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HS801 Contractor Safety Manual

Version	Approved by	Approval date	Effective date	Next full review
2.0	Director, UNSW Safety & Sustainability	8 April 2018	8 April 2018	April 2024

Guideline Statement		
Purpose	This manual is for contractors to refer alongside their own risk control documents when working on the UNSW site	
Scope	Any contractor working on the UNSW Site	
Are Local Documents on this subject permitted?	☒ Yes, however Local Documents must be consistent with this University-wide Document.	☐ No
Guideline		

Contents

1. Introduction

The University of New South Wales is committed to providing a safe environment for all who work, study and visit here. All contractors are required to follow Statutory requirements as set out under the following:

- Work, Health and Safety Act 2011,
- Work Health and Safety Regulation 2017
- Relevant Standards and Codes of Practise
- Relevant UNSW Procedures, Guidelines and Protocols

2. Scope

This document provides a HS&E framework for contractors and UNSW Project Managers when undertaking work on any UNSW campus. The aim of the document is not to duplicate risk control methodology as set out under statutory obligations, codes, standards, or industry best practise guidance. Its purpose is to advise on specific safety requirements required by UNSW in addition to these guidance documents for its site.

This document provides information for any contractor working on the UNSW site. Examples of contractor work activities include (not exhaustive):

- Working in laboratories
- Offices
- Roofs,
- Plant rooms/switch
- Common areas (footpaths, & roads)
- Gardens
- Service Tunnels
- Lift infrastructure
- Common areas
- Substations
- Building Facades
- Construction sites/activities
- Confined spaces
- Asbestos/HAZMAT removal
- Coring/cutting in buildings
- Hot works
- Excavation
- Heights's work
- Falling objects
- Use of vehicles on site
- Use of hazardous plant
- Lifting
- Electrical work

3. Document list

The following documents are referenced within this guideline and are relevant to contractor activities on site. All these documents are available in the Contractor Online Safety Portal: www.contractorsafety.unsw.edu.au

Keyword	Code	Document name	Document Location
Induction	HS805	Contractor induction checklist	http://safety.unsw.edu.au/documents-resources
Report	HS809	HS Performance report for Contractors	http://safety.unsw.edu.au/documents-resources
Policy	-	UNSW Health and Safety Policy	http://safety.unsw.edu.au/documents-resources
Policy	-	UNSW Environmental Policy	http://safety.unsw.edu.au/documents-resources
Asbestos	FMHS-AS01	UNSW Asbestos Management Plan | Work Health & Safety	
Asbestos	FMHS-AS02	Asbestos Fact Sheet	www.contractorsafety.unsw.edu.au - documents
Asbestos	HS918	Asbestos Work Permit	
Access	FMHS-CTR04a	Construction Contractor access authorisation form	
Access	FMHS-CTR04b	Service Contractor access authorisation form	
Inspection	FMHS – ENVR02	Site environmental inspection checklist	
Plan - Traffic	HS930	Traffic Management Plan Checklist	
Plan - Environmental	FMHS – ENV01	Environmental plan checklist	
Plan	HS810	HS Management Plan Checklist	
SWMS	HS811	SWMS Checklist	
Cleaner training	FMHS-CTR12	H&S for cleaners June 2017	
Confined Space	FMHS-CS02	Confined Space Hazard & Risk Register	
Confined Space	FMHS-CS01	Confined Space Photo Library	
Confined Space	FMHS-CS04	Confined Space Risk Assessment - Ammonia Scrubber	
Confined Space	FMHS-CS05	Confined Space Risk Assessment - Balance Tank	
Confined Space	FMHS-CS06	Confined Space Risk Assessment - Boiler Tank	
Confined Space	FMHS-CS07	Confined Space Risk Assessment - Chemical Tank	
Confined Space	FMHS-CS08	Confined Space Risk Assessment - Cooling Tower	
Confined Space	FMHS-CS09	Confined Space Risk Assessment - Diesel Tank	
Confined Space	FMHS-CS10	Confined Space Risk Assessment - Fountain Tank	
Confined Space	FMHS-CS11	Confined Space Risk Assessment - Grease Trap	
Confined Space	FMHS-CS12	Confined Space Risk Assessment - Large Filter Baskets	
Confined Space	FMHS-CS13	Confined Space Risk Assessment - Sediment Pit	
Confined Space	FMHS-CS14	Confined Space Risk Assessment - Settlement Tank	
Confined Space	FMHS-CS15	Confined Space Risk Assessment - Sewer Pit	
Confined Space	FMHS-CS16	Confined Space Risk Assessment - Storm Water Easement	
Confined Space	FMHS-CS17	Confined Space Risk Assessment - Storm Water Pit Drains	
Confined Space	FMHS-CS18	Confined Space Risk Assessment - Sump Pit	
Confined Space	FMHS-CS19	Confined Space Risk Assessment - Trade Waste Pit	
Confined Space	FMHS-CS20	Confined Space Risk Assessment - Trade Waste Tank	
Confined Space	FMHS-CS21	Confined Space Risk Assessment - Unknown Pit	
Confined Space	FMHS-CS22	Confined Space Risk Assessment - Unknown Tank	

Confined Space	FMHS-CS23	Confined Space Risk Assessment - Unknown Tank Void	
Confined Space	FMHS-CS24	Confined Space Risk Assessment - Waste Water Pit	www.contractorsafety.unsw.edu.au - documents
Confined Space	FMHS-CS25	Confined Space Risk Assessment - Waste Water Tank	
Confined Space	FMHS-CS26	Confined Space Risk Assessment - Water Tank	
Confined Space	FMHS-CS27	Confined Space Risk Assessment - Subsoil Pit	
Cryogenic Facilities	FMHS - BC01	Cryogenic Facilities Hazard Register	
Permit	HS821	Hot_Work_Permit	
Permit	HS931	Permit to Work-Excavation	
Permit	HS929	Coring/Cutting Permit	
Permit	HS932	Permit to fly drones: Contractors	
Permit	HS823	HV_Substation_Entry_Permit	
Permit	HS827	Switching Instruction Permit	
Permit	HS826	Request Isolation Permit	
Permit	HS828	HV Access Permit	
Permit	HS918	Asbestos Work Permit	
Permit	HS822	Confined_Space_Entry_Permit	
Permit	HS916	Working at Heights Permit	
Permit	HS700	Lab clearance permit	http://safety.unsw.edu.au/documents-resources
Roof	FMHS - RS03	C24- Clancy Roof Safety Manual	www.contractorsafety.unsw.edu.au - documents
Roof	FMHS - RS04	H6 - TYREE Roof Safety Manual	
Roof	FMHS - RS05	E10 - Roof Safety Manual	
Roof	FMHS - RS06	E26 - Roof Safety Manual	
Roof	FMHS - RS07	M15 - Roof Safety Manual	
Roof	FMHS-RS08	Roof Space Hazard and Risk Register	
Substation	FMHS-SB01	Substation Installation Management Plan	
Substation	FMHS-SB03	Substation hazard reference notes - Contractors	
Substation	FMHS-SB02	UNSW Substation Hazard Register	
Service Tunnel	FMHS - ST02	Service Tunnel Map	
Service Tunnel	FMHS-ST03	Service Tunnel Map -2	
Service Tunnel	FMHS - ST01	Service Tunnel induction form	

4. UNSW Health and Safety Policy

All contractors must be familiar with the UNSW Health and Safety policy statement: https://safety.unsw.edu.au/

UNSW AUSTRALIA

Health and Safety Policy Statement

Never Stand Still

Your health, safety and wellbeing

Our commitment

UNSW's Health and Safety Policy objective is that no person will come to harm while at UNSW.
To achieve this, everyone at the University needs to understand their individual health and safety responsibilities. UNSW has identified five guiding principles that underpin all health and safety activities.

- Active and visible leadership
- Mutual accountability
- Risk based approach
- Practical and simple solutions
- Consistency

UNSW will provide a world-class campus environment that promotes health, safety and wellbeing.
Our policy applies to all workers, students and visitors to the University and UNSW workers and students undertaking University related activities elsewhere.

The following values form the basis of achieving the University's health and safety policy objective:

- We are committed to ensuring the health, safety and wellbeing of everyone in the workplace.
- Everyone has a responsibility for safety; their own and that of others.
- Injuries can be prevented and an incident-free working and learning environment is actively pursued.
- Communication and consultation are central to working together for a safer workplace.

Improving human and environmental health, safety and wellbeing are predeterminants for UNSW's strategic priorities of academic excellence, social engagement and global impact.

UNSW safeguards health, safety and wellbeing through:

- Our Health and Safety Management System
- Our Risk Management Program
- Risk analysis for our research, teaching or operational activities and then managing those risks. A responsible person must then be satisfied that all foreseeable hazards are identified, assessed and controlled
- Measurable objectives and targets which facilitate continual improvements in health, safety and wellbeing in the workplace and reduce work related illness and injury
- Health and safety training and the dissemination of health and safety information to all workers, students and visitors to the workplace
- Consulting workers, students, contractors and affiliated entities about decisions that may affect their health and safety
- Ensuring there are adequate human and financial resources to manage our health and safety management system
- Communicating this policy throughout UNSW via public display, electronic distribution and training.

For support and advice contact:

UNSW Health and Safety
www.safety.unsw.edu.au
Ph: 9385 1565
Email: safety@unsw.edu.au

UNSW will comply with the *Work Health and Safety Act 2011*, the *Work Health and Safety Regulation 2011*, and other relevant legislation and industry standards including license conditions as a self-insurer for workers compensation.

Professor Ian Jacobs
President & Vice-Chancellor
UNSW Australia

30th March 2016
Date

Health and Safety information can also be found at:

- www.wellbeing.unsw.edu.au
- www.healthservice.unsw.edu.au
- www.sustainability.unsw.edu.au
- www.sustainabilityreport.unsw.edu.au

UNSW Health and Safety
UNSW Safety and Sustainability
Campus Life and Community Engagement

5. UNSW Environmental Policy

All contractors must be familiar with the UNSW Environmental policy statement: https://safety.unsw.edu.au/

ENVIRONMENT POLICY

Responsible Officer	Vice-President, Campus Life & Community Engagement
Contact Officer	Director, UNSW Safety & Sustainability
Superseded Documents	Environment Policy (2012)
Review	1 October 2018
File Number	2015/37444
Associated Documents	UNSW 2025 Strategic Plan Environmental Management Plan Environmental Compliance Register Talloires Declaration Universitas 21 – Statement on Sustainability

Version	Authorisation	Approval Date	Effective Date
3.1	Administrative update by Vice-President, Campus Life and Community Engagement	8 December 2015	8 December 2015

1. Purpose

To express UNSW's commitment to environmental sustainability.

2. Background

Environmental Sustainability is both a strategic priority and a strategic enabler in UNSW's 2025

UNSW is also a signatory to a number of international declarations relating to sustainability, including Talloires Declaration and the Universitas 21 Statement on Sustainability.

As a leading research-intensive university with a focus on contemporary and social issues we aspire to be a leader in environmental responsibility.

3. Scope

This policy applies to the operational activities of UNSW and the people associated with the University including staff and students as well as visitors and contractors.

4. Policy Statement

The University of New South Wales acknowledges that its activities have an impact on the environment both locally and globally.

We recognise that all staff, students and visitors have a responsibility to play their part in reducing our environmental impact.

We will work toward this by:

- Minimising carbon emissions and conserving natural resources for future generations through improvements in energy efficiency.
- Developing effective waste management and recycling practices.
- Increasing awareness of environmental responsibility among staff, students and visitors to the University.
- Having an environmental management system that ensures the University complies with environmental legislation.
- Promoting and encouraging sustainable forms of travel, transport and communication by staff and students.
- Maintain the University grounds in an environmentally sensitive way, having regard to the protection of natural habitats and local wildlife.
- Taking into account environmental factors in new build projects and re-developments.
- Striving to continually improve the University's environmental performance.

5. Environmental Management Plan

This policy will be supported by appropriate Procedures including an Environmental Management Plan ("EMP") which shall operate as if it is a Procedure. The EMP will, among other things, aim to minimise UNSW's environmental impact wherever practicable.

6. Reporting

The University will regularly report on its environmental performance in accordance with recognised standards and the targets expressed in the Environmental Management Plan.

7. Legal & Policy Framework

The roles and responsibilities for implementing this policy are in the Environmental Management Plan, the Environmental Law Compliance Directory and UNSW's Sustainability Strategy.

8. Review

In the context of an ever changing environment this policy will be reviewed annually in consultation with staff and students to ensure it remains relevant and reflects the aspirations of the University's stakeholders.

9. Acknowledgements

In developing this policy UNSW acknowledges Universitas 21 partner; the University of Nottingham and its Environment Policy.

Appendix A: History

Version	Authorised by	Approval Date	Effective Date	Sections modified
1.0	UNSW Council CL95/6	6 February 1995	6 February 1995	
2.0	UNSW Council CL05/73	20 June 2005	20 June 2005	Full review.
3.0	President and Vice-Chancellor	20 February 2012	20 February 2012	All: new document
3.1	Vice President – Campus Life and Community	8 December 2015	8 December 2015	Administrative update and review to align with UNSW 2025 Strategy

6. UNSW Contractor Online Safety Management System

All businesses and individuals must register in the system as per the process steps below.

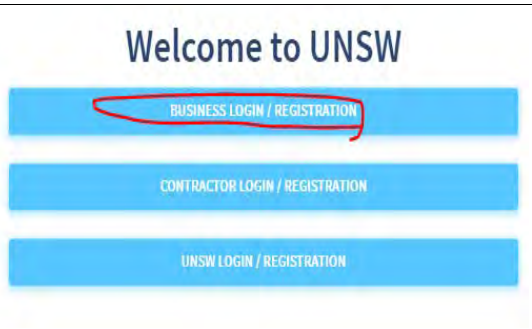
6.1. Business registration

The following steps outline how Businesses access to the online contractor system.

<table>
<tr><td>STEP 1</td><td>Go to the following link: www.contractorsafety.unsw.edu.au</td></tr>
<tr><td>STEP 2</td><td>A key contact for the business needs to register the business in the system[1,2] i.e.

• Construction project – project manager
• Service Contract – contract manager
• Small works – business owner

* NOTE: the person who registers the business still needs to register as an individual contractor and complete relevant inductions if working on the UNSW site

**Registration clarification

1. Whether the business is engaged by a UNSW Project Manager or are subcontracted under a Principal Contractor, each business must be registered on the system i.e.
• Example - Principal contractor “Super Constructions” enagages “Toms plumbing” to work on a construction site. In this case “Tom’s Plumbing” is required by UNSW to have someone representing the business/company to register it on the UNSW system.</td></tr>
<tr><td>STEP 3</td><td>Relevant documents must be uploaded by all companies/businesses

• Workers compensation or accident/injury policy for sole traders – & public liability must be uploaded
• Professional indemnity and product liability – upload these documents based on directions by your UNSW Project Manager

  </td></tr>
<tr><td>STEP 4</td><td>Once registered, your account details will be sent to your email address</td></tr>
</table>

6.2. Individual contractor registration

The following steps outline how individual contractors access to the online contractor system.

STEP 1

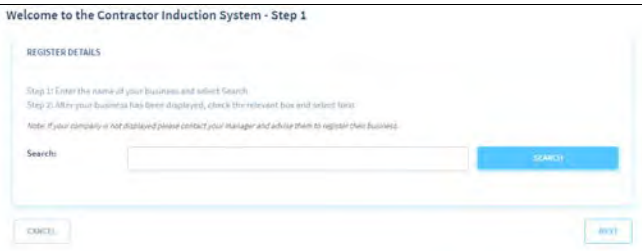
Go to the following link: www.contractorsafety.unsw.edu.au

STEP 2

Select the contractor login/register option

STEP 3

Search for the company you are working under on the UNSW site.



Example:

You work for "Toms Plumbing" who is subcontracted to "Super Constructions". In the system you will register under "Toms Plumbing", not "Super Constructions". If "Toms Plumbing" isn't in the system then your boss or the business owner needs to register the business in the system

STEP 4

Under "Role" you will see 3 options, select which one fits your role

- **Consultant** –not perosnally undertaking any hazardous or high risk work
- **Construction or Service Maintenance Contractor** - working in either construction, service maintenance or high risk work
- **Faculty Contractor –** contractors servicing scientific equipment, ETT in labs etc

STEP 5

Relevant documents/licenses must be uploaded

- **White card** – needs to be uploaded if undertaking construction, hazardous or high-risk work
- Photographs of other licenses such as confined space entry, heights competency etc need to be uploaded once registered

STEP 6

Inductions - see induction section for the types of inductions required in the online system

STEP 7

Once registered, your account details will be sent to your nominated email address

6.3. Contractor system queries

For any comments contact the following:

- contractorsafety@unsw.edu.au or
- EM helpdesk: 9385 5111 or email: estate@unsw.edu.au

7. Responsibilities and Accountability

All contractors working on site must have a site manager/contact who has control and management of the worksite/ work activities. Site managers are responsible for ensuring the following (not strictly exhaustive):

- Safety documents on site
- Consultation arrangements in place
- Inductions and training have/are occurring
- Follow UNSW requirements directions
- Identification details on worksites (i.e. signage)
- Implement risk management (housekeeping, safety controls)
- Hazard and incident reporting

8. Contractor Safety Documentation

Depending on the work being performed, contractors will need to supply the following safety documents to their UNSW Project Manager.

Construction Projects

❑ **Plan** - Construction site safety plan[1] (mandatory)
❑ **Plan** - Environmental management plan[2] (mandatory)
❑ **Plan** - Construction traffic management plan[3] (mandatory)
❑ **Insurance** - Public liability insurance (mandatory)
❑ **Insurance** - Workers' compensation insurance[4] (mandatory)
❑ **Insurance** - Professional indemnity insurance[5]
❑ **Insurance** - Product liability insurance[6]
❑ **Safety in design** - documents[7]
❑ **Certification** - Safety standard certification (ISO 450001, 4801 or 18001)[8]
❑ **Certification** - Environment standard certification (ISO 14001)[9]
❑ **Certification** - Quality certification (ISO 9001)[10]
❑ **Asbestos** - Asbestos removal insurance[11]
❑ **Report** – UNSW HS809 Monthly safety report needs to be completed for projects going for longer than 1 month (mandatory)

Major Service Contracts *(cleaning, asset maintenance etc)*

❑ **Plan** - Site safety plan[1] (mandatory)
❑ **Plan** - Environmental management plan
❑ **Insurance** - Public liability insurance (mandatory)
❑ **Insurance** - Workers' compensation insurance[4] (mandatory)
❑ **Insurance** - Professional indemnity insurance [5]
❑ **Insurance** - Product liability insurance [6]
❑ **Safety in design** - Safety in design documents [7]
❑ **Certification** - Safety standard certification (ISO 450001, 4801 or 18001) [8]
❑ **Certification** - Environment standard certification (ISO 14001) [9]
❑ **Certification** - Quality certification (ISO 9001)[10]
❑ **Asbestos** - Asbestos removal insurance [11]
❑ **Report** – UNSW HS809 Monthly safety report needs to be completed for projects going for longer than 1 month (mandatory)

Other Works & Services (minor works, reactive maintenance etc)

❑ **Insurance** - Public liability insurance (mandatory)
❑ **Insurance** - Professional indemnity insurance[5]
❑ **Insurance** - Product liability insurance[6]
❑ **Insurance** - Workers' compensation or Sole trader accident/ injury insurance (mandatory)

Safety system[12] (mandatory)
- ❑ Management commitment/ worker safety responsibilities summary
- ❑ Consultation arrangements
- ❑ SWMS
- ❑ Training & Supervision process
- ❑ Safety issue reporting process i.e. hazards and incidents
- ❑ Workers compensation /return to work process
- ❑ Licenses /competencies

For further information on the following see SafeWork NSW Small Business safety pack - click

Consultants

- ❑ **Insurance** - Public liability insurance
- ❑ **Insurance** - Workers' compensation insurance[4]
- ❑ **Insurance** - Professional indemnity insurance[5]
- ❑ **Insurance** - Product liability insurance[6]
- ❑ **Safety in design** - documents[7]
- ❑ **SWMS** - Use HS811 to assess against

Guidance notes

1. Site safety plans

- *The site safety plan must be site specific reflecting UNSW's policies, procedures and guidelines (information can be sought in HS801)*

2. Environmental management plans

- *The environmental plan must be site specific reflecting UNSW's policies, procedures and guidelines (information can be sought in HS801)*

3. Traffic management plan

- *The traffic management plan must be site specific reflecting UNSW's policies, procedures and guidelines (information can be sought in HS801)*

4. Workers compensation insurance

- *Check the insurance policy matches the SIRA website*

5. Professional indemnity insurance

- *Required for any work where design failure could result WHS risks*

6. Product liability insurance

- *Required where a product failure could result in WHS risks*

7. Safety in design documents

- *Required where design is undertaken*

8. Safety standard certification (ISO 450001, 4801 or 18001)

- *Generally required for companies undertaking construction projects or major service contract where the is a high level of complexity and resources involved*

9. Environment standard certification (ISO 14001)

- *Required for companies undertaking construction projects or major service contracts where the is a risk to the environment*

10. Quality certification (ISO 9001)

- *Required for companies undertaking construction projects or major service contracts where the is a high level of complexity and resources involved*

11. Asbestos removal insurance

- *Required for asbestos removal*

12. Safety system

- *Safety documents must be site specific reflecting UNSW's policies, procedures and guidelines (information can be sought in HS801)*

9. Inductions for the UNSW site

All contractors must undertake the following inductions where applicable, the information below is also listed within the various relevant topic areas via the online portal.

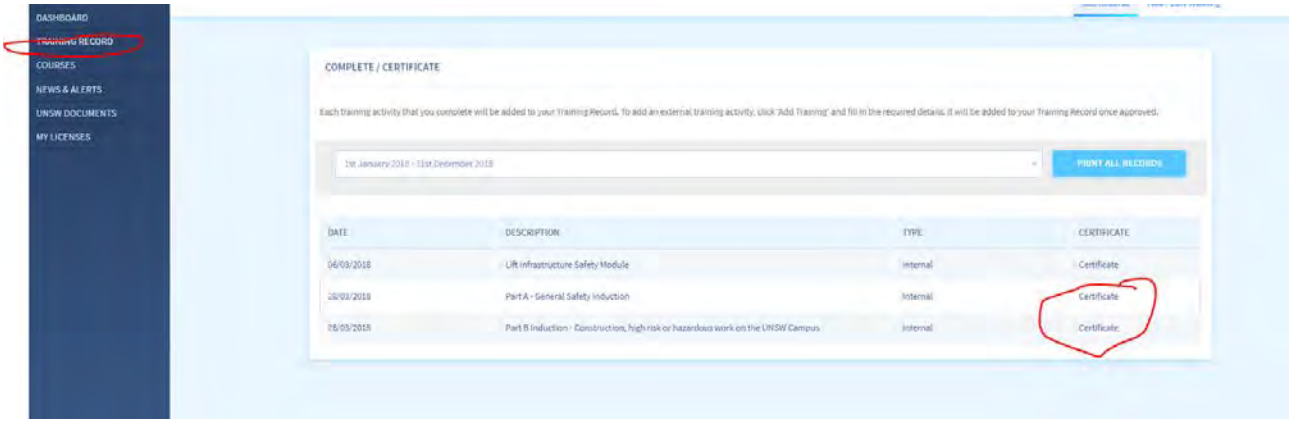
Inductions	Consultant	Construction or Serv. Maint.	Faculty Contractor
Part A	Mandatory	Mandatory	Mandatory
Part B	Optional[1]	Mandatory	Optional[1]
Plant rooms	Needs based[2]	Needs based[2]	Not applicable
Substations	Needs based[2]	Needs based[2]	
Service Tunnel	Needs based[2]	Needs based[2]	
Roofs/ceiling spaces	Needs based[2]	Needs based[2]	
Cryogenic Facilities	Needs based[2]	Needs based[2]	
Research Facilities	Needs based[2]	Needs based[2]	
Lift Motor rooms	Needs based[2]	Needs based[2]	

1. Contractors can see and do the induction if they wish, but this isn't mandatory
2. If needing access to the area, then the online module needs to be completed

Research labs	❑ Online safety module ❑ Face-to-face induction – HS805 Contractor Induction Form
Substations	❑ Online safety module ❑ Face-to-face induction – EM electrical services team • *see contacts list*
Plant rooms	❑ Online safety module
Service Tunnel	❑ Online safety module ❑ Face-to-face induction - FMHS-ST01 - Service Tunnel induction form • *see contacts list*
Bulk Cryogenic facilities	❑ Online safety module
Roofs & Ceiling spaces	❑ Online safety module
Lift motor rooms	❑ Online safety module ❑ Face-to-face induction– FMHS-LI05 – Lift Motor Room Induction Form • *see contacts list*

10. Obtaining a UNSW access card

Step 1: Print off your induction individual certificates from your training record



Step 2: go to the Security and Traffic Office at Gate 2 with:

- Induction certificates
- your driver's license and
- Your UNSW Project Manager needs to email the front desk that you are authorised to receive a card *(once they have verified you have completed your inductions etc). The email would have gone to* *id.cards@unsw.edu.au*
- Security and Traffic Office gate 2 is open for ID cards between 0800-1630 Monday to Friday

Step 3: complete one of the following forms to define your access needs

- FMHS-CTR04a - Construction Contractor access authorisation form
- FMHS-CTR04b - Service Contractor access authorisation form

You will need your UNSW Project Manager plus other relevant UNSW authorities (i.e. for substations, lift motor rooms etc) to sign off the form before you can acquire a UNSW card – see next section.

10.1. Existing contractors needing access to new areas

For existing contractors who have an updated need to access new areas, complete the same forms with the updated information and have them approved by your UNSW Project Manager i.e.:

- FMHS-CTR04a - Construction Contractor access authorisation form
- FMHS-CTR04b - Service Contractor access authorisation form

10.2. Access during business hours

- **Open times**: most UNSW buildings are open during normal business hours (8am – 6pm).
- **Card or Key**: access to rooms is either by key or by swiping your UNSW issued card on a card reader.
- **Restrictions**: depending on the room function, there may either be safety and/or security restrictions in place. For this reason, further instruction must be sought through your nominated UNSW Project Manager before entry. You may be required to do further inductions (i.e. labs, substations)
- **Facilities (toilets, showers etc)**
  - Contractors are welcome to use electricity, water, toilets and washrooms unless stated otherwise in their contract with UNSW
  - Contractors and their staff are also welcomed to use the numerous shops and eating facilities on UNSW campuses and properties

10.3. After-hours access

- **Afterhours access needs**: such access needs must be provided to your nominated UNSW Project Manager, so they can obtain permission from the relevant person in control of the area where applicable
- **SWMS**: where there is increased safety and security risks, extra controls associated with after-hours work will need to be documented as part of any SWMS
- **Security**: any person found inside a building after hours, without authorisation, will be asked to leave the building immediately by UNSW Security.

11. Consultation and Communication

Contractors must have documented consultation arrangements to ensure effective communication on safety is occurring between all contractors and the UNSW Project Manager. Examples include:

- Toolbox talks
- Pre-start meetings
- Weekly meetings
- Email reports

12. Honesty

Contractors are expected to be honest and not be deceptive on any safety or other issues on site. This is especially important during investigations or other ventures requiring joint co-operation and the sharing of information.

Any intentional misleading or deceptive behaviour will not be tolerated, and the contractor and their company will be listed on the UNSW incident register.

13. Harassment and Inappropriate Language

UNSW is an open and inclusive environment to all who choose to visit, study, or work here. All forms of harassment or offensive behaviour form any person on the UNSW site is unacceptable. This includes language or behaviour that reinforces inappropriate, demeaning, or discriminatory attitudes or assumptions about persons based on:

- Age
- Race
- Sex
- Sexual orientation
- Transgender status
- Marital status, or
- Disability.

- Behaviour such as whistling or unsolicited remarks of a sexual nature **is prohibited**. Where an incident is reported, UNSW will pursue disciplinary action with your Company
- Conversely, should you encounter harassment or inappropriate language from staff or students, please refer the matter to your nominated UNSW Project Manager. It may be appropriate to deal with the issue under the UNSW Staff Complaints Procedure: https://www.gs.unsw.edu.au/policy/documents/staffcomplaintproc.pdf

- **Further Information**
  - https://www.hr.unsw.edu.au/diversity/sexual-assault/harassment.html
    - UNSW HR: What is: sexual assault | What is: sexual harassment | Other forms of sexual misconduct
    - UNSW HR: Emergency contacts and 24/7 counselling | Prevention by UNSW | Where to get more support | FAQ

14. Pets

Pets are not to be brought onto the UNSW campuses or properties; this is except for special needs dogs

15. Children

- Whilst children are welcome to visit UNSW, due to safety reasons they are not allowed to accompany contractors undertaking work/in work sites on UNSW campuses and properties.

16. Protection of Children and other vulnerable persons

Contractors must not employ any persons to perform work at UNSW who:

- In the opinion of UNSW, poses an unacceptable risk to children or other vulnerable persons, or
- Has been convicted of a serious sex offence and is a prohibited person under the Commission for Children and Young People Act 1998 (https://www.legislation.nsw.gov.au).

17. Smoking, Alcohol and Other Drugs

All UNSW premises grounds, buildings and vehicles are smoke free

- Persons affected by alcohol or non-prescription drugs are not permitted to carry out work on UNSW campuses or properties
- Where it is observed that Contractors are affected by alcohol or other drugs during work, the matter will be referred to the nominated UNSW Project Manager who will be required to take immediate action
- For further information please refer to the following:
  - UNSW Smoke Free Environment Policy
  - Alcohol & Drugs Policy
  - Cancer Institute NSW
  - Australian Department of Health and Ageing – Quit Now Website
  - NSW Health Smoke Free Legislation

18. Health, Safety and Environment

18.1. Commitment to implementing Work, Health & Safety

Contractors working on the UNSW site must ensure the following in your processes (not strictly exhaustive):

- **Policy**
  - Be familiar with the UNSW Safety Policy and follow is principles
- **Risk Management**
  - Have a WHS Safety Management system equivalent to degree and complexity of work being undertaken on site
- **Reasonable care**
  - Take reasonable care for their own health and safety
  - Take reasonable care that their own acts or omissions do not adversely affect the health and safety of other persons
- **Instruction**
  - Comply with any reasonable instruction that is given by the university that is required for the purposes of meeting health and safety legislation
  - Co-operate with University policies and procedures
  - Not interfere with anything provided for health, safety and welfare
  - Comply with all risk control measures
- **Training & Inductions**
  - Complete any training & inductions required where directed to perform their job safely
- **Consultation**

- Report any WHS hazards and incidents to the project manager
- Take part in WHS consultative arrangements

- **Records & documents**
  - Maintain all WHS records as required
  - Have all safety documents available on site
- **Emergency Management**
  - Follow Emergency and Evacuation procedures

18.2. Commitment to Environmental Protection

Contractors working on the UNSW site must ensure the following (not strictly exhaustive):

- **Reasonable Care**
  - Take all reasonable steps to ensure their work does not adversely impact the environment
- **Controls**
  - Ensure that all necessary pollution control measures are in place and are regularly checked and maintained to minimise risk of environmental incidents
- **Fines**
  - Individuals can be fined substantial amounts and may face imprisonment for seriously polluting the environment. While smaller incidents of environmental pollution can incur fines of up to $1,500, corporations may be fined up to $5M and/or 7 years' jail.
- **Policy**
  - UNSW also has an Environmental policy that states its commitment to protection of the Environment : UNSW Environment Policy
  - http://safety.unsw.edu.au/documents-resources

19. Safety Compliance

19.1. Risk Management

For general risk management, UNSW requires all contractors to implement risk control methodology as set out under national and UNSW risk management codes and procedures:

- Code of practise: How to manage work health and safety risks
- HS329 Risk Management Procedure – http://safety.unsw.edu.au/documents-resources

19.2. Hazards and Incidents

- **Hazard**
  - A hazard is a situation or thing that has the potential to harm a person, property or the environment.
- **Incident**
  - A Health and Safety incident is any unplanned event which occurs during UNSW work and which could result in:
    - Work illnesses
    - Uncontrolled fire and explosion
    - Physical injuries
    - Equipment, plant or property damage
    - Dangerous occurrences which could have but did not injure a person
    - Exposure to hazardous substances or circumstances
    - Minor injuries, and

- Any other incident that could put employees or plant at risk

- **Reporting incidents to UNSW Project Manager**
  - All Safety and Environmental incidents and hazards must be reported to your nominated UNSW Project Manager as soon as possible after the occurrence. They will then take steps to have it reported on the UNSW online central reporting system.

- **Observations of unsafe work practises/ conditions**
  - Where UNSW observes unsafe work practises, the expectation is the contractor will immediately address the issue and/ or stop work until addressed
  - Supporting risk control documentation must be provided to UNSW for resolution of observations made

- **SafeWork NSW Reportable incidents**
  - If a reportable incident occurs, the area must be left 'as is' and barricaded off until advice is received from SafeWork NSW and UNSW
  - This does not apply where interference is necessary to aid or revive any person involved or to prevent further injury to persons or property. Where interference is necessary, the site must be secured and left 'as is' as soon as reasonably possible after this has occurred.
  - All reportable incidents must be reported to SafeWork NSW and the site preserved for both UNSW and SafeWork to investigate where necessary
  - A notifiable incident under the work health and safety legislation relates to:

    1. The death of a person
    2. A serious injury or illness of a person
    3. A potentially dangerous incident

    For more information visit http://www.safework.nsw.gov.au/

  - **UNSW will require the issued SafeWork NSW reference number for its records**

- **Incident Investigation**
  - For serious incidents (i.e., notifiable incidents, incidents where an injury is sustained or significant impacts on assets or environment) UNSW will undertake an investigation. Typically, UNSW will require the following documentation:
    - Contractors own internal investigation reports
    - Copies of SWMS and licenses
    - Equipment involved in the incident
    - Statements from witnesses
    - Plant logbooks and maintenance records
    - Any other relevant documents
  - Any incident will be reported through the UNSW online Incident notification system (WHS Monitor)

- **Post Incident review**
  - Where UNSW determines, a post incident review will occur with contractor where typically the following will be discussed:
    - Corrective actions to be implemented
    - Continual review and improvement processes
    - Failure to advise UNSW of incidents to UNSW is considered a serious breach and will be listed in the UNSW incident register.

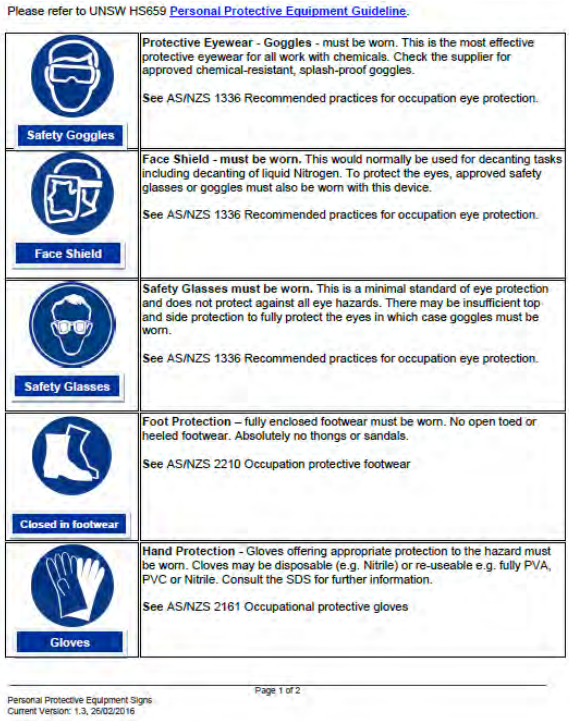
19.3. Audits and Inspections

UNSW Reserves the right undertake audits and inspections of any contractor documents and worksites. In doing so, the following things will generally be checked:

- **Documents**: contractors where requested are required to provide any safety documents for review
- **Feedback**: feedback will be provided to contractors for any audits or inspection activities conducted
- **Rude or abusive behaviour:** to any of the UNSW safety team doing inspections will not be tolerated. Any contractor doing so will be listed in the UNSW incident register.

19.4. UNSW Safety Signage

- Safety signs are placed on UNSW campuses and property to protect health and safety.
- Safety signs of different colours and shapes mean different things, for further information see the tables below or consult the following document: HS732 Signage Guideline



Please refer to UNSW HS659 Personal Protective Equipment Guideline.

Safety Goggles	**Protective Eyewear - Goggles** - must be worn. This is the most effective protective eyewear for all work with chemicals. Check the supplier for approved chemical-resistant, splash-proof goggles. See AS/NZS 1336 Recommended practices for occupation eye protection.
Face Shield	**Face Shield - must be worn.** This would normally be used for decanting tasks including decanting of liquid Nitrogen. To protect the eyes, approved safety glasses or goggles must also be worn with this device. See AS/NZS 1336 Recommended practices for occupation eye protection.
Safety Glasses	**Safety Glasses must be worn.** This is a minimal standard of eye protection and does not protect against all eye hazards. There may be insufficient top and side protection to fully protect the eyes in which case goggles must be worn. See AS/NZS 1336 Recommended practices for occupation eye protection.
Closed in footwear	**Foot Protection** – fully enclosed footwear must be worn. No open toed or heeled footwear. Absolutely no thongs or sandals. See AS/NZS 2210 Occupation protective footwear
Gloves	**Hand Protection** - Gloves offering appropriate protection to the hazard must be worn. Cloves may be disposable (e.g. Nitrile) or re-useable e.g. fully PVA, PVC or Nitrile. Consult the SDS for further information. See AS/NZS 2161 Occupational protective gloves

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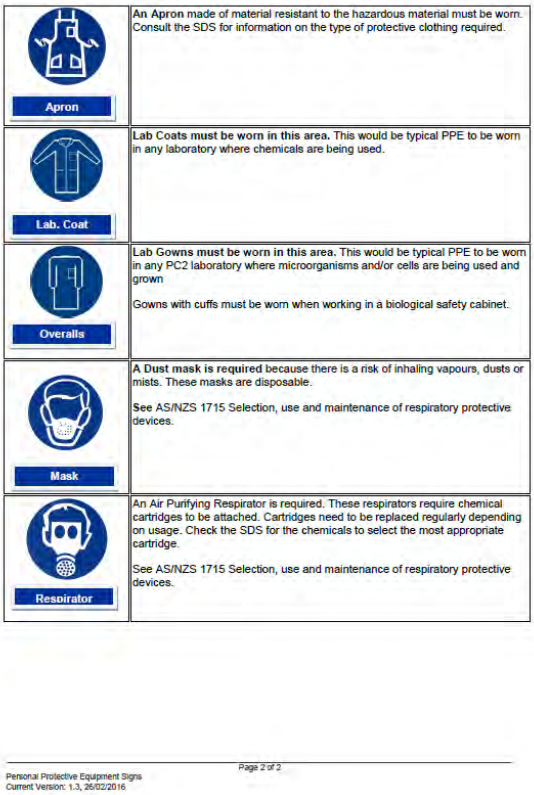
Personal Protective Equipment Signs
Current Version: 1.3, 25/02/2016



Apron	**An Apron** made of material resistant to the hazardous material must be worn. Consult the SDS for information on the type of protective clothing required.
Lab. Coat	**Lab Coats must be worn in this area.** This would be typical PPE to be worn in any laboratory where chemicals are being used.
Overalls	**Lab Gowns must be worn in this area.** This would be typical PPE to be worn in any PC2 laboratory where microorganisms and/or cells are being used and grown Gowns with cuffs must be worn when working in a biological safety cabinet.
Mask	**A Dust mask is required** because there is a risk of inhaling vapours, dusts or mists. These masks are disposable. See AS/NZS 1715 Selection, use and maintenance of respiratory protective devices.
Respirator	An Air Purifying Respirator is required. These respirators require chemical cartridges to be attached. Cartridges need to be replaced regularly depending on usage. Check the SDS for the chemicals to select the most appropriate cartridge. See AS/NZS 1715 Selection, use and maintenance of respiratory protective devices.

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Personal Protective Equipment Signs
Current Version: 1.3, 25/02/2016

PPE charts

UNSW Emergency chart

19.5. Safe Work Method Statements (SWMS)

A SWMS or JSA must be developed for any hazardous or high-risk or work on the UNSW site. All SWMS must meet compliance requirements against the UNSW HS811 checklist.

Examples of work requiring SWMS include (not strictly exhaustive):

Hazardous Work- *WHS Reg. 2017: CH4*	**Major hazard categories**
• Demolition work	• Hazardous chemicals **-** *WHS Reg. 2017: CH7*
• General electrical safety in workplaces and energised electrical work	• Asbestos**-** *WHS Reg. 2017: CH8*
• Falls	• Plant and equipment risks**-** *WHS Reg. 2017: CH5*
• Confined spaces	
• Manual tasks (hazardous)	
• Noise	
• Diving work	
• Falling objects	
• Work generating airborne contaminants	
• Hazardous atmospheres	
• Storage of flammable or combustible substances	
• Remote or isolated work	
• Hazardous building materials (asbestos, lead & other)	
High Risk Work - *WHS Reg. 2017: Schedule 3*	
• Scaffolding work	• Boom-type elevating work platform
• Dogging and Rigging work	• Concrete placing boom
• Crane and hoist operation	• Reach stackers
• Materials hoist	• Forklift operation
• Personnel and materials hoist	• Pressure equipment operation
High Risk Construction work- *WHS Reg. 2017: CH6*	
• Falls risk (>2m)	• Electrical services (live)
• telecommunication tower work	• Flammable (atmosphere)
• Demolition	• Concrete (pre-cast etc)
• Asbestos removal	• Traffic risks
• Collapse	• Mobile Plant
• Confined space entry	• Temperature (extremes)
• Shaft or trench work (>1.5m)	• Water (drowning risk)
• Explosives	• Diving work
• Pressure risks	
• Chemical (lines)	

UNSW recognises that controls for different jobs of the same nature may not drastically change, however the specific nature of the project or work will change, and this must be reflected in each SWMS.

19.6. Licenses and Competencies

Relevant licenses and competencies for work must be:

- documented in risk control documents (i.e., SWMS)
- available to UNSW Project Manager in the online portal

If a license or competency cannot be produced or has expired, then work will be ordered to stop until the issue is resolved.

19.7. Housekeeping

Contractors must ensure all work areas and associated surrounding sites are kept in a tidy/safe manner i.e.:

- **Plant rooms**: must not to be used as storage sites without written permission of your designated UNSW Project Manager
- **Restricted areas**: doors must not be chocked open (i.e., plant rooms, substations, lab doors etc)
- **Office doors**: must not be chocked open
- **Egress paths**: must be kept clear
- **Fire exits**: must be kept clear
- **Roadways**: must be kept clear, vehicles must not be illegally parked
- **Plant, equipment or materials**: must not be stored in common areas without written permission from the designated UNSW Manager
- **Hazardous chemicals and items:**
    - Replacing lids and caps on containers
    - Wiping up spills
    - Removing or bending over nails or bolts, and
    - Progressively removing other dangerous protruding objects.

- Also refer to the following Code of Practice**:** Construction-work-COP.pdf (nsw.gov.au)

19.8. Worksite Isolation

Where there is a risk of persons being affected by a work zone, appropriate barriers and signage must be implemented i.e.:

- **Contacts**: signage showing the principal contractor's name and telephone contact
- **Emergency**: access, egress, and evacuation routes (i.e., nurse call areas, toilets etc)
- **Site Office**: signage shows the location of the site office for the project if there is one
- **PPE**: PPE requirements needed to enter site
- **Signage**: advising work is in progress, who the key contact is with a mobile number listed
- **Barriers**
    - Where risk assessment dictates, either Class A or B hoarding
    - In other situations, barrier tape, bollards or witches' hats may be used in agreement with your UNSW Project Manager

19.9. Personal Protective Equipment (PPE)

PPE is an important of part risk control methodology, contractors need to observe the following PPE requirements.

- **Supply:** contractors are required to bring their own PPE on site
- **Suitability:** PPE must be suited for the job, meet current compliance and not be in a state of disrepair
- **Further information:** refer to the following guide on the UNSW Safety Website: HS659 Personal Protective Equipment Guideline

- **Lab-based PPE:** in some cases, UNSW will provide PPE where there is a specialist requirement for an environment i.e., work in a UNSW research lab access where contractors will be issued lab coats or gowns

19.10. Vehicle uses on site

UNSW has a variety of persons walking on its site including students, staff, contractor and children. All roads on UNSW Campuses are shared zones. For vehicle usage on site:

- **Pedestrians**: have priority and right of way on the UNSW campus
- **10km/hr limit: v**ehicles must drive at or slower than 10 km/hr to prevent vehicle/pedestrian conflicts
- **Hazard lights:** vehicles must use hazard lights/blinkers when driving on site, this includes;
    - heavy vehicles (i.e. trucks, delivery trucks)
    - Delivery vans, utes etc

19.11. Vehicle Parking

Vehicle parking out of designated parking zones must be authorised by the relevant UNSW Project Manager.

Parking DO's ✓

- **Speed limits**: the speed limit is **10km/hr** and **pedestrians always have right of way** at UNSW campuses and properties.
- **Stick to the road**: parking or driving across footpaths and grassed or landscaped areas is prohibited. Where the nature of works requires a vehicle to be driven on these areas, permission must be obtained through your UNSW Project Manager. Once permission has been obtained, you must ensure the following:
    - Have a spotter on foot direct you in areas of high pedestrian usage or recreation
    - Make sure that it is safe to drive across the footpath, grassed or landscaped area
- **Barriers:** place barriers around the vehicle and work area, and
- **Authorised parking**: park only in designated areas such as loading zones, permit bays or areas which have been approved by UNSW Security

Parking DONTS - X

- **Block access ways:** illegally park/ block roads or foot paths
- **Lawns/ gardens:** park on lawns or garden beds (unless approved)
- **Phones:** at no time must you drive and use a mobile phone in an illegal manner, for further information **see the following:**

http://roadsafety.transport.nsw.gov.au/stayingsafe/mobilephones/know-the-rules.html

- **Parking on Slopes**
    - Contractors must not park on slopes
    - If there is a critical need to park on slopes, then special written permission must be granted by the UNSW Project Manager. Controls such as wheel chocks, parking in gear, turning wheels 45 degrees will need to be used and documented in the relevant SWMS

Example of wheel chocks

Illegal parking on a slope at UNSW

NOTE - Fatal vehicle pedestrian/vehicle conflict incidents have occurred in the past on site. Any contractors found breaching site-specific requirements will be listed on the UNSW incident register. Where necessary, police will be notified

19.12. Service Isolation and shutdowns

- **Shutdown notice:** contractors are required to discuss shutdowns with their UNSW Project Manager before work commences. For non-emergencies, UNSW Project Managers must be given **10 day's notice** before a shutdown can be initiated
- **Accidental shutdown:** the UNSW Project Manager will inform the appropriate University staff. Should any service be accidentally shut-down, the contractor must immediately advise the nominated UNSW Project Manager.

Where contractors do not advise the nominated UNSW Project Manager and go ahead with an isolation, this will be considered an incident and the contractor company and contractor will be listed in the UNSW incident register

19.13. Lock Out Tag Out (LOTO)

When a service is isolated, contractors and their staff must place a proper "Danger" or "Isolation" tag(s) on all control switches, valves, main isolators or key rings whenever they isolate any equipment.

- **SWMS**: all LOTO must be detailed in a SWMS for the work
- **LOTO**: all lock out tags must at least have the following information:
    - Date and time of isolation
    - Name of person carrying out the isolation
    - Name of the company
    - Contact number(s)
    - Always remove tags when work has been completed - never remove another person's isolation tag.
    -

X Wrong – improper fire services isolation

✓ Correct type of tag

X – Wrong; improper LOTO

Never remove or ignore another tag without the written permission of the person who placed the tag. Any contractor or work sites found to be using improper LOTO tags/procedures will be registered in UNSW incident register.

19.14. Permit to Work system at UNSW

UNSW requires contractors to use UNSW permits when performing work. The following information outlines permit requirements and exclusions. Use of permits is also described under various topic categories further in this guideline. Permits should be issued daily.

19.14.1. Roles and Responsibilities

To ensure the permit to work system is effective, all individuals involved must clearly understand and take an active role in meeting their responsibilities. Due to the potential hazards associated with work requiring a permit, specific responsibilities must be observed.

19.14.2. Contractor side site supervisors

Contractor side supervisors must understand the work for which a permit has been sought and ensure the following:

- Ensure that a permit is granted before work commences
- Ensure that the person(s) doing the work is/are appropriately qualified to do the work
- Ensure that all checks are undertaken to ensure that the permit was used correctly
- Ensure appropriate persons are informed when a job is completed or suspended and that the permit is cancelled.

19.14.3. Permit Issuer – UNSW Project Manager

- Ensure all hazards associated with the proposed job have been identified, assessed and controlled
- Be familiar with the intended task(s)
- Ensure that the area and equipment are made safe before hand over
- Outline how the work is to be undertaken within the permit (e.g. procedures, precautions, equipment, location, start time, duration)
- Maintain records of work permits

19.14.4. Permit Receiver

- Must satisfy themselves that they understand the requirements of the permit
- Be skilled, qualified trained and competent to perform the Work, including the use of any personal protective equipment
- All aspects on the permit must be completed and documented
- Adhere to the permit to work requirements
- Ensure the job is performed in a safe manner
- Be aware of the hazards that could exist and have the necessary controls in place
- Make equipment and area safe on completion of the task
- Make the work area safe and seek immediate advice if a doubt or if circumstances or conditions change
- Ensure that all tags and signs are prominently displayed so that personnel are aware that the equipment is isolated / not to be operated.

19.14.5. Permit issue – general steps

Step 1 - Permit authorisation	Work may only commence after the appropriate permit has been completed and issued by the permit issuer. • **Information:** the permit shall have the appropriate level of authority endorsing the permit. Methods to be used and precautions to be taken shall be agreed to by parties beforehand and clearly stated on the work permit. • **Sign Off:** all parties must sign off before any work commences - authorisation is evident by the signature which confirms that the required isolations have been made and precautions taken, except where these can only be taken during the Work.
Step 2 - Completion of Work	Once the work activity is complete, the permit receiver is required to return the permit to the permit issuer. • **Completion/sign off:** when the permit issuer is satisfied that work has been completed to job specifications and safety requirements, they may sign off the permit. • **Site Handover:** on hand over of the work area, the permit receiver should sign the permit stating that the work area is now ready to be returned to the issuer o On the completion of work, and before the work area or plant is returned to service, a check shall be conducted to ensure o The work has been completed o Any temporary arrangements/installation (*e.g. temporary barricades, excavation holes*) have been removed o All personnel and equipment are accounted for o The work permit has been cancelled or signed-off as being completed; and o All related equipment and facilities and fire systems are operational and have been inspected and tested appropriately
Step 3 - Cancellation	• **Unused permits:** where a permit has been written and is not required to be issued or is not used for any other reason it must be marked as "cancelled". o The marking should include 2 diagonal lines across the page with the word 'cancelled' written in between. o If the nature of the work changes or any other part of the permit becomes redundant or is no longer applicable, the permit must be cancelled, and a new permit issued.

Relevant Cods of Practise

- Code of Practise - Code of practice – Welding processes (nsw.gov.au)
- Code of Practise - Code of Practice – Demolition work (nsw.gov.au)
- Code of Practise - Excavation-work-COP.pdf (nsw.gov.au)
- Code of Practise –Confined-spaces-COP.pdf (nsw.gov.au)

19.14.6. UNSW Permits

The following permits exist at UNSW, further information on each permit can be found in the permit section.

The following UNSW permits must be used by all contractors on the UNSW site		
Hot Work	HS821_Hot_Work_Permit – *closed construction projects exempt from using this permit**	
Confined Space	HS822_Confined_Space_Entry_Permit – *closed construction projects exempt from using this permit**	
Substation	HS823_HV_Substation_Entry_Permit	www.contractorsafety.unsw.edu.au Document library
Substation	HS826 Request Isolation Permit	
Substation	HS827 Switching Instruction Permit	
Heights	HS916 Working at Heights Permit – *closed construction projects exempt from using this permit**	
Asbestos	HS918 Asbestos Work Permit	
Coring/cutting	HS929 Coring/Cutting Permit – *closed construction projects exempt from using this permit**	
Excavation	HS931 Permit to Work-Excavation– *closed construction projects exempt from using this permit**	
Drones/UAV	HS932 Permit to fly drones: Contractors	
Lab work	HS700_Laboratory_Clearance_Certificate	
Lab work	HS704 Laboratory Decommissioning Checklist	

*Closed construction sites may use their version of these permits. For coring/cutting in live buildings, check with your UNSW Project Manager

19.15. Chemicals/ hazardous substances

Chemicals and hazardous substances must be managed appropriately and in accordance with statutory requirements i.e. (not exhaustive):

- **Containers**: chemicals must be contained in appropriate, sealed containers.
- **SDS**:
    - chemicals must be stored in accordance with the Safety Data Sheet,
    - SDS must be accessible during work.
    - SDS must not be older than 5 years
    - SDS must be GHS compliant
- **Bunding:** chemicals may also require enough bunding to contain spills
- **Labelling**: chemicals must be labelled properly
- **Spill Kits**: contractors must also have appropriate spill kits where applicable
- **Storage**: contractors must not store chemicals in plant rooms or other areas without the written permission of their nominated UNSW Project Manager

X – Wrong, improper labelling

19.15.1. Use of solvents

Many chemicals release vapours when bottles/containers are open, when using solvents, the following information must be observed:

- **Ventilation:** ensure adequate ventilation is provided (passive or mechanical extraction)
- **Intake vents:** care must be taken so that vapours do not escape into the surrounding area or air intake vents
- **Fire doors:** do not chock open fire doors for fire safety reasons and to prevent fumes from travelling throughout buildings
- **Sealing:** always seal solvent containers with a tight lid
- **Water-based agents:** use water-based or biodegradable strippers and cleaners wherever possible
- **Consultation:** let your nominated UNSW Project Manager know at least 10 days beforehand if a process will result in strong odours so they can consult the local area(s)

19.15.2. Chemical incidents

Report the spill by informing the Nominated UNSW Project Manager immediately, or if urgent, call Security on 938 56666 (24 hours)

19.16. Electrical work

All contractors must work to statutory requirement on electrical safety i.e.:

- **SWMS:** have a task specific SWMS in place
- **Live work:** live work is not permitted at UNSW
- **Live work special request:** if there are special requirements to do so, a request needs to be raised with the EM Electrical Services Team and the relevant UNSW Project Manager
- **Tagging and Testing:** all portable equipment to be tagged and tested (*see AS/NZS 3760:2010*)
- **Construction:** All construction wiring must be in accordance with (AS/NZS *3012:2010)*

- **LOTO:**
  - No electrical services can be isolated without a proper shut down notice via the UNSW Project Manager
  - **Distribution Boards:**
    - Cannot be accessed by unauthorised persons (i.e. non-electricians)
    - DB boards must be properly locked out only by an electrician with a proper LOTO system

- **Compliance**: all electrical equipment and wiring must meet requirements under the following standards AS3000 and AS/NZS 3012 & AS/NZS 3760
- **UNSW GPO's:** most general power outlets on the UNSW site are RCD protected, however you should verify this with your nominated UNSW Project Manager before work
- Also refer to the following documents for further information:
  - HS418 Portable Electrical Equipment Inspection, Testing and Tagging Guideline
  - Managing-electrical-risks-in-the-workplace-COP.pdf (nsw.gov.au)
  - AS/NZS 3760:2010
  - *AS/NZS* 3012:2010

19.17. Working at heights

Working at heights can result in serious risks to safety. Contractors must follow all legislative, UNSW and other relevant information for heights work;

- **SWMS:** have a task specific SWMS in place
- **Emergency rescue plan:** have an emergency rescue plan in place for fall arrest or use of rope positioning systems (WHS Regulation 2017; Clause 80)
- **Competencies:** have appropriate competencies on site such as working at heights and/or rope access training

Permit requirements

- The HS916 Working at Heights Permit must be issued by the UNSW Project Manager for any of the following scenarios:
  - **Use of a work positioning system:** (e.g. industrial rope access system or travel restraint system).
  - **Use of a fall arrest system:** (e.g. industrial safety net, catch platform or safety harness system other than a travel restraint system).
  - Work within 2m of an unprotected roof edge

- Work within 2m of an unprotected edge where there is a risk of fall more than 2m (even with a safety net)
- Installation of edge protection
- Testing of anchor points or other <2m from an unprotected edge
- Use of a boom-type lift

Examples of situations where a permit may not be required

- Use of step ladder
- Use of a ladder (<4m)
- Scaffolding
- Use of an vertical scissor lift EWP where a harness is not required under the WHS Regulation

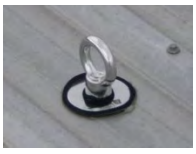
Roof edge warning signage

Code of Practise

- Managing-the-risk-of-falls-at-workplaces-COP.pdf (nsw.gov.au)

19.17.1. Falls - Safety and Hazard information for the UNSW site

The following table outlines information for working at heights

Static line glider  Static line gliders must be used for static lines	**Heights system compliance plates**  Compliance plates are in place advising of service/maintenance details for heights safety systems
Rail glide glider  Rail glide system gliders are available through EM - Facilitates Management	**Tag Colour** Yellow means it has been certified for 2021, Red means do not use
Edge Signage  Signage advising harness requirements are on some roofs	**Fixed ladder with fall arrest**  UNSW has multiple fixed ladders on site with fall arrest lines. Contractors must not ignore the line and use a harness where required 
Anchor point  Anchor points are available to use for fall arrest, rope positioning systems	**Straight ladder**  Must be secured onto supplied ladder brackets in a 4:1 ratio where necessary
Step & Platform ladders  These types of ladders are permitted on the UNSW site but must be used properly. Where practical, platform ladders are the preferred tool.	**Ladder with cages**  UNSW has multiple ladders on site with cages site
EWPs  EWP's are a better tool than ladders and should be used as a preferred method for heights work where practical	**Mobile Scaffolding**  Mobile scaffolding is also a more preferred tool over ladders and should be used where an EWP is impractical

X – Wrong

Scaffolding falls risk

X – Wrong

Lack of fall protection (i.e. harness) near roof edge

X – Wrong

Scaffolding falls risk

19.17.2. UNSW Managed EWPS

UNSW has EWPs on its site which may be used by pre-approved contractors. These EWPs are in the following locations:

Building	Unit ID	Unit Description
G19	76242	Lift - Elevated Work Platform - Portable - Personnel- Snorkel - 25 Foot Lift - 159 kg (350Lbs) Safe Working Load
F13	76243	Lift - Elevated Work Platform - Portable - Personnel- Snorkel - 25 Foot Lift -159 kg (350Lbs) Safe Working Load
H13	76244	Lift - Elevated Work Platform - Portable - Personnel- Snorkel - 25 Foot Lift - 159 kg (350Lbs) Safe Working Load
C24	76245	Lift - Elevated Work Platform - Portable - Personnel- JLG - 25 Foot Lift - 159 kg (350Lbs) Safe Working Load
G19	98449	Lift - Elevated - Work - Platform

The following terms and conditions must be followed for EWP use:

- Operators must be competent, that is they must have an EWP yellow card
- The logbook must be filled prior to use of plant
- The unit must not be used for anything beyond its intended design/purpose
- EWP usage must be defined in any SWMS for the work
- If there are any concerns, then the unit must not be used but advise sought from the nominated UNSW Project Manager
- Keys must be returned to UNSW after usage

19.17.3. Falling objects

All falling objects must be controlled and addressed in a high-risk work SWMS:

- **Exclusion zones:** must be established and documented in SWMS
- **Hoarding:** must be used where risk assessed (10 kPa class B hoarding used based on risk analysis)
- **High risk work**: a spotter is required for crane lifts etc
- For further information please refer to the following:
  - HS707 Working at Heights Guideline (UNSW Safety Website)
  - Code of Practice: Managing-the-risk-of-falls-at-workplaces-COP.pdf (nsw.gov.au)

19.18. Noise

The physical environment of UNSW campus needs to remain conducive to learning and research at all times. This means the control of hazardous or nuisance noise i.e.

- **Hazardous noise:** must be risk managed in such a way that does not adversely affect the hearing of contractors, general public, students' staff or other stakeholders *(i.e. noise abatement, PPE must be documented and used where necessary*)
- **Open music:** contractors are not permitted to have radios, music or other entertainment playing openly at any level in common areas. This is to ensure the research, teaching and nearby residents are not unnecessarily disturbed
- **Noisy works**: excessively noisy works must be presented to relevant UNSW Project Manager 10 days before the event. This is so alerts can be sent out to those stakeholder groups which may be impacted
- **Machinery noise**: must be controlled by fitting noise suppressors and by regular maintenance
- **Out of hours scheduling**: noisy work and noisy truck movements shall be scheduled to out of business hours where possible to minimise disruption
- **Impact on external residents**: for any noisy work near external residents (i.*e. on campus boundaries*) you must notify your UNSW Project Manager, so they can take appropriate steps
- **Noisy works times**: for excessively noisy works during business hours (8-5pm) or out of hours, you must consult your UNSW Project Manager. They will set agreed arrangements to minimise impacts on local UNSW stakeholders or external residents
- For further information please refer to the following:
  - HS708 Noise Management Procedure (UNSW Safety Website)
  - Code of Practice – Managing noise and preventing hearing loss at work (nsw.gov.au)

19.19. Asbestos

UNSW has multiple areas where asbestos is present. Contractors must refer to the following for more information on asbestos removal:

- **Plan:** the information in this guide is complementary to the UNSW Asbestos Management plan - UNSW Asbestos Management Plan | Work Health & Safety for all contractors to refer to better understand asbestos management on the UNSW site. It can be accessed through the UNSW Safety Website (https://safety.unsw.edu.au/)
- **Asbestos register:** UNSW has asbestos registers available for contractors to identify whether a site has asbestos – speak to your UNSW Project Manager and check www.contractorsafety.unsw.edu.au - documents
- **Stickers:** have been placed on asbestos materials in buildings to warn contractors/ all persons of asbestos risks
- **Information/instruction:** no work can go ahead until the UNSW Project Manager has been consulted, if unsure, do not proceed but ask.

19.19.1. Asbestos removals

- **UNSW Permit**
  - Any asbestos removal must use the UNSW Asbestos permit HS918 Asbestos Work Permit. This permit must be completed whenever asbestos material is being removed and requires multiple sign off.

- **Asbestos removal documents**
  - Contractors must provide all relevant documents for asbestos removal works, including:
    - Air monitoring reports
    - SWMS
    - Removal control plans
    - Licenses/ qualifications
    - Completed permits
    - UNSW Project Manager must have these documents, so they can be archived in the UNSW RAMS system (folder WOR15-0012)

- **After completion:**
  - When the work is completed, completed permits must be handed back to UNSW and stamped as “expired”.

- **Further information can be found in the following Codes of Practise:**
  - How-to-manage-and-control-asbestos-in-the-workplace-COP.pdf (nsw.gov.au)
  - How-to-safely-remove-asbestos-COP.pdf (nsw.gov.au)
  - FMHS-AS01 - UNSW Asbestos Management Plan

19.20. Plant and Equipment

19.20.1. Mobile Plant

Mobile plant must be used responsibly and for its intended purpose that is in accordance with training and manufacturer instructions. All operators must be competent and have high risk license where applicable. When on the UNSW site, mobile plant must:

- **Storage/ parking:** equipment stored in common spaces must be authorised through UNSW Security (i.e. outside closed construction sites)
- **Keys:** must not have keys left in the ignition (EWP's etc)
- **Slopes**: equipment must not be stored/parked on slopes
- **Egress**: equipment must be stored out of the way of other UNSW traffic, emergency access/egress ways and not on grassed areas (unless approved)
- **Contact:** all stored plant in common areas must have contact details listed so UNSW Security or others can contact the necessary person
- **Fire extinguishers:** mobile plant must have a fire extinguisher attached to it.
- **Other types of mobile plant:** plant such as generators, compressors & oxy units brought onto the UNSW campus for use must have safety controls in place.
    - For generators, a spill kit and fire extinguisher must be immediately available to deal with any fuel spill or fire.

Code of Practise

- Code of practice – Managing the risks of plant in the workplace (nsw.gov.au)

19.20.2. Tools and equipment

In general, tools and equipment must have the following:

- **Serviced:** be in service/fit for use
- **Log-book:** have log-books filled and on site
- **Guarding:** have all safety guards
- **ETT:** have a current electrical test tag
- **Secure:** be locked away / secured to prevent unauthorised access and theft
- **Plant**: such as generators, compressors brought onto the UNSW campus for use must have spill kit and fire extinguisher with the plant for immediate use in the event of a fuel spill or fire.
- Further information can be found in the following:
  - HS327 Plant and Equipment Procedure
  - Code of practice – Managing the risks of plant in the workplace (nsw.gov.au)
  - Construction-work-COP.pdf (nsw.gov.au)

X – Wrong

Damaged Oxy-Acetylene regulator in use on site

X – Wrong

Damaged grinder disk being used on site

X – Wrong

Damaged sling in use on site

19.20.3. Scaffolding

Scaffolding is a necessary item of plant to allow safe access whilst undertaking work at heights. Scaffolding must be set up in accordance with statutory requirements.

Aside from standard scaffolding risk controls, you must implement restricted access measures to prevent students or other persons accessing to scaffolding.

X – Wrong

Lack of restricted access measures for scaffolding in a publicly accessible area

19.21. Excavation and Trench Work

On site, there are multiple critical services running underground on all areas of campus. Excavation work generally means work involving the removal of soil or rock from a site to form an open face, hole or cavity using tools, machinery or explosives. Contractor must observe the following for excavation work on site:

- **SWMS:** contractor must have a SWMS for excavation work
- **As built diagrams:** contractor must request from their UNSW Project Manager any as built diagrams which might be available
- **Dial before you dig:** contact dial before you dig www.1100.com.au
- **Permits:** The HS931 Permit to Work-Excavation must be used where excavation is using earthmoving equipment to remove soil for works and services

Further information can be found in the following Codes of Practise

- Code of Practice: **Excavation-work-COP.pdf (nsw.gov.au)**

19.22. Coring and Cutting work

On the UNSW there are also multiple critical services running through buildings.

- **As built diagrams:** contractors must request from their UNSW Project Manager any as built diagrams which might be available
- **Permit:** the HS929 Coring/Cutting Permit must be used for any coring or cutting in active UNSW areas
- **Dial before you dig:** contact dial before you dig for roads, footpaths or similar: www.1100.com.au
- **Shutdown/isolation:** must be initiated for any coring or cutting work

19.23. Hot Works

Hot works present significant safety risks, observe the information below for hot works at UNSW.

- Hot work is any process involving any of the following:
  - grinding
  - welding
  - brazing
  - oxy cutting
  - heat treatment
  - or any other similar process that generates heat or continuous streams of sparks.

- Undertaking hot work in areas where flammable or combustible chemicals or other materials are present creates a significant risk of fire or explosion.

Any hot works require the following:

- **SWMS:** contractor must have a SWMS for hot work
- **Plant:** must be fit for purpose, tested/ serviced. An appropriate fit for use fire extinguisher must be in the immediate work zone
- **Permits:**
  - The UNSW HS821_Hot_Work_Permit must be issued for all hot works (for exceptions see contents for relevant section)
  - **Hot works in labs:** HS700_Laboratory_Clearance_Certificate must also be completed for hot works in labs
- **Fire system isolation:** Where a "fire system isolation" is required, this must be requested **10 days** beforehand

Codes of Practise:

- Code of practice – Welding processes (nsw.gov.au)

20. UNSW Hazardous/restricted areas

20.1. Bulk Cryogenic Facilities

There are various bulk cryogenic facilities on UNSW sites which are considered restricted areas. The following table outlines information for work in these areas.

Induction	• All contractors are required to complete the online safety module • Based on work being carried out, specific face-to-face inductions with the nominated person in the contact list
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks • *HS811 is the checklist UNSW uses to check SWMS against
Safety Document(s) Review	• All contractors must review and be familiar with the following documents before cryogenic facility entry (available in the online documents library): o FMHS-BC01 - Bulk Cryogenic Facility hazard and risk register
Authorisation:	• Contractors must not enter facilities without authorisation from their UNSW Project Manager and EM Cold Storage Manager
Shutdowns, Service Isolations and alerts	• Electrical, gas and other services are present in these areas • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work commencing to the nominated UNSW Project Manager
Permits	• There are no specific permits for entry, however other permits for hot work, coring/cutting or excavation must be issued where applicable
PPE	• Sturdy enclosed footwear must be used in cryogenic facilities • Task specific PPE must be used and documented in the task SWMS
Access	• Access can only be granted once the online safety module has been successfully completed • Once the above has been completed, you will need to complete the FMHS-CTR04b Service Contractor access authorisation form, and have it approved
Reporting concerns to your Contractor Manager	• If there are any concerns with a cryogenic facility, please report to your UNSW Project Manager.
Safety Information	• For work in bulk cryogenic facilities, observe the safety information in the following table

20.1.1. Cryogenic facility general hazard information

The following information needs to be understood prior to any work in these areas.

<table>
<tr><th>Access</th><th>Traffic Hazards</th></tr>
<tr><td>

DO NOT CHOCK OPEN DOORS
Cryogenic Facilities are either on the CardAx system or have restricted access keys


</td><td>

Most facilities are exit onto shared road/footpaths
Take care when entering/ exiting facilities for moving traffic/ vehicles

</td></tr>
<tr><th>Cold Temperatures</th><th>Low head room or awkward spaces</th></tr>
<tr><td>

Some pipes have permanent ice on their exterior – this may lead to poor grip when moving around facility
Caution must be taken when moving around facilities
Where purging may need to occur, discuss with the Cold Storage Manager on risks (see contacts list)
Purging of some services may lead to exposure of cold liquids/gases
Gloves should be used


</td><td>

Head or other body parts may collide with stationary objects
Take caution when moving in areas of risk

</td></tr>
<tr><th>Electrical services</th><th>Chemicals</th></tr>
<tr><td>

Electrical services are present in cryogenic facilities
Isolation required before work


</td><td>

Inert gases are present
Facilities are designed to have adequate ventilation
Some have low 02 alarms (speak to Cold storage manager and consult FMHS-BC01 hazard register)


</td></tr>
<tr><th>Slips, trips and falls</th><th>Falls</th></tr>
<tr><td>

Most facilities have services running on the ground or wet surfaces due to ice melt
Caution must be taken when moving around the facility
Enclosed footwear must be used
Facilities have lights which can be switched on/used


</td><td>

Some facilities have areas/access ladders which present falls hazards
Face the ladder;
Maintain 3 points of contact;
Never slide down ladders;
Always wear proper enclosed footwear


</td></tr>
<tr><th>Noise</th><th>First Aid</th></tr>
<tr><td>

In some cases, noise can reach hazardous levels i.e. filling or purging of pressure equipment


</td><td>

Contractors are required to bring their own First Aid Kits into facilities

</td></tr>
<tr><th>Emergency Safety</th><th>Phones</th></tr>
<tr><td>
Cryogenic facilities generally have:

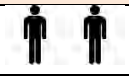
Safety warning signage
Exit signs
Evacuation speakers (some rooms)
Emergency lights
Call Security for any Emergencies x56666


</td><td>

In some facilities, phone lines are present
Mobile coverage generally present in most facilities (contractor must check their coverage)


</td></tr>
<tr><th>Isolation</th><th></th></tr>
<tr><td>

A buddy system should be established and covered in risk assessment or SWMS


</td><td></td></tr>
</table>

20.2. Confined Spaces

Any confined space entry must be carried out in accordance with legislative requirements.
The following information lists further requirements relating to confined spaces at UNSW.

Induction	• All contractors are required to complete the online safety module • Based on work being carried out, specific face-to-face inductions will be required
SWMS	• Any contractor working in these areas must have a HS811 compliant* task specific SWMS covering all identified risks • **An emergency rescue plan must be in place, UNSW reserves the right to ask for the plan to be tested before work**
Safety document(s) review	• All contractors must review and be familiar with the following documents before entry (available in the online documents library): o Register: review the FMHS-CS02:UNSW Confined Space Register o Photo reference: review the FMHS-CS01: Confined Space Photo Library • UNSW CS Risk assessments: review the relevant risk assessment (see below)
Authorisation	• Contractors must not enter facilities without authorisation from their UNSW Project Manager
Shutdowns, Service Isolations and alerts	• Electrical, gas and other services are present in these areas • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Complete the HS822_Confined_Space_Entry_Permit and have it displayed during work o If the work needs to continue after the time specified on the permit to work, a new Space Entry Permit must be issued. o NOTE - If work stops for a period of more than 1 hour, a new gas test will be required o Other permits for hot work, coring etc may also be required
PPE	• Task specific PPE must be used and documented in your SWMS
Access	• Access can only be granted once the online safety module has been successfully completed • It is important to prevent unauthorised entry, do not leave an open confined space unattended
Reporting concerns to your Contractor Manager	• If there are any concerns with a particular cryogenic facility, please report to your UNSW Project Manager.

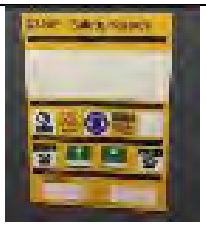
Risk assessments for UNSW confined spaces

The following risk assessments are in place (see www.contractorsafety.unsw.edu.au document library) to guide contractors when developing their SWMS for confined space work on site.

- FMHS-CS04 - Confined Space Risk Assessment - Ammonia Scrubber
- FMHS-CS05 - Confined Space Risk Assessment - Balance Tank
- FMHS-CS06 - Confined Space Risk Assessment - Boiler Tank
- FMHS-CS07 - Confined Space Risk Assessment - Chemical Tank
- FMHS-CS08 - Confined Space Risk Assessment - Cooling Tower
- FMHS-CS09 - Confined Space Risk Assessment - Diesel Tank
- FMHS-CS10 - Confined Space Risk Assessment - Fountain Tank
- FMHS-CS11 - Confined Space Risk Assessment - Grease Trap
- FMHS-CS12 - Confined Space Risk Assessment - Large Filter Baskets
- FMHS-CS13 - Confined Space Risk Assessment - Sediment Pit
- FMHS-CS14 - Confined Space Risk Assessment - Settlement Tank
- FMHS-CS15 - Confined Space Risk Assessment - Sewer Pit
- FMHS-CS16 - Confined Space Risk Assessment - Storm Water Easement
- FMHS-CS17 - Confined Space Risk Assessment - Storm Water Pit Drains
- FMHS-CS18 - Confined Space Risk Assessment - Sump Pit
- FMHS-CS19 - Confined Space Risk Assessment - Trade Waste Pit
- FMHS-CS20 - Confined Space Risk Assessment - Trade Waste Tank
- FMHS-CS21 - Confined Space Risk Assessment - Unknown Pit
- FMHS-CS22 - Confined Space Risk Assessment - Unknown Tank
- FMHS-CS23 - Confined Space Risk Assessment - Unknown Tank Void
- FMHS-CS24 -Confined Space Risk Assessment - Waste Water Pit
- FMHS-CS25 - Confined Space Risk Assessment - Waste Water Tank
- FMHS-CS26 - Confined Space Risk Assessment - Water Tank
- FMHS-CS27 - Confined Space Risk Assessment - Subsoil Pit

20.3. Research labs

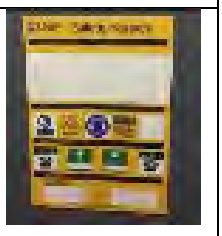
Research labs have hazard profiles. Contractors needing to work in these spaces must observe the information in the following table.

Induction	• **Online:** complete the online induction in the contractor induction system • **Face-to-face:** be inducted reviewed with the following form HS805 Contractor Induction Form • **Training for cleaning staff (upper and lower campus):** cleaning staff must undertake the face-to-face PowerPoint presentation with a Safety & Sustainability Coordinator: o FMHS-CTR12 - HS for cleaners o HS908 Cleaning in Moderate to High Risk UNSW Facilities Procedure • This can be arranged through the relevant Cleaning Contract Manager
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Safety Document(s) Review	• All contractors must review and be familiar with any safety documents provided by the lab manager
Authorisation	• The relevant lab manager must be contacted before entry, details can be found on the hazard chart on the lab door
Shutdowns, Service Isolations and alerts	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Contractors must not complete work in a research lab without one of the following permits/ clearance checklists being issued or with direction from their UNSW Project Manager: • **Lab clearance permit:** HS700_Laboratory_Clearance_Certificate o **Step 1: prior to work:** The laboratory manager completes and signs the Laboratory Clearance Certificate indicating that the area is free of uncontrolled risks, the necessary HS information has been provided and the equipment and area has been cleaned and decontaminated. o **Step 2: working in laboratory:** The contractor then displays the completed certificate in the area where the work is being conducted. o **Step 3: after completion:** when the work is completed the contractor signs the certificate and returns it to the laboratory manager. o **Research labs:** obtain a lab decommissioning checklist (where applicable): HS704 Laboratory Decommissioning Checklist
PPE	• Sturdy enclosed footwear must be used • Other task specific PPE such as lab coats must be used where directed by the lab manager
Signage	• Signage on the lab door will advise of hazards in any given lab space 

Access	• Once the above has been completed, you will need to complete the FMHS-CTR04b Service Contractor access authorisation form, and have it approved
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

20.4. Roofs and Ceiling Spaces

Work on roofs entails various risks including the risk of falls, hazardous plant and falling objects. Observe the following for roof/ceiling work:

Induction	• Any contractor wishing to access a UNSW roof must complete the online safety module in the contractor online system
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Safety Document(s) Review	• All contractors must review and be familiar with the following documents before entry (available in the online documents library): • **Register:** consult the FMHS- RS08 Roof Hazard Register • **Roof safety plans:** consult one the roof safety plans where applicable: o FMHS - RS03 - C24- Clancy Roof Safety Manual o FMHS - RS04 - H6 - TYREE Roof Safety Manual o FMHS - RS05 - E10 - Roof Safety Manual o FMHS - RS06 -E26 - Roof Safety Manual • FMHS - RS07 - M15 - Roof Safety Manual
Authorisation	• You must get access clearance from your nominated UNSW Project Manager before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• The heights permit must be issued the HS916 heights permit where applicable for fall risks (see contents for relevant Section) • Also refer the following: o HS707 Working at Heights Guideline
PPE	• Sturdy enclosed footwear must be used • Task specific PPE must be used and documented in your SWMS
Signage	• Signage on roof doors will advise of hazards 
Access	• Once the above has been completed, you will need to complete the FMHS-CTR04b Service Contractor access authorisation form, and have it approved • **Note:** No solo workers on roofs
Reporting concerns to your	• If there are any concerns, please report to your UNSW Project Manager.

Contractor Manager	

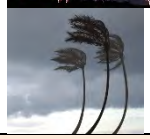
20.4.1. Roof general hazard information

Roof types and safety signage

- There are multiple roof types on the UNSW campus.
- **These include:** Concrete slab, Pitched tiled roofs, Clip lock/aluminium roofs, copper roofs, roofs with timber purlins
- Roof entry will generally have the safety signage at entry

General roof safety

- Contractors must confirm with their UNSW manager as to whether they can perform general work (non-emergencies) on a roof when:
  - o There are thunderstorms
  - o High winds
  - o Wet weather



Edge protection

- Some roofs have edge protection in place (i.e. railings, parapets)
- For a proper list, refer to the external FMHS- RS08 Roof Hazard Register

Falling Objects

- Objects must not be placed on building edges unless it is secured by a lanyard or other device to prevent it falling onto persons below

Unprotected edges

- Work <2m from an unprotected edge requiring the use of a heights safety system;
- A HS916 heights permit must also be issued/ used.

Static lines

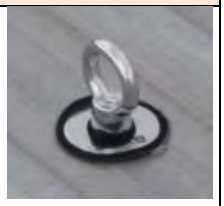
Static lines are present on a number of roofs; Some of these systems require "gliders" which can be borrowed from UNSW, speak to your UNSW Manager.

Rail glide systems

Some roofs have rail glide systems which can be used for fall prevention or rope positioning systems For technical specs on system and gliders, speak to your UNSW Project Manager

Anchor Points

- The majority of roofs have anchor points,
- Anchor points are rated at either 15 or 21 kN
- Anchor points are certified annually by UNSW



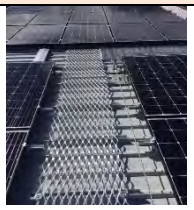
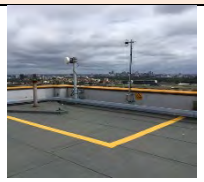
Signage and line marking

Some roofs have signage and yellow line marking where the 2m unprotected edge exclusion zone starts

Heights system compliance - tags

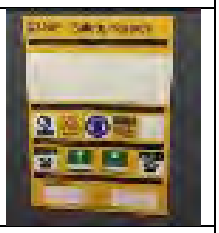
- Any heights system should have either blue or red tag on them.
- If there is not tag, do not use, speak to your UNSW Project Manager

Blue means it has been certified,
Red means do not use

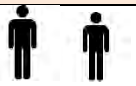
Walkways	Internal Ceiling space hazards
• Some roofs have dedicated walkways in place; • These walkways should always be adhered to when generally moving from one point to another. 	• Ceiling spaces at UNSW should be considered to have, biological hazards (vermin excreta), asbestos, dust, lead dust, aging structures • SWMS must have controls for these and other identified hazards where applicable 
Heights permit	**Ladders with fall arrest systems**
• The HS916 Working at Heights Permit must be used when using heights protection systems • The permit is available on the UNSW Safety website, speak to your UNSW Project Manager	• Ladders with fall arrest lines must be used with a harness/glider 
Exclusion zones for roof work	**Other hazards on roofs**
• An exclusion zone with a spotter must be established for work over building edges where there are either ropes hanging or the risk of falling objects below.	• There are other hazards on the roof such as plant, radiation, and asbestos, speak to your UNSW Project Manager Refer to the FMHS- RS08 hazard register 
Research activities on roofs	**Roof safety plans**
• Some roofs have research activities on them, these include: E4, H6, G17, F23, K17, H22 & J17; • Some of this research may present a hazard – speak to the Contractor Manager for further guidance.	• Some roofs have roof safety plans. To identify such roofs refer to the FMHS- RS08 Hazard register. • The plans are available through online contractor safety system
Heights system compliance - signage	**Installing heights safety systems on roofs**
• Signage is in place to indicate the status of heights safety system certification 	• Installation of height safety systems must follow the following guidance: o UNSW heights safety system guide, UNSW D&C guidelines o Relevant standards, Codes and Legislation
Fume Hood stacks	**Reporting concerns to your Contractor Manager**
• Arrange for a fume hood shutdown for prolonged periods of work <2m of stacks • Alternatively maintain a 3m work zone around active fume hood stacks where possible 	• If there are any concerns with a particular roof i.e. loose plant, vermin etc, please report to your UNSW Project Manager.

20.5. Plant & Switch Rooms

Work in plant/switch rooms entails various risks including working in isolation and live services. For work in these areas, please observe the following information.

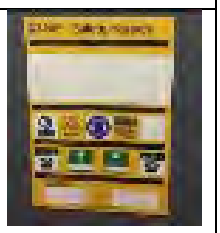
Induction	• Any contractor needing access must complete the plant & switch room online safety module in the contractor online system
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Authorisation	• You must obtain access clearance from your nominated UNSW Project Manager before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• specific permits for hot work, coring etc must be issued where applicable (find relevant section in contents)
PPE	• Sturdy enclosed footwear must be used • Task specific PPE must be used and documented in your SWMS
Signage	Hazard chart signage on entry doors will advise of hazards 
Access	• Once the above has been completed, you will need to complete the FMHS-CTR04b Service Contractor access authorisation form and have it approved
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

20.5.1. Plant rooms general hazard information

<table>
<tr><td colspan="4">Access</td></tr>
<tr><td colspan="4"> 
• Plant rooms are either on the CardAx system or have restricted access keys
• DO NOT CHOCK OPEN DOORS</td></tr>
<tr><td colspan="2">Moving parts</td><td colspan="2">Electrical services</td></tr>
<tr><td>  </td><td>• Some plant rooms have plant with moving parts
• Do not remove covers etc without conducting a risk assessment
• Ensure loose clothing/hair is tied back/secured</td><td>  </td><td>• Electrical services are present in plant and switch rooms
• Isolation required before work</td></tr>
<tr><td colspan="2">Temperature hazards</td><td colspan="2">Low head room or awkward spaces</td></tr>
<tr><td>  </td><td>• Some plant in plant rooms may have hot surfaces
• Follow caution signs
• Do not remove covers etc without undertaking risk assessment</td><td>  </td><td>• Head or other body parts may collide with stationary objects</td></tr>
<tr><td colspan="2">Chemicals</td><td colspan="2">Slips, trips and falls</td></tr>
<tr><td> 
  </td><td>• Plant rooms can contain different types of chemicals which may be corrosive, toxic, flammable or other
• Speak to supervisor for further information on specific risks
• Do not loosen pipes which have not been isolated
• Some plant rooms have safety showers</td><td>  </td><td>• Most facilities have services running on the ground or wet surfaces due to ice melt
• Facilities have lights which can be switched on/used</td></tr>
<tr><td colspan="2">Falls</td><td colspan="2">Noise</td></tr>
<tr><td>  </td><td>• Plant rooms have areas/access ladders which present falls hazards
• Face the ladder;
• Maintain 3 points of contact;
• Never slide down ladders;
• Always have proper enclosed footwear</td><td>  </td><td>• In some plant rooms noise can reach hazardous levels
• Hearing protection must be carried and worn</td></tr>
<tr><td colspan="2">First Aid</td><td colspan="2">Isolation</td></tr>
<tr><td>  </td><td>• Contractors are required to bring their own First Aid Kits into plant rooms</td><td>  </td><td>• A buddy system must be established and covered in risk assessment or SWMS</td></tr>
<tr><td colspan="2">Emergency Safety</td><td colspan="2">Phones</td></tr>
<tr><td>  </td><td>Plant rooms generally have:
• Fire extinguishers
• Fire sprinklers (some rooms)
• Safety warning signage
• Exit signs
• Evacuation speakers (some rooms)
• Emergency lights
Call Security for any Emergencies x56666</td><td>  </td><td>• Land lines: in some rooms are present
• WIP phones: in some rooms are present</td></tr>
</table>

20.6. Main Service Tunnel

The UNSW main service tunnel runs under the main campus and contains various services. For work in the Service Tunnel, observe the following information.

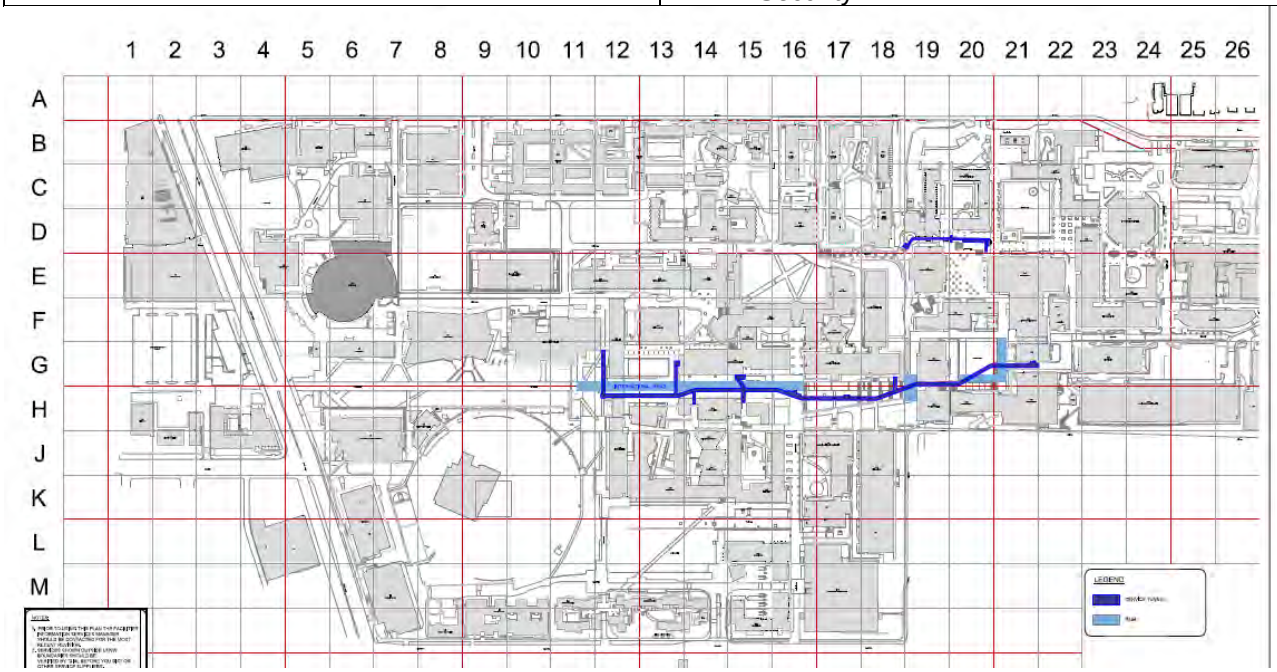
Induction	• Any contractor wishing to access must complete the service tunnel online safety module in the contractor online system and; • Complete a face-to-face induction using the FMHS – ST01 UNSW Service Tunnel Induction with a nominated person in the contact list (notice of at least 7 days is required):
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks •
Safety document(s) review	• Contractors will need to review the following documents to help document controls in their SWMS o Map - FMHS - ST02 Service Tunnel diagram o Map - FMHS-ST03 Service Tunnel Map 2
Authorisation	• You must obtain access clearance from your nominated UNSW Project Manager before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Specific permits for hot work, coring etc must be issued where applicable (find relevant section in contents)
PPE	• Sturdy enclosed footwear must be used o Task specific PPE must be used and documented in your SWMS
Signage	• Signage on entry doors will advise of hazards 
Access	**Service Tunnel Access process** 1. Access for the service tunnel can only be granted after the online safety module and face-to-face induction has been completed 2. Only persons in the contact list can perform face-to-face inductions 3. Induction starts by the relevant UNSW Project Manager contacting one of the above persons to do the walk through 4. Induction occurs with the FMHS – ST01 Service Tunnel induction form 5. Once induction occurs, the relevant Project Manager will need to raise a service tunnel request in Archibus and alert one of the above-mentioned persons to approve 6. Once the approval has been granted, contractors can then acquire a day access card from the Security Office, Red Centre.

Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

20.6.1. Main Service Tunnel general hazard information

Access	**Moisture alarms**
Swipe Card access only • DO NOT CHOCK OPEN DOORS • Only inducted persons can access the tunnel	• Moisture alarms are present in the tunnel to advise of water ingress /floods
Collision – body parts	**Electrical services**
 • Walking through tunnel may result in collisions with stationery object (low head room etc)	 • Electrical services are present • Isolations/LOTO required before work
Electrical - HV	**Wet surfaces in tunnel**
 • High voltage electrical services present (11Kv) • Services are shielded	 • Constant water on ground – slips, trips and falls can occur
Falls	**Phones**
 • Climbing fixed ladders in tunnel: • Face the ladder; • Maintain 3 points of contact; • Never slide down ladders; • Always have proper enclosed footwear	• Land lines: not present • WIP phones: not present Mobile Phone coverage is: poor to good in tunnel 
Gas lines	**Isolation**
 • Gas lines at medium pressure (100kPa) • Gas control panel near the Substation 2 entrance	 • A buddy system must be established & covered in risk assessment or SWMS
Noise	**Signage**
 • Noise levels exceed 85dB near the Substation 2 entrance	 • Grid code reference signs are located on the ceiling in certain locations
Crush potential	**Security alarm**
• Some doors open/ close with force due to pressurisation • Entry door at the library falls under this category	• There are access alarms which sound if unauthorised access occurs • These can only be deactivated via UNSW Security after authorisation
Exit points from tunnel	**First Aid**
• Library • G17 • Webster (exit point goes into the Substation) • Scientia (exit point goes into the basement) • Chemical Sciences • Evacuation diagrams are located near exit points • See FMHS - ST02 Service Tunnel diagram	 • Contractors are required to bring their own First Aid Kits into Tunnel
Other Emergency systems	**Emergency gas alarms**
• **Red buttons:** sound a hooter that alerts people within the tunnel, they do not alert • **Emergency evacuation lighting**: present in the tunnel	• The service tunnel has the following gas sensors:

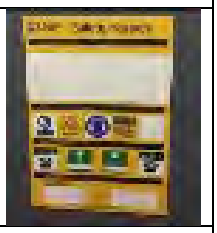
Security or Emergency Services; • **FIRE:** There are no thermal or smoke detectors in the tunnel; • **EXIT LIGHTS:** There are Emergency lights in place, including exit lights	• **Security:** In case of emergencies, contact security on 9385 6666 • **Break Glass alarms**: Not present 	• Methane Sensors • Natural gas (high & low) alarm - audible alarm; • Low 0_2 alarm - audible alarm; • UNSW Security are alerted if any of the above alarms are activated • UPS alarm – silent alarm to UNSW Security • Pump alarm – silent alarm to UNSW Security	• Strobe lights present for gas sensors 



Service tunnels campus layout

20.6.2. Pool Service Tunnel

The pool service tunnel runs under the main campus and contains various services. For work in this area, observe the following information.

Induction	• Any contractor wishing to access must complete the service tunnel online safety module in the contractor online system and; • Complete a face-to-face induction using the FMHS – ST01 Service Tunnel Induction with the nominated person in the contact list (notice of at least 7 days is required)
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Authorisation	• Contractors must obtain access clearance from your nominated UNSW Project Manager before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Specific permits for hot work, coring etc must be issued where applicable (see permit section)
PPE	• Sturdy enclosed footwear must be used • Task specific PPE must be used and documented in your SWMS
Signage	• Signage on entry doors will advise of hazards 
Access	**Service Tunnel Access process** • Once the approval has been granted, contractors can then acquire access for their card by putting a request through their UNSW Project Manager to have their details updated
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

20.6.3. Pool Service Tunnel general hazard information

Collision – body parts

- Walking through tunnel may result in collisions with stationery object (low head room etc)

Electrical services

- Electrical services are present
- Isolations/LOTO required before work

Access

- Swipe Card access only
- DO NOT CHOCK OPEN DOORS
- Only inducted persons can access the tunnel

Wet surfaces in tunnel

- Constant water on ground – slips, trips and falls can occur

Falls

- Using the ladder to access the tunnel
  - Face the ladder;
  - Maintain 3 points of contact;
  - Never slide down ladders;
  - Always have proper enclosed footwear

Phones

- Land lines: not present
- WIP phones: not present

Mobile Phone coverage is: poor in tunnel

Gas lines

- Gas lines at medium pressure (100kPa)
- Gas control panel near the Substation 2 entrance

Isolation

- A buddy system must be established & covered in risk assessment or SWMS

Exit points from tunnel

- Through the B5 plant room
- Through the exit door onto the pool lawn

First Aid

Contractors are required to bring their own First Aid Kits into Tunnel

Other Emergency systems

- **Red buttons:** sound a hooter that alerts people within the tunnel, they do not alert Security or Emergency Services;
- **FIRE:** There are no thermal or smoke detectors in the tunnel;
- **EXIT LIGHTS:** There are Emergency lights in place, including exit lights
- **Emergency evacuation lighting**: present in the tunnel
- **Security:** In case of emergencies, contact security on 9385 6666
- **Break Glass alarms**: Not present

Emergency gas alarms

The service tunnel has the following gas sensors:

- Smoke detection
- Chlorine detection
- UNSW Security are alerted if any of the above alarms are activated

20.6.4. Morven Brown Service tunnel

The Morven Brown service tunnel runs under the Morven Brown building and contains various services. For work in this area, observe the following information.

Induction	• Any contractor wishing to access must complete the Morven Brown service tunnel online safety module in the contractor online system and; • Complete a face-to-face induction using the FMHS – ST01 Service Tunnel Induction with one of persons listed in the contact list (a notice of at least 7 days is required)
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Authorisation	• Contractors must obtain access clearance from your nominated UNSW Project Manager before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Specific permits for hot work, coring etc must be issued where applicable
PPE	• Sturdy enclosed footwear must be used and task specific PPE must be used and documented in your SWMS
Signage	• Signage on entry doors will advise of hazards 
Access	• Once the approval has been granted, contractor can then acquire access for their card by putting a request through their UNSW Project Manager to have their card details updated
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

20.6.5. Morven Brown service tunnel

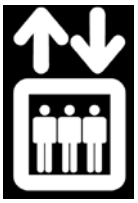
<table>
<tr><th>Collision – body parts</th><th>Electrical services</th></tr>
<tr><td> 

• Walking through tunnel may result in collisions with stationery object (low head room etc)</td><td> 
• Electrical services are present
• Isolations/ LOTO required before work</td></tr>
<tr><th>Access</th><th>Wet surfaces in tunnel</th></tr>
<tr><td>• Swipe Card access only
• DO NOT CHOCK OPEN DOORS
• Only inducted persons can access the tunnel</td><td> 
• Constant water on ground – slips, trips and falls can occur</td></tr>
<tr><th>Falls</th><th>Phones</th></tr>
<tr><td> 

• Using the ladder to access the tunnel
o Face the ladder;
o Maintain 3 points of contact;
o Never slide down ladders;
o Always have proper enclosed footwear</td><td>• Land lines: not present
• WIP phones: not present
Mobile Phone coverage is: poor in tunnel
  </td></tr>
<tr><th>Gas lines</th><th>Isolation</th></tr>
<tr><td>• 
• Gas lines at medium pressure (100kPa)
• Gas control panel near the Substation 2 entrance</td><td> 
• A buddy system must be established & covered in risk assessment or SWMS</td></tr>
<tr><th>Exit points from tunnel</th><th>First Aid</th></tr>
<tr><td>• Through the B5 plant room
• Through the exit door onto the pool lawn</td><td> 

• Contractors are required to bring their own First Aid Kits into Tunnel</td></tr>
<tr><th>Other Emergency systems</th><th></th></tr>
<tr><td>• FIRE: There are no thermal or smoke detectors in the tunnel;
• EXIT LIGHTS: There are Emergency lights in place, including exit lights
• Emergency evacuation lighting: present in the tunnel
• Security: In case of emergencies, contact security on 9385 6666
• Break Glass alarms: Not present</td><td></td></tr>
</table>

20.7. Lift infrastructure (i.e. shafts, motor rooms)



Work in lift infrastructure entails various risks including moving plant, isolation, and live services. For work in these areas, observe the following information.

Inductions	Observe the following to acquire access: • **Step 1:** complete the online lift safety module in the contractor online portal • **Step 2:** complete a face-to-face induction into motor rooms • **Lowy lifts**: Lift contractors must also undertake a face-to-face PowerPoint induction for any work on the Lowy lifts (C25). Discuss this with your relevant UNSW Project Manager
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Authorisation	• Contractors must obtain access clearance from your nominated UNSW Project Manager before entry • You must get authorisation from the UNSW Lifts Contracts Manager
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Specific permits for hot work, coring etc must be issued where applicable (find the relevant section in the contents)
PPE	• Sturdy enclosed footwear must be used • Task specific PPE must be used and documented in your SWMS
Signage	• Signage on entry doors will advise of hazards 
Access	**Lift motor room access process** Access can only be after the contractor has completed the online safety module and had a face-to-face induction. For the face-to-face induction please see the following process 1. EM staff supervising contractors may provide a lift motor room induction • Before this can occur, the EM staff member must have been inducted by the Lifts contractor manager, EM Safety team member or delegate from the lift company (see contacts list) 2. Face-to-face inductions must be done using the FMHS-LI05 – Lift Motor Room Induction Form 3. Induction form records need to be stored in the Facilitate induction register
Safety Document(s) Review	• Contractor will need to review the following documents to help document controls in their SWMS o Read the FMHS-Li04 -Lift hazard register document

	o Refer to the TYREE maintenance risk assessment in the online Contractor system when servicing these lifts (doc ref# FMHS-RA012a - Lift Infrastructure Open Atrium Lifts 109 and 110)
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.

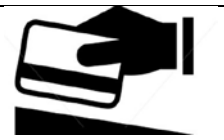
20.7.1. General hazard information for UNSW lift infrastructure

Access	**Mobile Phones**
 • Lift motor rooms are either on the CardAx system or have restricted access keys • DO NOT CHOCK OPEN DOORS TO MOTOR ROOMS • Access can only be approved by the UNSW lift contracts manager	 • Mobile Phone coverage is generally good in motor rooms (contractor must check their coverage)
Moving Parts - Crush/entanglement	**First Aid**
 • Some plant in lift motor rooms is guarded • Some moving plant requires non-lift technicians to follow a rule of at least one and half arm length clearance • Follow safety signage guidance on lift motor room doors	 • Contractors are required to bring their own First Aid Kits into Motor Rooms
Falls	**Isolated Environments**
 • Lift shafts present significant falls hazards, only qualified lift technicians are authorised to access these areas	 • A buddy system must be established and covered in risk assessment or SWMS
Electrical Services	**Emergencies**
 • Electrical services are present in lift motor rooms and shafts • Isolation required before work • Lift control panels must not be opened • Lift control panels have electrical hazard warning signs	 Lift motor rooms generally have the following: • Fire extinguishers • Fire sprinklers (some rooms) • Safety warning signage • Exit signs • Evacuation speakers (some rooms) • Emergency lights
Phones	
 • Land lines: present • WIP phones: present	

20.8. Substations

Substations pose significant safety hazards to workers. The information in this section of the guide complement that already outlined in the FMHS-SB01 - Substation Installation Management Plan

Induction	• Any contractor wishing to access must complete the o Complete the online safety module in the contractor online portal o Complete a face-to-face induction with a UNSW Electrical Services Team (see contacts list)
SWMS	• Any contractor working in these areas must have a HS811 compliant task specific SWMS covering all identified risks
Authorisation	• You must obtain access clearance from your nominated UNSW Project Manager and the UNSW Electrical Services Team before entry
Shutdowns, Service Isolations and alerts:	• Electrical, gas and other services are present in these areas. • No live work is permitted, and proper isolations must occur using a Lock Out Tag Out (LOTO) system • All non- emergency isolation requests must be submitted 10 days prior to work to the nominated UNSW Project Manager
Permits	• Due to the variety of HV substations at UNSW, there are three types of situations where a person may need to enter them: o A person who needs to undertake non HV work in a HV substation. o A licensed electrician who needs to undertake low voltage work in a HV substation. o A HV licensed electrician who needs to undertake HV work in a HV substation. • The following permits apply to HV work to be carried out by HV qualified electricians. All other work in HV substations can only be undertaken under the direct supervision of the UNSW EM Electrical Services Team member: o HS823_HV_Substation_Entry_Permit o HS827 Switching Instruction Permit o HS826 Request Isolation Permit o HS828_HV Access Permit • Upon receiving a request from a HV qualified electrician, the UNSW EM Engineer will: o Review any documentation/SWMS regarding the proposed work. o Verify the qualifications of all persons who will be entering the HV substation o Identify and include on the permit any hazards o Any conductors to be roped off and danger signs placed prior to the Work commencing o The areas in which the person/s is to carry out the work o All other equipment in the HV substation especially the transformers, HV and LV switchboards o The trip mechanisms on the switchboards and explain in general terms what may cause an inadvertent trip o Action to take in an emergency (to be included in SWMS) o Whether a safety observer is required o Prepare and issue the permit to carry out the work o On completion obtain signed off HV Substation Entry Permit and file

PPE	• Sturdy enclosed footwear must be used • Task specific PPE must be used and documented in your SWMS	
Access	• DO NOT CHOCK OPEN DOORS • Substations are either on the CardAx system or have restricted access keys	
Signage	• Signage on entry doors will advise of hazards	
Safety Document(s) Review	• The following documents need to be reviewed before any work in substations can occur: o **Read the plan:** FMHS-SB01 - Substation Installation Management Plan. o **Review the hazard register:** FMHS-SB02: UNSW Substation Hazard Register	
Reporting concerns to your Contractor Manager	• If there are any concerns, please report to your UNSW Project Manager.	

20.8.1. General hazard information for UNSW Substations

High voltage services are present

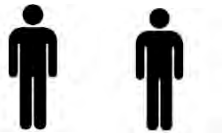
- High voltage services are present
- Regarding electrical shock risks, each substation has its own hazard profile,
- Information on hazard is outlined in the following document and through guidance by the EM Electrical Services team:
  - o FMHS-SB01 - Substation Installation Management Plan.
  - o FMHS-SB02: UNSW Substation Hazard Register

Temperature hazards

- Some plant may have hot surfaces
- Follow caution signs
- Do not remove covers etc without undertaking risk assessment

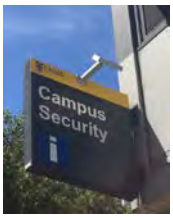
Low head room or awkward spaces

- Head or other body parts may collide with stationary objects
- Take caution when moving in areas of risk
- Hard hats should be considered

Chemicals	Slips, trips and falls
• SF6 is present in some substations • For indoor installations, spills of insulating liquid are contained by impermeable floors with thresholds around the area where the equipment is located or by collecting the spilled liquid in a designated holding area in the building.  • Containment for outdoor equipment - substations are designed to contain the quantity of insulating liquid in equipment, the volume of water from rain and fire suppression systems in accordance with the proximity to water courses and soil conditions	• Caution must be taken when moving around the facility • Enclosed footwear must be used • Facilities have lights which can be switched on/used 
First Aid	**Isolated environment**
• Call Security for any Emergencies x56666 • Some substations have first aid and electrical rescue kits • Contractors are required to bring their own First Aid Kits into substations  	• A buddy system must be established and covered in risk assessment or SWMS 
Phones	**Noise**
• **Land lines:** in some rooms are present • **WIP phones:** in some rooms are present • **Mobile Phone coverage varies** substations within buildings tends to be poorer than those in located outside buildings 	• In some substations noise can reach hazardous levels • Hearing protection must be carried and worn 

21. Emergency Management

21.1. Security Services



Help point

- **Campus Security patrol the Campus 7 days a week, 24 hours a day, all year round.**
  - For general enquiries - 9385 6000
  - **For emergency number - 9385 6666**
- **Help Points** - are also located around the campus and have a direct line to security - see resources below
- **Identification**
  - Security from time-to-time require contractors to identify who they are
  - Any identification supplied to contractors by UNSW must be available always while on UNSW campuses and properties.

UNSW Resources

- Security | Estate Management | UNSW Sydney
- Help points location map
- StaySafe@UNSW App

21.2. Emergencies

- Due to the size of the UNSW Campus, UNSW Security coordinates emergency responses to ensure immediate access to any location on campus.

For emergencies where NSW Fire & Rescue, NSW Police and/or NSW Ambulance are needed call 9385 6666 - avoid calling call 000

  - UNSW Security will remove bollards, escort emergency services etc to ensure quickest response possible

- **Why UNSW requires Security to be contacted first**

  - They will meet Emergency Services at a nominated gate
  - Remove bollards
  - Arrange crowd and traffic control
  - Provide First Aid assistance where needed

UNSW Emergency chart

- **How to contact Security**

  - **Phones:** use a phone to call 9385 6666
  - Contact Security via the SatySafe@UNSW App
  - **Help Points:** one of the Help Points located about campus
  - **Lift Phones:** any lift phone
  - **Duress buttons:** activate a duress button (where fitted)
  - **Alarm notification** - e.g. building fire alarm will alert UNSW Security

- **When calling UNSW Security, advise the operator on:**
  - The nature of the emergency
  - The location of the emergency; building, floor and room number
  - What assistance is required
  - Your name
  - The Company's name, and
  - Your mobile phone or other contact number.

UNSW Documents (http://www.estate.unsw.edu.au/)

- UNSW Emergency Procedures.pdf
- Emergency Procedures Poster - Kensington Campus
- Emergency Procedures Poster - Paddington & Randwick Campuses

21.3. First Aid Kits & Fire Extinguishers

21.3.1. First Aid Kits

- Contractors must have their own first aid kit.
- In the event of a first aid emergency, contractors may access UNSW First Aid kits. If doing so you must advise the UNSW Project Manager after the event
- Campus Security personnel are first aid trained
- Also see:
  - First-aid-in-the-workplace-COP.pdf (nsw.gov.au)
  - HS905 First Aid Procedure

Codes of Practise

- First-aid-in-the-workplace-COP.pdf (nsw.gov.au)

21.3.2. Fire Fighting Equipment

- **Reels** - Fire hose reels and/or fire extinguishers are located in all UNSW buildings, they are identified by signposting in the corridors
- **Extinguishers** - generally, the types of extinguishers at UNSW are:
  - Dry chemical
  - Water
  - Foam
  - Carbon dioxide
- Only use extinguishing equipment if it is safe to do so and if you are properly trained.
- Contractors are not permitted to use any UNSW firefighting equipment, such as hydrants, hose reels and fire extinguishers, for anything other than their intended purpose.

Fire Extinguishers

21.3.3. Emergency Evacuation Procedures

When evacuating buildings, be aware of emergency tones and listen to announcements.

- **Alarm:** when a fire alarm sounds, or at the direction of a Floor Warden, stand by and wait for further directions.
  - In a building with an EWIS (early warning intercommunication system) the alarm will be a "beep, beep" tone
- **Turn off equipment**: any equipment (using emergency stop buttons if possible) and close any gas cylinders
- **Alarm:** when told to do so, or when the evacuation "whoop, whoop" tone sounds, leave the building via the EXIT door or stairs
- **Evacuate:** proceed directly to the designated assembly area outside the building, as shown on the Emergency Evacuation Plan in the foyer
- **Secure dangerous equipment:** leave the building via the EXIT door or stairs and proceed directly to the designated assembly area outside the building, as shown on the Emergency Evacuation Plan in the foyers.
- **DO NOT USE LIFTS**: if in a multi-storey building DO NOT PANIC but evacuate through the designated stairs

- **Obey instructions:** of the Floor Wardens
- **Remain at the assembly area:** until the Chief Warden or UNSW Security advises it is safe to re-enter the building.

Obey the instructions of emergency personnel. Their hats and vests identify them:

- **White** for Chief and Deputy Chief Wardens
- **Yellow** for Floor Wardens or wardens
- **Green** for First Aid Officers.

22. Continual improvement

Contractors must ensure their safety-based processes have a continual improvement process in place. This means any deficiencies identified in their safety system as identified through either reported hazards, incidents, UNSW audits, or inspections are addressed.

23. Environmental Compliance

All construction projects and major service contracts must have an environmental management plan. For any other works and services where there is a risk to the environment then a plan must also be developed and in place. The plan must at least cover the following areas.

23.1. Waste

UNSW requires Contractors and their employees to identify waste minimisation options at the start of each project consistent with regulatory requirements

- **Skip bins**: at most work sites an industrial rubbish skip is required but only for materials that cannot be re-used or recycled. Contractors must ensure that rubbish does not blow away, or spill from the skip\ should you need to bring a rubbish skip onto UNSW property, you will need to discuss its placement with the nominated UNSW Project Manager or Project Manager.
- **Legal obligations**: contractors are legally responsible to ensure waste is disposed of in the correct manner
- **UNSW skip bins**: contractors shall not use UNSW rubbish bins/recycling bins/skips to deposit construction and demolition waste and are expected to maximise recovery of construction and demolition waste for reuse or recycling
- **Building material rubbish** must be removed progressively by Contractor(s) at their own expense, as noted within contractor's individual environmental management systems (ISO 14000). Contractors are not permitted to use UNSW bins or skips to transport or deposit waste building material
- **Rubbish dumping**: as described within the Environment Protection Authority guidelines, under no circumstances are contractors to dump rubbish on vacant land on the UNSW campuses or properties. The disposal and washing out of excess concrete from trucks is not permitted on UNSW campuses or properties
- **Paints**: the disposal of paints or residue from cleaning and painting equipment is not permitted on UNSW campuses or properties as this poses an environmental risk.

Asbestos: must only be removed by an appropriately licensed contractor and disposed of in licensed facilities

- **Refrigerant gases** (CFCs):
    - Must be collected in specially sealed cylinders by a licensed disposal company, and
    - Must not be released into the atmosphere.

- **PCBs**
    - Must be disposed of in accordance with regulatory requirements
    - Must be collected and contained appropriately to prevent spillage

- **Light Tubes**
    - Never dispose of light tubes in UNSW rubbish or recycling bins, this is not only unlawful, but it also presents a great risk to the safety of cleaning staff. Disposal of light tubes should be discussed
    - Light tubes must not be broken,
    - They must be deposited in specially marked collection containers, speak with your UNSW Project Manager

23.2. Contaminated soils

Where contractors working on site discover contaminated soil, they must report this to their nominated UNSW Project Manager i.e.:

- Oil
- Asbestos
- Cyanide
- Heavy metals, or
- Any other toxic material.

All contaminated soil must be removed by a licensed waste disposal contractor

23.3. Protection of landscaped areas

- **Flora and Fauna:** all flora and fauna are highly valued, and contractors are asked to respect the campus ecology when on the grounds
- **Landscaping disturbance**: if any work is likely to disturb landscaping or grassed areas, the contractor must advise their nominated UNSW Project Manager a minimum of 10 days prior to the intended commencement of the work
- **Tree disturbance**: Please consult with the grounds manager before commencing any works that may impact the UNSW trees. Every effort must be made to avoid disturbing trees as well as landscaped and grassed areas. where negligent work results in damage to these areas, the cost of rectifying the damage will be recovered from the contractor.
- **Fires**: never light a fire on University grounds.

23.4. Water Conservation, Erosion and Sediment Control

- **Drain protection:** 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 receive rainwater
- **Erosion & Sediment protection:** before construction work starts, erosion and sediment controls must be installed when it is possible that work on UNSW grounds will cause erosion or sediment losses
- **Protection of the aquifer**: the bulk of storm water run-off on the Kensington campus is used to recharge the aquifer for subsequent bore water extraction by the University. This water is then used for a variety of purposes, including cooling towers and non-potable laboratory water.

23.5. Bore water

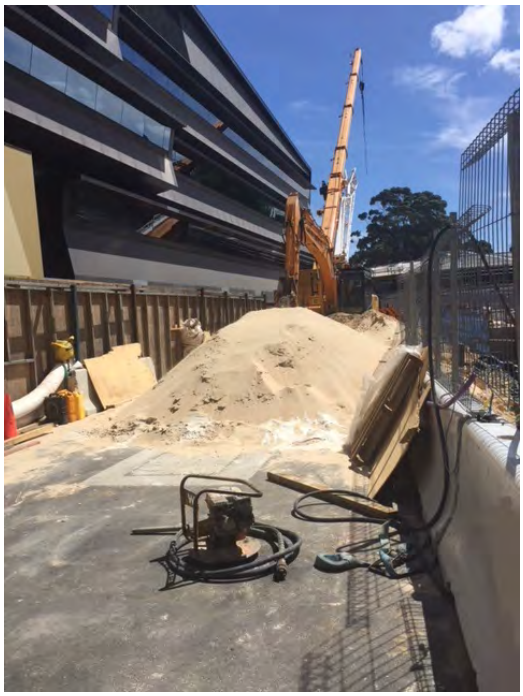
Please also note that only bore water should be used for such purposes as:

- Site shed toilet flushing
- Washing down
- Street cleaning
- Trench compaction
- Pipe cleaning, and
- Testing.
- Due to its low pH level, bore water is not recommended for use in concrete.
- Drinking water is only to be used for human consumption and ablutions

23.6. Dust

Dust can cause health problems for workers and others on UNSW campus and properties. If a work site is generating dust:

- **Containment:** that dust must be contained within that worksite
- **Water sprays etc**: dust control measures such as use of water sprays or jets should be considered
- **Cover piles**: materials and stockpiles that generate dust should be covered
- **Sweepings:** should be placed into a bag or box before being put into a skip to prevent dust from becoming airborne when the bin is emptied, and
- **PPE**: face masks and respirators should be worn to protect your health, as necessary.



Contact list UNSW

Keyword	Name	Phone	Email
Service Tunnel inductions	Jay Hamoir	0478492097	j.hamoir@unsw.edu.au
	Robert Alam	0401041105	robert.alam@unsw.edu.au
	Russel Druce	0435 579 026	r.druce@unsw.edu.au
Morven Brown tunnel inductions			
	Russel Druce	0435 579 026	r.druce@unsw.edu.au
Pool Tunnel inductions	Radu Florescu	0455066009	r.florescu@unsw.edu.au
Lift Motor room inductions	Stephanie Miszuk	9385 9427	s.miszuk@unsw.edu.au
	Delegate from lift company	See above	See above
Substations inductions	Jay Hamoir	0478492097	j.hamoir@unsw.edu.au
	Remus Tudor	0478491989	remus.tudor@unsw.edu.au
Bulk Cryogenic facilities inductions	Paul O'Brien	0432 894 796	paul.obrien1@unsw.edu.au
Security - Emergencies	UNSW Security	9385 6666	security.services@unsw.edu.au
Security - General	UNSW Security	9385 6000	security.services@unsw.edu.au
Estate Management	Helpdesk	9385 5111	estate@unsw.edu.au

24. UNSW Project Managers Section

Contractors do not need to add this into their site safety plans

24.1. Incident investigations

All serious safety related incidents need to be reported to the UNSW Safety & Wellbeing team and investigated. The investigation process is outlined in the table below.

Incident process
❑ A WHS Monitor (myUNSW) report is submitted ❑ An investigation is undertaken using HS003a Contractor Incident Investigation Report template ❑ Follow up with contractor on actions items to address any deficiencies ❑ Safety alert put out through Facilitate and the Online Contractor Safety system

24.2. Archibus shutdowns and alerts

a) Log into Archibus
b) Select client
c) Create service request
d) Select Project tab (hard hat)
e) Fill in mandatory field (red star*)
f) Put in Unit code as either COOFACIL
g) Under problem type select shutdown, under NSF ID select option 1 or 2
h) Under account put in NA
i) Description field put in
   - Construction
   - Building
   - Level
   - Date
   - Service being isolated
j) Remember if the request is going out in less than 6 days put in “critical”, if >6 days put in “high”, “med” or “low”
k) Fill out additional details section
   a) Cause code
   b) Start/end dates
   c) Primary trade (BGIS or CFM – you need to do one for both)
   d) Isolation duration – continues for longer projects, daily for once off

NOTE: **You must complete the shutdown within 15 minutes or the system will log you out**

24.3. Service Shutdown/ advisory list

Use the following list to identify what services/persons or business groups need to be notified for various types of work

Service isolation	Details	Whom to consult	
• **Asbestos removal**	Removal of asbestos; asbestos emergencies, refer to UNSW ACM plan, Security	Local stakeholders, Manager - Asset Management for updates to asbestos register -	❑
• **Asbestos notification**	Activities such as licensed asbestos removal	SafeWork NSW	❑
• **Drone operation**	Use of drones to survey/other	EM Comms, Security, CASA, Air services	❑
• **Crane lifts**	Use of cranes one site	EM Comms, Security, CASA, Air services -	❑
• **Lab services**	Fume hoods, gas detectors, power, other	Precinct manager and lab manager	❑
• **Fire services**	Sprinklers, thermal or smoke detectors; inadvertent disruption to fire services	EM engineering services, UNSW security	❑
• **Cardax**	Isolation of Cardax readers for easy access during jobs, inadvertent disruption to cardax	UNSW security - EM	❑
• **Lifts**	Lift shutdown, inadvertent disruption to lifts	EM - Lift contract manager	❑
• **Electrical services**	De-energising electrical systems, inadvertent disruption to electrical services	EM elect. service team	❑
• **Mechanical services**	Air-conditioning shutdown, other, inadvertent disruption to HVAC services	EM HVAC	❑
• **Water services**	Isolation of waste services, inadvertent disruption to water services	EM Hydraulic team	❑
• **Gas services**	Isolation of natural gas or specialist gases for lab needs, inadvertent disruption to gas services	EM Hydraulic team	❑
• **IT services/ Communications**	Isolation or work on communication services, inadvertent disruption to IT services	UNSW IT	❑
• **Radiation – (roofs)**	Powering down of Base towers, microwave dishes, security aerials	Precinct Manager Base towers Microwave dishes – UNSW IT FM Security - Security aerial	❑
• **Vehicle access/road blocks**	For vehicle access, impact on gardens, trees etc alert General Services	EM Grounds	❑
• **Heavy vehicles over service tunnel**	Parking vehicles over the main service tunnel	EM Hydraulic services	❑
• **Disruptions to UNSW stakeholders or residents**	Advise on potential impacts or disruptive issues	EM communications	❑
• **Vehicle or crowd assistance on the UNSW site**	Advise Security for any help or support when moving vehicles etc. For Weekends, arrange for Security to have parking inspectors for illegal parking	UNSW Security	❑
• **Impact of airspace above UNSW**	Where air spaces above UNSW may impact helicopter or aircraft safety	CASA/Air Services	❑
• **Environmental impacts**	TBA	EPA	❑
• **Neighbours (offsite)**	Noise, traffic, other	Face-to-Face, Via EM Comms	❑
• **Offices**	Noise, traffic, dust, fumes, power outages, Asbestos removal, access, other	Face-to-Face, Via EM Comms	❑
• **Labs**	Noise, traffic, dust, fumes, power outages, Animal Facilities, Asbestos removal, gas outages, access, other	Face-to-Face, Via EM Comms	❑
• **General campus users**	Noise, traffic, dust, fumes, Asbestos removal, access, other	Face-to-Face, Via EM Comms	❑

24.4. Service Reinstatement

Consider what services need to go back into operation post work
❑ Lab services ❑ Fire services ❑ Air services re cease of drone operations ❑ Cardax ❑ Lifts ❑ Electrical services ❑ Mechanical services ❑ Water services ❑ Gas services ❑ IT services/ Communications ❑ Radiation – (roofs) ❑ Road blocks - bollards ❑ Advise Neighbours (offsite) - ❑ Advise Offices ❑ Advise Labs ❑ Advise General campus users

24.5. Audits and inspections

Documents audits and inspections on contractor safety documents need to occur on a routine basis. The following information identifies responsibilities around the audit and inspection process.

24.5.1. Supervisors for UNSW Project Managers

Supervisors are responsible for ensuring their direct reports have an audit and inspection process for any contractors they are managing.

24.5.2. UNSW Project Managers

UNSW Project managers are responsible for the following:

Plan	• Review site plans against the HS 810 site safety plan checklist
Plan	• Review environmental plans against the FMHS - ENVR02 - Environmental site inspection checklist
Plan	• Review traffic plans against the HS930 Traffic management plan checklist
SWMS	• Review SWMS against the HS811 checklist
Inductions	• Ensure contractors have completed all relevant online inductions within the www.contractorsafety.unsw.edu.au portal • **Main Service Tunnel:** ensure contractors are face-to-face inducted • **Pool Service Tunnel:** ensure contractors are face-to-face inducted • **Morven Brown Service Tunnel:** ensure contractors are face-to-face inducted • **Lift Motor rooms:** ensure contractors are face-to-face inducted • **Research labs:** ensure contractors are face-to-face inducted by lab managers • **Cryogenic facilities:** ensure contractors are face-to-face inducted
Site inspections	• Establish a worksite inspection process for contractor activities – you may use the HS812 Contractor site safety checklist

Asbestos removal control plans	• Assess removal control plans against requirements set out in the FMHS-AS01 asbestos management plan
Permits	Issue any of the following permits where required: • Permit HS821 Hot_Work_Permit • Permit HS931 Permit to Work-Excavation • Permit HS929 Coring/Cutting Permit • Permit HS932 Permit to fly drones: Contractors • Permit HS823 HV_Substation_Entry_Permit • Permit HS827 Switching Instruction Permit • Permit HS826 Request Isolation Permit • Permit HS828 HV Access Permit • Permit HS918 Asbestos Work Permit • Permit HS822 Confined_Space_Entry_Permit • Permit HS916 Working at Heights Permit

24.6. Records management – Contractor Safety Documents

UNSW Project managers are responsible for the following:

Keyword	Record type	Location
Plan	• Site plans/site plan HS 810 reviews	Project efile
Plan	• Environmental plans/ FMHS - ENVR02 - Environmental Site Inspection Checklist	Project efile
Plan	• Traffic plans/ HS930 Traffic Management Plan Checklist	Project efile
Permit	• Expired permits (scanned copies)	Project efile
Permit	• Expired permits (hard copies)	Hard folder
Lab	• Lab clearance certificates (HS700; HS704)	Project efile
Lab	• Lab induction HS630 forms	Project efile
Induction forms	• Substations, service tunnel & lifts	Facilitate
Insurances	• Insurances (WC, PL, PI)	Online contractor system
Asbestos	• Asbestos documents (records, clearance certificates, removal control plans etc)	RAMS folder: (#Ref WOR15-0012)
Hazmat	• Hazmat clearance reports (clearance certificates for lead paint removal etc)	RAMS folder: (#Ref WOR15-0012)
Design	• Safety in design documents	Project efile
SWMS	• SWMS reviews HS811 reviews	Project efile
Licenses	• Contractor licenses /competencies	www.contractorsafety.unsw.edu.au

24.7. Records - asbestos documents

All UNSW staff who supervise asbestos removals must file all contractor asbestos documents and records relating to the removal:

- **STEP 1:** Asbestos work is undertaken.
- **STEP 2:** All relevant documents collected for each job (refer to checklist at end of this document);
- **STEP 3:** Once documents have been received and work completed, documents need to be renamed under the following naming convention:
    - Document type: Building: Date
    - For example, if a removal job occurs within Biological Sciences on the 1/1/2016, then the HS918 removal permit it would have the following name assigned:
    - HS918 permit: D26: 01012016
- **STEP 4:** Log into RAMS, type in Asbestos into the equal to field. Scroll down to the EM Super Folder (#Ref WOR15-0012);
- **STEP 5**: Open the folder and select the building where the file(s) need to go.
- **STEP 6:** Drag and drop file into the folder.
- **STEP 7:** Assign yourself as the author.

24.8. Common Safety Competencies for Contractors

Use the following table to check common contractor safety competencies. Note this list is not strictly exhaustive and the AQF should be consulted where necessary.

Category	Competencies
High Risk (HR) work	• See Part 4.5 High Risk work and Schedule 3 of the WHS Reg. 2017 and below
EWP HR license	• TLILIC2005 - Licence to Operate a Boom-Type Elevating Work Platform (Boom Length 11 Metres or More)
EWP use	• RIIHAN301D - Operate Elevating Work Platform – Yellow card with Scissor lift (SL), Boom Lift (BL) and/or Vertical Lift (VL) ticket
Asbestos removal	• Class A- Remove friable asbestos
Asbestos removal	• Class B- Remove non-friable asbestos
Asbestos removal	• Supervise removal - licensed Assessor
Work around asbestos	• 10314NAT Course in Asbestos Awareness
Traffic controller	• Blue card - control traffic
Traffic controller	• Yellow card - control and develop traffic control plans
Construction work (general)	• CPCCWHS1001 Construction Safety White Card
Electrical - HV work	• Ausgrid HV training
Heights safety	• IRATA level 1 – basic rope access
Heights safety	• IRATA level 2 – rope rigging
Heights safety	• IRATA level 3 - Supervisor
Heights safety	• RIIWHS204D - Work Safely at Heights
Drone operation	• See HS831 drone permit
Self-contained breathing apparatus	• MSMWHS216 - Operate Breathing Apparatus • PUAFIR207B - Operate Breathing Apparatus Open Circuit • PUAFIR215 - Prevent Injury
Confined space entry	• RIIOHS202A - Enter and work in confined spaces
Fire fighting	• CPPFES2005A Demonstrate first attack firefighting equipment
Apply first aid	• HLTAID002 - Provide Basic Emergency Life Support • HLTAID003 – Provide First Aid
First Aid: Provide First Aid and Low Voltage Training	• UETTDRRF06B - Perform rescue from a live LV panel • HLTAID001 - Provide cardiopulmonary resuscitation
First Aid: Apply CPR	• HLTAID001 - Provide Cardiopulmonary Resuscitation • **CPR must be updated every 12 months**
First Aid: Occupational first aid (advanced) – large construction projects	• HLTAID003 - Provide first aid • HLTAID006 - Provide advanced first aid • HLTAID007 - Provide advanced resuscitation • HLTAID008 - Manage first aid services and resources
First Aid: Advanced resus first aid	• HLTAID001 - Provide Cardiopulmonary Resuscitation

	• HLTAID007 - Provide Advanced Resuscitation

25. EM Safety team

The EM Safety team are responsible for the following:

- Provide advice and guidance to UNSW Project Managers on concerns raised for any safety document reviews (*i.e. for site plans, SWMS or other documents where requested*)
- Provide Support and guidance for UNSW Project Managers in their contractor site inspection regimes
- Ensure EM Project Managers are aware of their responsibilities for contractor safety through, training, instruction and consultation.

End of document

Accountabilities	
Responsible Officer	Director: Health and Wellbeing
Contact Officer	Manager; Health and Wellbeing
Supporting Information	
Legislative Compliance	WHS Act; 2011 WHS Regulation; 2017
Parent Document (Policy and Procedure)	HS105 WHS Policy: https://www.gs.unsw.edu.au/policy/documents/ohspolicy.pdf Environmental Policy: https://www.gs.unsw.edu.au/policy/documents/environmentpolicy.pdf
Supporting Documents	NIL
Related Documents	NIL
Superseded Documents	HS801 Contractor Safety Guideline
File Number	[For Governance Use]
Definitions and Acronyms	
Insert Term	NIL
Insert Term	

Revision History				
Version	**Approved by**	**Approval date**	**Effective date**	**Sections modified**
2.0	Director: Safety and Wellbeing	8 April 2018	8 April 2018	NA
2.2	Senior Manager Health & Safety	17 May 2021	17 May 2021	Full review

Further Information This section is not published on the final PDF document. It is for website purposes only	
Keywords for search engine	Contractor, Safety
FAQs and answers	NIL