an associated requirement.
Prior to commencement of any works on gas infrastructure the following procedures must be adhered to:

- The gas system must be isolated
- Smoking, open flamed, hot work and other ignition sources in the hazardous area will be identified and isolated
- Consumer gas piping (i.e. piping after the metre) must be purged prior to work commencing. Where purging is not practicable, the Contractor will notify the relevant Utility Authority prior to commencing work on any unpurged piping
- All open pipe ends must be sealed while the work is in progress
- All gas piping must be tested by the Contractor after works have been complete
- Testing for gas leads must be conducted using either the soap and water method (external) or a gas ‘sniffer’

4.5. Asbestos, Lead and other Hazardous Materials

If the Contractor should become aware of hazardous materials impacting on the works, the Contractor must **immediately cease work** and notify the Principal Contractor and the CIS Project/Contract Manager within the hour. Such materials include:

- Asbestos
- PCB’s
- Lead dust and lead paint
- Heavy metals
- Flammable or explosive liquids or gases
- Toxic, infective or contaminated materials
- Radiation from radioactive materials
- Noxious or explosive chemicals
- Tanks or other containers which have an unknown history

Prior to refurbishment works, the CIS Project/Contract Managers will ensure that a visual asbestos survey (and where possible an invasive/destructive survey) to identify any asbestos containing materials (ACM) has been conducted.

All hazardous materials inspections, whether organised for Compliance purposes or via a contractor, must use the CIS templates available upon request from cis.whs@sydney.edu.au.

Additional information on the management of hazardous materials, reports and permits is available here:


Login: cis_con Password: C0ntr@ct

If the website is not available, the Contractor must contact the CIS WHS Manager cis.whs@sydney.edu.au or 02 9114 2699 to obtain the required asbestos report.
4.5.1. Asbestos

All asbestos work must be carried out in accordance with SafeWork NSW requirements and as set out in Code of Practice How to Safely Remove Asbestos. The CIS Asbestos Removal Work Permit must be completed for all asbestos removal works. The permit is available through the link below or upon request via cis.whs@sydney.edu.au.

Contractors shall consult the Hazardous Materials Reports for current asbestos information on buildings. Each building that has been surveyed has a summary page containing asbestos information. These summary pages and reports are currently available by logging into the CIS Emergency Preparedness site (link shown below), then clicking on the ‘Hazardous Materials Reports’ link in the left-hand column, then searching by Campus.


Login : cis_con Password: C0ntr@ct

If the website is not available, the Contractor must contact the CIS WHS Manager cis.whs@sydney.edu.au or 02 9114 2699 to obtain the required asbestos report.

Note that a number of hazardous materials reports also contain information on lead paint, lead dust, PCB’s, SMF and heavy metals that may have been identified during inspections.

If Contractors identify “new” ACM during their works, they must stop work immediately and contact the CIS Project/Contract Manager to discuss further action.

ACM can only be removed and disposed of by an appropriately licensed asbestos Contractor. This can be organised through a Campus Assist Service Request.

4.6. Prevention of needle stick/sharps injuries

Sharps are defined as objects or devices capable of cutting or penetrating the skin, e.g. hypodermic needles, Pasteur pipettes, broken glass and scalpel blades. Various hard plastic items, such as broken plastic pipettes, are also classified as sharps.

All sharps have the potential to cause injury through cuts or puncture wounds. In addition, many sharps are contaminated with blood or body fluids, microbiological materials, toxic chemicals or radioactive substances, posing a risk of infection or illness if they penetrate the skin.

There is a risk of sharps injury in particular for workers handling sharps but also for cleaning workers and grounds workers. Needles and sharps can be found especially in laboratories, bins, toilets, parks and gardens.

Where there is a risk of needle stick or sharp injury, appropriate personal protective equipment must be worn such as puncture resistant gloves, safety boots, long pants and long sleeve shirts. Contractors must undergo any and all inductions deemed necessary by the local manager/contact. Contractors are to strictly adhere to all information provided by the local manager/contact.
Contractors are not to handle any needles or sharps and must immediately contact their manager and the area supervisor if needles or sharps are identified in the workplace.

Any incident involving needles or sharps must be treated as a notifiable incident to SafeWork NSW as it potentially exposes the person to a substance likely to create a serious risk to health or safety in the future. Refer to section “Notifiable Incident” for more details on notification requirements.

4.7. Trenching & Excavation

Any excavation work on the University grounds must be carried out in accordance with the provision of WHS Regulations and Code of Practice Excavation Work. All excavation and ground penetration works to a depth greater than 150mm require a Permit to Dig.

All excavation work is considered high risk work and therefore requires the Contractor to prepare and submit a SWMS.

Contractors must manage the risks to health and safety associated with excavation work before the work commences including but not limited to the risk of:

- a person falling into an excavation
- a person being trapped by the collapse of an excavation
- a person working in an excavation being struck by a falling object
- a person working in an excavation being exposed to an airborne contaminant

To manage the risks, all relevant matters must be considered including:

- the nature of the excavation
- the nature of the excavation work including the range of possible methods of carrying out the work
- the means of entry into and exit from the excavation (if applicable)

The requirements of Section 3.14 Essential Services of this Handbook must be followed as part of the excavation process.

Any excavations within 1.5 meters of known service is to be carried out by manual excavation (i.e. shovel) until the service is exposed.

All open excavations must be surrounded by suitable barricades or barriers at all times.

Any underground obstacle, unexpected service, unidentified materials, suspected archaeological items or artefacts identified requires an immediate stop of work and the Contractor must inform the CIS Project/Contract Manager to assess the necessary course of action.

All trenches over 1.5 metres in depth must be protected against collapse and barricades must be erected around the trench and kept in place at all times.

Where contractors are engaged for events on University grounds they are advised that all structures are to be weighed down and not pegged. Any proposal to erect a structure on the lawns needs to be clearly documented in the booking request, and if in doubt, discuss with University Venues or Grounds.
4.8. Lock-Out, Tag-Out and Test

4.8.1. Lock Out Requirements

The lock and tag out process is required a contractor is required to conduct work on any plant, equipment or service that has one or more energy sources that crate a potential hazard for the contractor when working on the equipment.

One person one lock

University sites require each person working under a Lock-Out, Tag-Out and Test procedure to have and attach their own lock to prevent the isolator being opened while their task is in process.

If two or more people are working on machinery, plant and equipment that is isolated through several lock out points, each person must attach a lock and tag to each lock out point.

To avoid the need for multiple locks on each lock out point, a lock box may be used. Under this system, each lock out point is locked by only one lock, and the keys to the locks of the machinery’s lock out points are placed inside a box that is locked by all the individual locks of people working on the same plant.

One lock one key

Each person working on the machinery, plant and equipment must have their own lock, key and tag. There should be no duplicate key available for any lock, except a master or duplicate key for use in an emergency that is secured and not readily available.

During inspection, repair, maintenance, cleaning or adjustment of the machinery, plant and equipment, the one key to each person’s lock should be held only by that person, who is responsible for both locking and unlocking the lock out device.

Multiple energy sources

If more than one energy source or hazard has to be locked out to enable safe shut-down of the machinery and equipment, the single key to each lock out device should be held by the same person.

Removal of Tags and Locks

Removal of Danger tags, security locks or other devices must only be carried out by the originator. Contractors are not permitted to remove other contractor’s tags and locks.

Unauthorised breach or removal of a tag or lock will result in disciplinary action.

In the event that a tags or lock cannot be traced or requires removal but the person responsible for the items cannot remove the lock, permission can only be obtained from the Director of CIS.
4.8.2. Danger Tags

Danger – Do Not Operate Tag is used with a lock-out device to identify that a lock-out is in progress; the person working on the plant/equipment; and date applied.

Image 10 - Example of Danger Tags

The tag is not used on its own to isolate plant or circuits, as this is not an effective isolation device. A tag only provides information to others; a lock must be used as an isolation device, and will be accompanied by a tag.

Under no conditions will activating operational stop buttons, emergency stop devices or interlock devices be considered the equivalent to the isolation of power sources or the release of stored energy.

Attach own Danger Tags or Lock-Out Device to isolation switches, valves or other isolators in all instances where Lock-Out, Tag-Out and Test is required.

Contractors must use industry standard locks, hasps and tags, for example, Master Lock types.

Image 11 - Example of Lock and Hasp

All locks must be traceable to the user. Where locks are identified only by numbers, a Register of Personal Locks is to be maintained and readily available.

4.8.1. Testing Isolation Procedure

After plant has been shut down, locked out and tagged, all isolated power sources should be tested first with appropriate instruments and then by trying to activate the plant, before any person attempts to start work on the plant. This should be done by a person who
understands the complexity of the plant (or parts of the plant, including control stations and computers remote from the plant).

It is not safe to assume an isolator has locked out an electricity source simply because it is in an open position. While normally this should open an air gap between contact points, it is possible for contact points to become welded together by the passage of electricity, and remain so even when the isolator appears to be open.

Work on the plant should not begin until tests have confirmed it is safe to do so. The calibration of any instruments required to test isolation procedure should be checked before use.

### 4.8.2. Out of Service Tags

Out of Service Tags are used to identify plant or equipment taken out of service due to a fault, damage, or non-requirement.

Tags are not removed until the item is safe for return to service.

![Image 12 - Example of Out of Service Tag](image)

An ‘Out of Service’ Tag can be used by anyone who considers the item to be unsafe or unserviceable. Details of the date, person tagging and reasons will be entered onto the tag.

Tags are securely fixed to the plant/equipment controls (e.g. steering wheel on a forklift) and isolator where applicable. Any starting device (e.g. key) is removed to prevent activation.

The person tagging should immediately advise Campus Assist of the fault by telephone or on-line, who will ensure that matter is appropriately logged.

### 4.9. Confined Spaces

A confined space means an enclosed or partially enclosed space that:

- is not designed or intended primarily to be occupied by a person
- is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space
- is or is likely to be a risk to health and safety from:
o an atmosphere that does not have a safe oxygen level, or
o contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
o harmful concentrations of any airborne contaminants, or
o engulfment

Confined spaces may include but are not limited to:

- Storage tanks, process vessels, boilers, pressure vessels, silos and other
- Tank-like compartments
- Open-topped spaces such as pits or degreasers
- Pipes, sewers, shafts, ducts and similar structures
- Any shipboard spaces entered through a small hatchway or access point, cargo tanks, cellular double bottom tanks, duct keels, ballast and oil tanks, and void spaces, but not including dry cargo holds

When working in confined spaces, Contractors and their workers must comply with WHS Regulations and Code of Practice Confined Spaces. Particular emphasis is placed on risk assessment, control of risks, entry permits, rescue arrangements and training and competency.

A Confined Space Permit is required to be submitted and authorised prior to commencement of any works in a confined space. The CIS Project/Contract Manager is responsible for organising application for the permit. Copies of the permit must be displayed on the work site.

CIS identifies all confined spaces and maintains a register and subsequent risk assessments for each campus. This information must be taken into consideration when applying for a permit and may be obtained by contacting cis.whs@sydney.edu.au.

The Contractor must ensure that all staff working in or on confined spaces are trained in confined space entry safety standards and will be required by the University to provide proof of training.

4.10. Working Outdoors

Outdoor workers are exposed to many types of hazards that depend on their type of work, geographic region, season, and duration of time they are outside. Outdoor workers include farmers, foresters, landscapers, groundskeepers, gardeners, painters, roofers, pavers, construction workers, mechanics, and any other worker who spends time outside.

Contractors should train outdoor workers about their workplace hazards, including hazard identification and recommendations for preventing and controlling their exposures.

Outdoor hazards that should be considered as part of the works by Contractors are:

- Physical hazards such as extreme heat, extreme cold, noise, lightning, and ultraviolet (UV) radiation
- Biological hazards such as venomous wildlife and insects, and poisonous plants
- Vector-borne diseases such as those spread to workers by insects, such as mosquitoes, or ticks
The University has guidelines for outdoor workers available here: http://sydney.edu.au/whs/guidelines/others/outdoor.shtml

Further information on two of the more common outdoor hazards from the groups above is provided below.

4.10.1. Working in the heat

To reduce UV exposure and the risks of heat illnesses Contractors should provide:

- sun safety information, instruction, training and supervision
- shaded rest areas and frequent rest breaks in addition to scheduled meal breaks
- water and encourage workers to stay hydrated (200mL every 15-20 minutes)
- personal protective equipment such as:
  - clothing with UPF 50+ rating, loose shirts with long sleeves, collars and long pants
  - broad spectrum sunscreen (SPF 30+)
  - sunglasses which meet Australian Standards for UV protection

4.10.2. Snakes

Outdoor workers without appropriate personal protective equipment (PPE) in snake-prone areas during summer can be at serious risk of being bitten by venomous snakes.

Although bite incidents are rare, gardeners and workers in agriculture and construction remain vulnerable to injury.

As with any other workplace hazard, it is essential Contractors take appropriate steps to protect workers from exposure to risks. Outdoors workers near creeks or rivers or open grassy areas need to be aware of potential danger and provided with PPE – ideally, puncture-proof gaiters, and thick gloves. First-aid trained staff and equipment and an emergency plan are also crucial.

Workers should proceed with caution if near or picking up objects where snakes might be resting during daytime – things like large rocks, piles of timber and corrugated iron sheeting.

Before carrying out work in or around tall grass, piles of leaves or bushes, make some noise and use long-handled tools to disturb vegetation to move snakes on.

If encountering a snake, the best option is to freeze as the slightest movement can signal predator or prey reaction and trigger a strike.

In addition to puncture-proof gaiters, wear loose pants, thick socks and sturdy footwear and gloves to protect against bites. If bitten, don’t panic and keep calm to help prevent venom spreading through the lymph gland system. Apply a firm bandage over the bitten limb area, immobilise it and call emergency services.

Never try to kill the snake or apply a tourniquet to the wound area or attempt to suck out venom or cut or wash the bite. Do not apply any chemicals or antiseptics to the wound or take medication or alcohol.
Ensure the bitten person stays as still as possible and does not try to dislodge the compression bandage, which must be removed by hospital or medical staff.

Always treat a snake bite, no matter how seemingly superficial, as a medical emergency.

### 4.11. Refrigerant Gases

Refrigerant gases deplete the ozone layer if allowed to escape. It is therefore the Contractor’s responsibility to ensure that refrigerant gases are treated with appropriate caution to avoid contaminating the environment.

Refrigerant gases must not be released into the atmosphere; they should be collected in specially sealed cylinders by a licensed disposal operator.

Refer to the following Australian Standard and Code of Practice for further information:

- **AS 4211.3 Gas recovery or combined recovery and recycling equipment - Fluorocarbon refrigerants from commercial/domestic refrigeration and air conditioning systems**
- **HB40.1 The Australian Refrigeration and Air-Conditioning Code of Good Practice – Reduction of emissions of fluorocarbon refrigerants in commercial and industrial refrigeration and air-conditioning applications**

### 4.12. Isolation of services

To ensure minimal impact on stakeholder groups, the CIS Project/Contract Manager are required to confirm that service isolations for services such as electricity, water, gas, telephone or data have been arranged and that individuals or areas affected have been advised five (5) working days prior to the date of the shutdown.

Information regarding the service isolation should be provided to the CIS Project/Contract Manager describing the nature of the work to be done, the time and the expected duration of the shutdown. All interruptions must be kept at an absolute minimum and only at such times as has been agreed by the CIS Project/Contract Manager. Should services be shut down accidentally, the Contractor must advise the CIS Project/Contract Manager and Campus Security immediately.

Contractors are to ensure that the isolation/tag out system is applied to the setting up, servicing and repair of all machinery capable of being activated by energy sources including: electrical, pneumatic, hydraulic, chemical and mechanical (refer to section 4.8).

#### 4.12.1. Isolation of Fire & Security Alarms

Where a Contractor project involves works that may generate heat, dust, or smoke, an application for a fire system interruption must be submitted. The following procedures must be strictly adhered to.

For all fire service isolation, submit a fire system interruption form at least three working days PRIOR to the commencement of the isolation. This is located here:

The isolation can be performed by a project-appointed fire Contractor or by the University Fire Services Maintenance Provider.

If using the University Fire Services Maintenance Provider to action the isolation, submit a work request through Campus Assist. A valid University Account Code must be provided. This can be supplied by the CIS Project/Contract Manager in charge of the project.

Systems should be restored at the end of each day. If a system needs to be left isolated overnight, email fire.services@sydney.edu.au to ensure adequate fire protection can be maintained.

A risk assessment identifying the risks and measures undertaken to ensure adequate fire protection is maintained at all times in the general location of the works must be provided. This statement can be submitted along with the application for the fire system interruption.

WORKS CANNOT COMMENCE BEFORE APPROVAL IS RECEIVED FROM CAMPUS INFRASTRUCTURE & SERVICES

No welding or other heat or dust producing work is to be carried out in any internal area before the fire alarm detectors are isolated. It is a requirement of all such works that a Permit to Work be completed indication any/all Hot Work activities.

Failure to comply with this requirement may result in a false alarm calling out the Fire & Rescue NSW Services and the relevant Service Provider, the cost of which will be invoiced to the Contractor.

Security Services and the Project/Contract Manager must be notified of modifications to the hydrant system requiring interruption to the fire water supply not less than five (5) working days prior to the modification work taking place.

4.12.2. Isolation of Fume Cupboards

Fume cupboard or chemical store ventilation can only be isolated by arrangement with the CIS Project/Contract Manager. Fume extraction fans must not be isolated before ‘tagging out’ all affected laboratory fume hoods to prevent their use (refer to section on ‘Danger’ and ‘Out of Service’ tags). Contractors must personally confirm that laboratory staff are aware that they are about to start work on a fume hood system.
5. Environmental and Sustainability Requirements

5.1. Sustainability Commitments/Policy

The University’s commitment to sustainability is set out in its Environmental Sustainability Policy.

The University Engineering and Sustainability unit has developed a range of strategies to improve The University’s environmental footprint; including energy and water efficiency, waste management and resource recovery, sustainable procurement / supply chain and protecting ecological systems.

All consultants and contractors involved in projects and programs are required to follow the University Design Standards and Construction Guidelines which set minimum requirements for sustainability requirements.

Each individual has a duty of care to protect the environment and must exercise due diligence. Due diligence means that PCBU’s and workers need to:

- Take all reasonable steps to prevent pollution and protect the environment
- Show that everything that could have been done to prevent an incident, has been done
- Ensure that all necessary pollution control measures are in place and are regularly checked and maintained to minimise the risk of an environmental incident
- Turn off non-essential equipment that is not being used where possible

Individuals and corporations may be fined or imprisoned for up to seven (7) years, for seriously polluting the environment. Smaller incidents of environmental pollution can incur fines and/or penalties by littering or accidentally polluting the environment. In these instances, ignorance is not considered an excuse. Contractors working on University grounds must comply with all legislative environmental requirements.

5.1.1. Environmental Risk Assessment

All Contractors must identify environmental aspects of their work that could give rise to environmental impacts and then manage the associated risks. The contractor must document identified environmental aspects of their works that can have an impact on the environment. They must undertake and document an environmental risk assessment of their works to identify significant environmental impacts and measures and procedures to control them.

All Contractors must work through the hierarchy of control when managing environmental risk. In controlling risks the priority is always to eliminate risks to the environment so far as is reasonably practicable.
Where environmental risks cannot be eliminated, they must be minimised by implementing engineering controls. If a residual risk still remains, then it must be minimised by implementing documented operational control procedures.

5.1.2. Environmental Management Plan

Where specifically required by the contract or where there is a legislative requirement, contractors must develop a project specific environmental management plan (EMP) based on the environmental impacts identified. The EMP should set objectives and targets to minimise and control the environmental impacts of the project.

5.1.3. Site Management

The Contractor must maintain a clean site throughout the contract period and ensure that the site is cleared of all rubbish, refuse and excess construction materials at the end of each day.

Progressively throughout the works and on completion of the contracted works, the Contractor is required to clean and clear away from the site all debris, rubbish, surplus building materials etc. to the satisfaction of the CIS Project/Contract Manager and to leave the site in a condition suitable for occupation. Should the University need to arrange additional cleaning to satisfy the requirements of the clause, the Contractor will be invoiced.

5.1.4. Stormwater Management and Soil Conservation

The release of contaminants or contaminated stormwater to any offsite is considered a breach of the Protection of the Environment Operations Act 1997.

Erosion and sediment controls must be installed for sediment runoff from disturbed areas to prevent the release of contaminated stormwater offsite. Erosion and sediment controls must be installed in accordance with the “Blue Book” – Managing Urban Stormwater, Soils & Construction, Volume 1 Ed. 4 (Landcom 2004). Erosion and sediment controls need to be installed before commencing work. Roads and pathways must be kept free of mud and debris.

5.1.5. Air Quality and Airborne Contaminants

Contractors must take all practicable precautions to minimise changes to the air quality of their work area and surrounding areas. Air quality can be affected by dust, fires, hazardous chemicals, or exhaust fumes and work that may potentially produce these elements should be limited to after hours operations with approval from the CIS Project/Contract Manager.

Dust on and around a work site can cause health problems for workers and others on the campus. If a work site is generating dust, Contractors must ensure that:

- Materials and stockpiles that are generating dust are kept covered and wet down
- Sweepings are placed into bags or boxes and sealed before disposing of them into a skip to prevent dust from becoming airborne when the skip is emptied
• Appropriate personal protective equipment is worn by workers, such as face masks or respirators

The use of hazardous chemicals around the University can cause health problems for workers and others on campus. Potential activities include spray painting, powder coating, and abrasive blasting. If hazardous chemicals are being used, in addition to work procedures managing workers exposure to chemicals, Contractors must ensure that:

• Appropriate ventilation measures are in place
• Air quality monitoring is being undertaken if required to manage exposure levels
• Site protection measures including the erection of signs and physical barriers are in place to restrict access to others on campus

Exhaust fumes – if a vehicle or a piece of machinery emits visible exhaust fumes continuously for 10 seconds, the owner is liable to incur an infringement notice from the Environmental Protection Authority (EPA). Vehicles and machinery should be regularly serviced so that air pollution emissions are kept to a minimum.

5.1.6. Hazardous Chemicals and Dangerous Goods

Contractors must obtain approval for any hazardous chemicals prior to delivery to site. In order to minimise risk, orders should be made for only 1-2 days supply. Contractors will be responsible for:

• The safe keeping of all hazardous chemicals and materials used
• Correct storage when not in use in approved storage facilities (i.e. reliable, tightly sealed and labelled containers, indoors on an impervious floor with enough bunding to contain any spill, appropriately ventilated)
• All hazardous chemicals/materials must be appropriately labelled and Safety Data Sheets (SDS's) held on site
• All hazardous materials must be handled safely and according to detailed instructions as outlined on the product labels at all times
• Under no circumstance are any hazardous chemicals to be brought onto the site without an SDS
• No hazardous chemical is to be decanted without an appropriate container/label
• A written risk assessment of the hazardous chemicals relating to its use
• Training details of those required to use the substance

Clean-up materials must be provided in case of spillage. Liquid spills may be mopped up with rags, sawdust or commercially available absorbent products. DO NOT wash chemicals or other hazardous substances down the drain or pour chemicals onto the ground.

The Contractor must ensure that the clean-up materials are appropriate for the chemicals used and that at least one person on the site at any time is trained to clean up a spill. This includes ensuring an adequate supply of clean-up materials is available and easily accessible at all times.
5.2. Waste Management

The University is committed to waste avoidance and has set a target to improve resource recovery to more than 80%. Contractors must prepare a project-specific waste management plan documenting and demonstrating how construction and demolition waste will be minimised and recycled. The waste management plan must document:

- the type and volume of material generated
- methods for storing, separating, sorting and recovering materials for reuse and recycling
- disposal of waste materials to appropriately licensed waste management and recycling facilities
- the supply of appropriately labelled bins/skips used specifically for the segregating recyclable materials and construction waste
- a suitable location for waste bins/skips
- procedures to monitor and measure the types of waste materials generated and recycled
- checking and reporting procedures to ensure compliance with the waste management plan and the University’s requirements for recycling and waste management

The disposal of waste on the University grounds is expressively forbidden. University rubbish bins must not be used for the disposal of construction and demolition waste. The University has a strong commitment to environmental sustainability and encourages all Contractors and workers to identify waste minimisation options at the start of each job by:

- Working out costs and savings involved in minimising waste
- Avoiding over-ordering of materials
- Ensuring that sub-Contractors are aware of their responsibilities with regard to waste disposal
- Recycling materials where possible
- Purchasing materials with the minimum packaging, or ask suppliers to accept their packaging back

There are many opportunities for waste reduction and Contractors should encourage their workers to adopt a team approach to this and to raise awareness as much as possible.

5.2.1. Bins and Skips

The type, quantity and location of waste bins/skips must be coordinated with the CIS Project/Contract Manager at the relevant campus. Bins must not restrict traffic or access/egress to work areas and buildings.

Debris must not be stored within stairs, passage ways or exits. All debris must be removed from the site and placed in skips. The Contractor must ensure the site is kept clean and tidy, recyclables are separated from waste materials in dedicated bins/skips and bins/skips are emptied on a regular basis.
An industrial rubbish skip is required on most work sites. Skips must have a lid in place when not being used, to prevent the rubbish from being blown away and to minimise any rainwater ingress.

Contractors must maintain an auditable log of the quantities of waste recycled and waste materials disposed to landfill.

5.2.2. Chemical Waste

Any chemical wastes must be stored in their original packaging (packaging must be maintained in good condition) and care must be taken to ensure that the containers are properly sealed. Chemical wastes must be disposed of by licensed disposal operators.

It is expressively forbidden for chemical wastes to be tipped into sinks, onto the ground, or into sewers or storm-water drains e.g. paint, thinners, chemicals, solvents, detergents, oils etc.

5.2.3. Electrical Waste

Electrical cables, fuses, devices such as switches and similar material must be disposed of by a licensed Contractor.

5.2.4. Contaminated Waste

Any pathological, biological and clinical wastes and sharps must be stored in purpose-built, specifically labelled, bright yellow contaminated waste bins. These bins must be serviced only by licensed hazardous waste Contractors.

Contaminated construction waste (waste fuels / oils / lubricants, hazardous substance containers) must be stored in impervious bins / containers and stored in bunded areas.

It is forbidden to dispose of contaminated waste in general purpose or recycling rubbish bins.

The CIS Project/Contract Manager or Security Services should be contacted to assist with the most suitable location for contaminated waste bins.

5.2.5. Metals

Materials such as iron, steel, copper and lead must be disposed of only by suitable competent disposal Contractors. Advice should be sought from the Contractors with regard to correct labelling, packaging and storing of lead.

5.2.6. Electrical/Transformer Oils

These oils must be stored in special containers issued by licensed waste disposal companies. The containers must be collected only by such disposal companies. These containers must not be left on the University grounds by a contractor.
5.2.7. Recycling

The University requires recycling of appropriate materials, such as aluminium cans, glass and plastic, as well as paper and cardboard. Contractors are to ensure recyclable materials are placed in the correct recycling bins.

5.3. Vibration and Noise Management

The Contractor must liaise with building occupants in the vicinity and coordinate their activities to minimise disruption to normal operations of the building’s occupants.

If a situation arises where work of a disruptive or noisy nature disturbs normal activities, this work must be stopped immediately at no cost to the University. Compliance may result in (but not be restricted to) noisy or disruptive activities being postponed to a more suitable time and taking steps to minimise the effects of future noisy and/or disruptive activities.

5.3.1. Vibration Management

Where Contractors are scheduled to carry out vibration activities, for example piling, jackhammering they must notify persons impacted by vibration. This can be done with assistance from the CIS Contract/Project Manager.

5.3.2. Loud Radio

Contractors should be aware that as the Campus is an educational facility, noise must be kept to a minimum near buildings. Radios and other loud outdoor music are not permitted.

5.3.3. Noise Control

Contractors must take all practicable precautions to minimise noise. Any works (e.g. drilling) that will cause disruption to the University activities and guests must not commence without the prior permission of the CIS Project/Contract Manager.

5.3.4. Noise Levels

Noise from equipment being used must not exceed prescribed levels for hearing conservation or recommended levels for areas of occupancy. Where high noise levels are expected to be produced by certain operations, consideration must be given to carrying out the process during a time outside of normal operating hours. Personal Protection Equipment should also be worn by Contractors working above the prescribed recommended noise levels as appropriate.

Safe Work Australia Code of Practice Managing Noise and Preventing Hearing Loss at Work advised the following common noise sources and their typical sounds levels.
<table>
<thead>
<tr>
<th>Typical Sound level in dB</th>
<th>Sound Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>Jet engine at 30m</td>
</tr>
<tr>
<td>130</td>
<td>Rivet hammer (pain can be felt at this threshold)</td>
</tr>
<tr>
<td>120</td>
<td>Rock drill</td>
</tr>
<tr>
<td>110</td>
<td>Chain saw</td>
</tr>
<tr>
<td>100</td>
<td>Sheet-metal workshop</td>
</tr>
<tr>
<td>90</td>
<td>Lawn mower</td>
</tr>
<tr>
<td>85</td>
<td>Front-end loader</td>
</tr>
<tr>
<td>80</td>
<td>Kerbside heavy traffic, lathe</td>
</tr>
<tr>
<td>70</td>
<td>Loud conversation</td>
</tr>
<tr>
<td>60</td>
<td>Normal conversation</td>
</tr>
<tr>
<td>40</td>
<td>Quiet radio music</td>
</tr>
<tr>
<td>30</td>
<td>Whispering</td>
</tr>
<tr>
<td>0</td>
<td>Hearing threshold</td>
</tr>
</tbody>
</table>

Table 2 - Indicative dB Levels

5.4. Flora and Fauna

5.4.1. Tree Protection

The University has a Tree Management Plan, which provides strategic guidance for the protection and enhancement of trees on campus.

Tree Protection on construction and development sites is high priority. Australian Standard 4970 (Protection of trees on development sites 2009) sets out a framework for the assessment, integration and management of trees within the development context.

Prior to any works within the Tree Protection Zone including the structural root system, the Contractor or Project Manager shall advise the University Grounds Manager or nominated representative to obtain instruction including the engagement of a consulting arborist.

Appendix 4 of the Tree Management Plan provides a checklist of the Protection procedures that must be adhered to.

The Contractor must take appropriate actions to prevent the damage or destruction of native flora and fauna on campus. Native flora and fauna is protected in NSW under State legislation (Native Vegetation Act 2003, National Parks and Wildlife Act 1974) and in some
instances Commonwealth legislation (*Environment Protection and Biodiversity Conservation Act 1999*).

Work sites must be established to avoid interaction with vegetation and potentially impacted vegetation should be protected with barricading.

Any native fauna encountered on the work site should be allowed to leave under its own accord, or if injured removed by an appropriately qualified wildlife handler.

Pets and other animals must not be bought onto campus, with the exception of animals for university farms with prior approval.

### 5.5. Heritage and Cultural Areas

The Contractor must take appropriate actions to prevent the damage or destruction of heritage items and structures. Heritage items and places are protected in NSW under State legislation (*Heritage Act 1977, National Parks and Wildlife Act 1974*) and Commonwealth legislation (*Environment Protection and Biodiversity Conservation Act 1999, Native Title Act 1993, Aboriginal and Torres Strait Islander Heritage Protection Act 1981*).

There are a number of registered heritage structures and items on the University campuses which require specific protecting and management measures. Contractors working in and around heritage structures must adhere to any site specific heritage protection measures.

Aboriginal heritage items and places identified must not be disturbed, damaged or removed. Where an Aboriginal heritage item is disturbed, or an Aboriginal heritage item is discovered during construction works, all works in the area must immediately cease and the CIS Project/Contract Manager must be contacted.

### 5.6. Water Quality

It is against the law to place any material (other than clean water) in a position where it is likely to leak, fall or be blown into any drain or gutter that is used to collect rainwater.

Allowing this to occur may result in fines or legal proceedings against businesses or individuals, by the Environmental Protection Authority (EPA) whether the pollution was accidental or not.

To prevent this from happening, the footpath and gutter around the work site should be kept free of litter, soil and sand, particularly at the close of each working day. Litter, leaves or other debris must never be swept into drains or gutters and rubbish bins must be covered.

### 5.7. Contaminated Land

Soils may become contaminated with oils, asbestos, cyanide, heavy metals or other toxic material. In the event of such contamination occurring or discovered, the Contractor must inform the CIS Project/Contract Manager, so that the services of a licensed disposal Contractor may be engaged for its assessment and safe removal.
Soil must not be removed from University grounds without the prior approval of the CIS Project/Contract Manager.

5.8. University Farms

Prior to commencing work on farms, contractors must meet with the designated site contact to cover any induction or relevant safety and environmental information and protocols relevant to the farm.

Contractors working on university farms must avoid interaction with stock / animals. This includes not feeding, patting or scaring animals and maintaining site fencing arrangements (keeping gates as originally found).

Contractors must be aware of the location of electric fences and take appropriate precautions when working around electric fences.

Vehicles, plant and equipment must meet the farm biosecurity requirements before being introduced to or removed from site. This may include the wash-down of wheels / tracks / dirty equipment to remove all dirt and vegetative material.

In the broader context of working on farms it is important to remind all staff and contractors about managing any risks to keep safe. Common hazards on farms to be aware of include:

- zoonosis (animal diseases that are transmissible to humans)
- dangerous chemicals
- animals - (herd and wild animals)
- vehicles and road hazards (4WD, quad-bikes, unsealed roads and kangaroos)
- farming equipment (tractors and machinery)
- wet/dry wells
- unseen holes in the ground and uneven surfaces

Depending on the scope and location of work contractors may require inoculations as precaution against zoonotic diseases.
6. Emergency Preparedness and Response

6.1. First Aid

Contractors are responsible for providing first aid equipment and access to first aid facilities for their workers. They must also provide access to trained personnel to administer first aid.

First aid kits and access information may be kept in Contractor’s or worker’s vehicles. However the Contractor must assess the storage location with consideration to the actual work location and/or distance of the vehicle.

6.2. Emergency Procedures

Contractors Categories 3, 4 and 5 are required to prepare maintain and implement emergency procedures and plans for each of their various workplaces. Contractor emergency plans must provide the following:

- emergency procedures, including:
  - an effective response to an emergency
  - evacuation procedures
  - notifying emergency service organisations at the earliest opportunity
  - medical treatment and assistance
  - effective communication between the Contractor and the University to coordinate the emergency response and all persons at the workplace

- testing of the emergency procedures, including the frequency of testing
- information, training and instruction to relevant workers in relation to implementing the emergency procedures

The Contractor emergency plans and procedures must consider all relevant matters, including the following:

- the nature of the work being carried out at the workplace
- the nature of the hazards at the workplace
- the size and location of the workplace
- the number and composition of the workers and other persons at the workplace

When setting up workplaces Contractors are to ensure the following:

- the layout of the workplace allows, and the workplace is maintained so as to allow, for persons to enter and exit and to move about without risk to health and safety, both under normal working conditions and in an emergency
- lighting levels are maintained in a manner which enables safe evacuation in an emergency
Contractors are expected to periodically test their emergency procedures to ensure they remain effective.

University emergency procedures are displayed in all buildings describing the alarms, emergency exits, fire fighting equipment, assembly areas and so on. In the event that a University staff member asks the contractor to evacuate, the Contractor must:

- Leave the building immediately by the nearest exit
- Proceed to the assembly area indicated on the evacuation plan
- Remain in the assembly area. Do not re-enter the building until it is safe to do so by fire warden or University Security or fire brigade

**Contractors must immediately notify any emergency to the Emergency Services on 000 and then the University Security on 02 9351 3333.** If calling from University landline, dial extension 13333. When calling University Security, please advise the:

- Nature of the emergency
- Location (i.e. building, floor, room number)
- Any casualties
- Whether emergency services have been notified
- The level of assistance required


**6.2.1. Building Specific Evacuation Plans**

Contractors can view building evacuation plans by logging into the CIS Emergency Preparedness site (link shown below), then clicking on the ‘Evacuation Plan’ link in the left-hand column, then searching by Campus.


Login: cis_con Password: C0ntr@ct

**6.3. Emergency Contact List**

<table>
<thead>
<tr>
<th>Contact</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Security (24 hours)</td>
<td>02 9351 3333 (from University landline 13333)</td>
</tr>
<tr>
<td>Campus Security (general enquiries)</td>
<td>02 9351 3487</td>
</tr>
<tr>
<td>Emergency Services</td>
<td>000</td>
</tr>
<tr>
<td>Ambulance / Fire / Police</td>
<td></td>
</tr>
<tr>
<td>Crime Stoppers (24 hours)</td>
<td>1800 333 000</td>
</tr>
<tr>
<td>Campus Assist</td>
<td>1300 226 787</td>
</tr>
</tbody>
</table>
Table 3 - Emergency Contact List

6.4. Work on Isolated or Remote Locations

There will be times when a Contractor may be required to perform works in a remote or isolated situation (working alone on a University campus). The definition of remote/isolated work according to the WHS Regulation 2011 (NSW) is ‘work that is isolated from the assistance of other persons because of location, time or the nature of the work’.

Contractors are required to consult, co-ordinate and communicate with the CIS Project/Contract Manager when it is anticipated that remote and/or isolated works are required to be performed by the Contractor. The CIS Project/Contract Manager will consult with the contracting company to ensure that a suitable risk management framework has been established to mitigate significant health and safety risks associated with the isolated and remote work.

The Contractor in consultation with the CIS Project/Contract Manager must establish an effective communication plan to ensure that communication lines between the contracting company, CIS Project/Contract Manager and the Contractor performing the work are readily available to verify the Contractor has not sustained any injury during the course of their works.

The communication plan, at minimum, must include a process to notify the CIS Project/Contract Manager when works has commenced and work has been completed. Depending on the scope of works regular phone calls to an agreed stakeholder may be required to verify the worker has not sustained harm.

When a Contractor has not communicated to the CIS Project/Contract Manager their whereabouts during the course of works, The CIS Project/Contract Manager is to contact security who can undertake a search for the Contractor.

Security will facilitate any first aid and/or medical requirements and inform the CIS Project/Contract Manager and any other relevant stakeholders.

Where reasonably practicable, CIS will engage local project managers with experience of the area to assist implementing and verifying safe systems of work are established to minimise health and safety risks for workers.
7. Hazard and Incident Reporting

7.1. Hazard and Incident Reporting

The reporting of incidents and identification of hazards is critical in achieving a safe workplace as it prompts action to prevent any future accidents and injuries.

All incidents and/or near misses arising from the activities undertaken by Contractors should be reported to the Responsible CIS Project/Contract Manager (managing the contract) in writing within 24 hours.

- All contractor notifiable incidents are to be recorded in RiskWare, the University incident and hazard reporting system, by either the CIS Project/Contract Manager or the CIS WHS Manager (cis.whs@sydney.edu.au)
- All contractor notifiable incidents must be notified to the Regulator (i.e. SafeWork NSW) by the contractor. While contacting SafeWork NSW is an obligation of the Contractor, the University will also notify SafeWork NSW to satisfy obligations

Separate to notifiable incidents, all incidents and hazards that affect the university community are required to be entered in RiskWare, this means:

- Where a contractor has management and control of a workplace and events occur within the perimeter of the workplace, it is only required to be entered into RiskWare where it has a potential to affect the university community, i.e. infrastructure/essential services related, fire, event causing evacuation etc.
- Where a hazard or incident occurs (1) outside a designated contractor work perimeter, and (2) within the campus, and (3) has the potential to impact the university community, it must be entered into RiskWare, e.g. equipment and materials falling outside of the project site; lost load from a contractor vehicle potentially striking staff/students/visitors etc.

All hazards that do not satisfy one of these conditions should be reported and managed using the Contractor own hazard reporting system.

If in doubt about whether an identified hazard requires reporting, the CIS Project/Contract Manager or CIS WHS Manager will provide direction.

7.2. Access to RiskWare

Only workers with a staff UniKey can access RiskWare. This includes internal project managers. External project managers, contractors and other affiliates don’t have access to RiskWare.

Therefore it is the responsibility of the relevant CIS Project/Contract Manager to arrange for reporting of hazards and incidents into RiskWare on the Contractor behalf, after being informed on the hazard/incident.

More information on RiskWare can be found here - http://sydney.edu.au/whs/report/about_riskware.shtml
7.3. Notifiable Incidents

Any notifiable incident (fatality, serious injury/illness and dangerous incident – potentially resulting in injury) is to be reported immediately to the Emergency Services on 000 and then to University Security on 02 9351 3333 for first aid and preservation of the scene if required.

The Contractor must then contact the CIS Project/Contract Manager and the CIS WHS Manager (cis.whs@sydney.edu.au) to advise the notifiable incident who will then also advise the University Safety Health and Wellbeing department (whs.information@sydney.edu.au).

In the instance of a notifiable incident as described below, SafeWork NSW must also be contacted immediately on 13 10 50 as an urgent investigation may be needed.

A notifiable incident includes the following in relation to a place of work:

a) Fatality;
b) immediate treatment as an in-patient in a hospital, or
c) immediate treatment for:
   o the amputation of any part of his or her body, or
   o a serious head injury, or
   o a serious eye injury, or
   o a serious burn, or
   o the separation of his or her skin from an underlying tissue (such as delving or scalping), or
   o a spinal injury, or
   o the loss of a bodily function, or
   o serious lacerations, or
d) medical treatment within 48 hours of exposure to a substance, or
e) an uncontrolled escape, spillage or leakage of a substance, or
f) an uncontrolled implosion, explosion or fire, or
g) an uncontrolled escape of gas or steam, or
h) an uncontrolled escape of a pressurised substance, or
i) electric shock, or
j) the fall or release from a height of any plant, substance or thing, or
k) the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations, or
l) the collapse or partial collapse of a structure, or
m) the collapse or failure of an excavation or of any shoring supporting an excavation, or
n) the inrush of water, mud or gags in workings, in an underground excavation or tunnel, or
o) the interruption of the main system of ventilation in an underground excavation or tunnel.
Any of the above incidents must be followed up with a full written report by the contractor detailing the incident, actions taken and recommendation to avoid a re-occurrence.

Non-disturbance provisions apply to the scene of a serious incident.

**Where a notifiable incident has occurred on site, the Contractor must take measures to ensure, so far as is reasonably practicable, that the site where the incident occurred is not disturbed until an inspector arrives at the site or any earlier time that an inspector directs.**

This does not apply where interference is necessary to aid or revive any person involved in an accident or to prevent further injury to persons or property.
### 8. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Contractor</td>
<td>A person, organisation, their workers or a nominated representative engaged to carry out work for the University in a contract for service arrangement.</td>
</tr>
<tr>
<td>Contract Manager</td>
<td>The person nominated to administer and supervise the contract (may be the University staff or external project manager with delegated authority).</td>
</tr>
<tr>
<td>Construction Work</td>
<td>Any work carried out in connection with the construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning or dismantling of a structure and may include:</td>
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<tr>
<td></td>
<td>a) any installation or testing carried out in connection with an activity referred to in the above paragraph;</td>
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<td></td>
<td>b) the removal from the workplace of any product or waste resulting from demolition;</td>
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<td></td>
<td>c) the prefabrication or testing of elements, at a place specifically established for the construction work, for use in construction work;</td>
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<td></td>
<td>d) the assembly of prefabricated elements to form a structure, or the disassembly of prefabricated elements forming part of a structure;</td>
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<td></td>
<td>e) the installation, testing or maintenance of an essential service in relation to a structure;</td>
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<td>f) any work connected with an excavation;</td>
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<td></td>
<td>g) any work connected with any preparatory work or site preparation (including landscaping as part of site preparation) carried out in connection with an activity referred to the first paragraph; and</td>
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<tr>
<td></td>
<td>h) any of the aforementioned activities that are carried out on, under or near water, including work on buoys and obstructions to navigation.</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>High Risk Construction Work</td>
<td>High risk construction work includes:</td>
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<td>a) involves a risk of a person falling more than 2 metres, or</td>
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<td></td>
<td>b) is carried out on a telecommunication tower, or</td>
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<td></td>
<td>c) involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure, or</td>
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<td></td>
<td>d) involves, or is likely to involve, the disturbance of asbestos, or</td>
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<td></td>
<td>e) involves structural alterations or repairs that require temporary support to prevent collapse, or</td>
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<td></td>
<td>f) is carried out in or near a confined space, or</td>
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<td></td>
<td>g) is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres, or a tunnel, or</td>
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<td>h) involves the use of explosives, or</td>
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<td>i) is carried out on or near pressurised gas distribution mains or piping, or</td>
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<td>j) is carried out on or near chemical, fuel or refrigerant lines, or</td>
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<td></td>
<td>k) is carried out on or near energised electrical installations or services, or</td>
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<td></td>
<td>l) is carried out in an area that may have a contaminated or flammable atmosphere, or</td>
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<td></td>
<td>m) involves tilt-up or precast concrete, or</td>
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<td></td>
<td>n) is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians, or</td>
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<td></td>
<td>o) is carried out in an area at a workplace in which there is any movement of powered mobile plant, or</td>
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<td></td>
<td>p) is carried out in an area in which there are artificial extremes of temperature, or</td>
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<td>q) is carried out in or near water or other liquid that involves a risk of drowning, or</td>
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<td></td>
<td>r) involves diving work.</td>
</tr>
<tr>
<td>Principal Contractor</td>
<td>A Person Conducting a Business or Undertaking (PCBU) which has taken control and management of a construction site from the PCBU which commissioned the construction project. The construction project must be greater than $250,000 in value before a PCBU who commissioned the construction project can relinquish management and control of the project to another PCBU.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>The nominated superintendent’s representative.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Structure</td>
<td>Structure means anything that is constructed, whether fixed or moveable, temporary or permanent, and includes:</td>
</tr>
<tr>
<td></td>
<td>a) buildings, masts, towers, framework, pipelines, transport infrastructure and underground works (shafts or tunnels), and</td>
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<tr>
<td></td>
<td>b) any component of a structure, and</td>
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<td></td>
<td>c) part of a structure</td>
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<td></td>
<td>Examples: a roadway or pathway; a ship or submarine; foundations, earth retention works and other earthworks, including river works and sea defence works; formwork, falsework or any other structure designed or used to provide support, access or containment during construction work; an airfield; a dock, harbour, channel, bridge viaduct, lagoon or dam; a sewer or sewerage or drainage works.</td>
</tr>
<tr>
<td>'must'</td>
<td>Any sentence within the Handbook containing 'must' is to be considered a mandatory requirement.</td>
</tr>
</tbody>
</table>