



University of Technology, Sydney

Facilities Management Unit

Specification

for

the supply and installation / refurbishment of

for the

**Room
Building
Campus**

Tender/Project No.

For use with the Minor Works Contract

THIS IS A TEMPLATE AND HAS TO BE REVIEWED TO SUIT THE PROJECT**A. PRELIMINARIES****A.1 GENERAL SCOPE OF WORKS**

Work to be done and materials to be supplied as shown on drawings and the specification on Level , Building , Campus, for the University of Technology, Sydney.

A.2 DEFINITIONS

Except where otherwise stated or the context otherwise requires the following definitions shall be deemed to apply to any document forming part of the Contract documents:

- "Proprietor". The University of Technology, Sydney.
- "Project Manager". The Project Manager shall be the Director, Facilities Management Unit of the University of Technology of Sydney, or his duly appointed representative.
- "Specification". The Specification, including Notice to Tenderers.
- "Practical Completion". As defined in the Contract.
- "Site" is the area within the Building or structure and adjacent areas that is provided to the Contractor for the execution of the works.

A.3 GOODS AND SERVICES TAX

All claims for payment including progress claims and approved variations, must be submitted on a "Tax Invoice" as specified by the Australian Taxation Office (ATO). The invoice must identify the Contractor's Australian Business Number (ABN). However if an ABN is not quoted, the University will be obliged under ATO regulations to deduct tax at the maximum personal rate from the payment and pay it to the ATO on behalf of the Contractor.

To facilitate payment, all invoices are to be addressed to:

**University of Technology Sydney
The Manager Finance and Administration
Facilities Management Unit
PO Box 123
Broadway NSW 2007**

A.4 SITE SUPERVISOR

All work forming part of the Works shall be carried out under the supervision of a competent Site Supervisor who shall be solely employed on this project for the duration of the work and based on site full time.

A.5 RESPONSIBILITY AND SUB-CONTRACTORS

The Contractor shall accept full responsibility for the satisfactory completion of the whole of the Works, for its completion within the time permitted by the contract, and the rectification of any defects during the Defects Liability Period, including work carried out by his own organization and by sub-contractors selected by him or the Proprietor.

The Contractor shall enter into an agreement in writing with every sub-contractor, setting out his requirements for commencement and conclusion of the sub-contractor's work. The Contractor shall ensure that all subcontractors are made fully aware of the Proprietor's requirements as described in the Contract documents.

A.6 OCCUPATIONAL HEALTH AND SAFETY

All works shall be carried out in a safe manner so as not to endanger the public or the University's employees. The Contractor shall comply with the requirements of the Occupational Health and Safety Act 2000, Regulation 2001 and all associated Acts or Regulations, which requires employers and contractors to ensure the health, safety and welfare of employees and the staff, students and visitors of the University. Also refer to Contract Clauses on Occupational Health and Safety.

The Contractor shall submit a site specific 'Occupational Health and Safety Management Plan' for the Project Managers acceptance within two weeks [must be before work commences on site) of the award of the contract. This plan must be kept up to date during construction. The plan shall include the following information as a minimum:

- names, positions and responsibilities for all people with OH&S responsibilities;
- the process for complying with OH&S induction and training at site;
- the process for managing and reporting any OH&S incidents including the identity of and contact details for the person or persons who will be available to prevent, prepare for respond to and recover from such incidents;
- any site safety rules and details of the arrangements for ensuring that all persons at the place of work (whether employees or visitors) are informed of the rules; and
- safe work method statements for all work activities assessed as having safety risks.

A copy of the OH&S Management Plan shall be made available at site. Further a copy of any parts of the OH&S Management Plan that are relevant to a sub-contractor are provided to the sub-contractor before they commence on Site.

The Contractor shall notify the Project Manager before using any process or material which may cause potential harm or disruption to the building or it's occupants and allow for such to be done or used out of normal working hours. This includes the likes of use of hammer drills, metal saws, solvent based coatings, dusty operations etc.

The Contractor shall ensure that materials will not be placed in locations or delivered in a manner from which other than temporary obstruction could result.

The Contractor shall ensure that all contractors and sub contractors involved in construction work at UTS carry a WorkCover Certificate / "Green Card" showing that General OH&S Induction Training and Work Activity OH&S Induction Training has been satisfactorily completed. The Contractor shall maintain on Site, records of such training.

The Contractor shall fully implement the requirements of the UTS Site Safety Handbook for Contractors. A copy of the handbook is available on the Facilities Management Unit web page http://www.fmu.uts.edu.au/policies/Downloads/Site_Safety_Handbook.pdf.

A.7 ACCESS TO SITE AND CONTRACTOR IDENTIFICATION

The Contractor shall arrange access to Site through the Project Manager.

The Contractor shall ensure that all their and sub-contractor personnel report to the UTS Security Office prior to commencing work at Site.

The Contractor will be required to provide Security with details such as University Project No., nature and location of work, expected duration of work and number of people who will be working on Site.

All Contractor and sub-contractor personnel must report to the Security Office prior to commencing work on Site. They will have to show evidence of completion of General OH&S Induction Training and Work Activity OH&S Induction Training (ie "Green Card") and complete and sign the "Contractor Permit-To-Work" book. Security will then issue the "Contractor Permit-To-Work" pass.

This pass must be kept accessible by the person at all times whilst working on an UTS Site.

A.8 QUALITY ASSURANCE (*Note: Please consult with Quality Manager on suitability of this Clause during documentation **and remove this note***)

It is desirable that the Contractor shall maintain a quality system for the Works that meets the requirements of Australian Standard AS/NZS ISO 9001:2000.

A.9 INSPECTION AND TEST PLANS (*Note: Please consult with Quality Manager on suitability of this Clause during documentation **and remove this note***)

The Contractor shall plan and document the inspections, tests and verifications to be performed by the Contractor and its Subcontractors in Inspection and Test Plan(s).

Inspection and Test Plan(s) shall be submitted to the Project Manager at least seven (7) days prior to the programmed commencement date of the work covered by each plan to allow the Project Manager to assess their suitability and to insert witness points required by the Proprietor.

Requests by the Contractor for changes to the accepted Inspection and Test Plans shall be submitted in writing to the Project Manager.

At any witness point identified as such in the Inspection and Test Plans that require the presence of the Project Manager or his representative the Contractor shall provide notice of two (2) working days in respect of each witness point to the Project Manager. Work may proceed past a witness point if the Project Manager **elects not** to attend at the mutually agreed time and place of inspection.

A.10 MATERIALS & WORKMANSHIP

All materials illustrated or specified to be included in the completed works shall be new unless specified to be reused. Unless a higher standard is laid down in this Specification, all materials and processes in this contract are to comply with the relevant specifications and codes of the Standards Association of Australia. Where no such specification or code exists, the items shall be the best grade or quality of their respective kinds.

Skilled labour only is to be employed in all trades and the highest standards of workmanship maintained.

Any material and/or workmanship which does not, in the opinion of the Project Manager, satisfy the requirements of this clause shall be removed and replaced and/or re-executed to the satisfaction of the Project Manager at no extra cost.

A.11 OBVIOUS WORK

If neither the drawings nor the specifications contain any mention of work, which in the opinion of the Project Manager is necessary for the satisfactory completion of the works, such work shall be deemed to be included in the contract and allowed for in the Contract price.

Any item of work and material shown on the drawings but not specified, or vice versa, shall also be deemed to be included in both and allowed for in the Contract price.

A.12 INSTRUCTIONS BY OTHERS

The Contractor shall not accept any instructions or requests in connection with this contract from any person or persons except the Project Manager. The Contractor shall immediately refer any such instruction or request to the Project Manager. No variations to the contract will be deemed to be sanctioned by parties other than the Project Manager.

A.13 VARIATIONS

All Variations to the Contract shall be issued in accordance with the Conditions of Agreement, Section 10, and the requirements listed below:

- variations shall be quoted for in writing and acceptance given before carrying out the work.
- The quotation, is to be submitted as soon as possible if no date stated.
- Where the quotation is for work in lieu, both additional and omitted work shall be priced and the overhead and profit % applied to the balance.
- Should the matter of the quotation add to or subtract from the contract time, the days lost or won, are to be stated.
- Where applicable, copies of Sub-contractor's quotations are to accompany the quotation.
- The valuation of a variation shall be that the % to be used for overhead and for profit shall be jointly 15%.

A.14 EXISTING SERVICES

Existing services, as far as they are known, are shown on the drawings. Locations are diagrammatic only and intended as a guide. Their identity on the drawing does not relieve the Contractor of the responsibility to further investigate the existence of such services and make all proper allowance for their effect on the Works.

Disconnect, divert or temporarily stop off all live lines as required and as approved by the Project Manager. Reconnect when work has been completed.

Notify all Services or Supply Authorities before commencing work on or in the vicinity of a service, if required to do so by the regulations of the Authority.

Existing services which are to remain in the completed Works shall be protected from damage.

A.15 TOOLS, PLANT, SCAFFOLDING

The Contractor shall provide all tools, plant and scaffolding necessary for the proper execution of the work, complying with all relevant regulations, and allow use of scaffolding that may be in position to all sub-contractors engaged upon the work.

A.16 USE OF LIFT

The Contractor shall be entitled to use one (1) of the lifts in the building for transporting clean and dry materials to or from the various floors. The Contractor is to ensure that the lift is protected against damage to the satisfaction of the Project Manager and shall make good any damage that may arise from his use of the lift.

If the Contractor fails to maintain the lift in good working condition at all times, the Proprietor reserves the right to immediately effect necessary repairs and deduct such costs incurred from moneys due to the contractor.

The Contractor's right is not for the exclusive use of the lift by the Contractor but it is the right to share the use of the lift with others. In the event of any dispute between the Contractor and others over the use of the lift the Project Manager shall be the sole arbiter of the dispute.

A key for independent operation of the lift is available at the security office within the building for daily use by the Contractor. Acceptance of the key constitutes the Contractor's taking full responsibility for the key and replacement of the key and all cylinders if lost. Current cost of the system replacement is approximately \$2,000.

A.17 DOOR KEYS

Door keys will be issued on a daily basis from the building's security office. On acceptance the Contractor assumes full responsibilities for the key and the replacement of the key and all controlled cylinders if the keys are not returned.

A.18 STORAGE & PARKING

Specific areas will be allocated to the Contractor for the duration of the work by the Project Manager as being areas where materials may be stored and where the contractor may at his own cost form a lockable enclosure. Apart from short term temporary storage, all storage of materials and equipment is to be confined to within the working area of the project.

There are no on-site parking facilities. The University has introduced a Restricted Parking Area Scheme, linked to the Self Enforcing Infringement Notice Scheme operated by the NSW Police Service Infringement Processing Bureau. Drivers who park contrary to any parking signs, or who fail to observe the directions of an authorised officer (i.e. UTS Security Services Officers and their supervisors), may be issued with an Infringement Notice having the same force in law as similar notices issued by police.

A.19 GUARANTEES AND WARRANTIES

Obtain all guarantees and warranties required by the Documents set out in various sections of this Specification.

All guarantees and warranties shall be obtained in the name of the Proprietor and shall state as follows:

- a) That workmanship, materials and installation are guaranteed or warranted for the period specified and commencing at the Date of Practical Completion of the project.
- b) That upon written notice from the Proprietor, any defects which arise during that period will be made good without cost to the Proprietor.

A.20 DRAWINGS & SPECIFICATION

In carrying out the work the Contractor must necessarily be guided by existing dimensions in preference to figures on the drawings or scale readings, but before any deviations are made from the drawings the approval of the Project Manager in writing must first be obtained.

Subject to the foregoing, figured dimensions on the drawings shall have preference over scale readings, and where any discrepancy exists the matter is to be immediately brought to the Project Manager's attention in writing for determination by them, failing which the responsibility for and cost of any work entailed in re-adjustment shall rest with the Contractor.

A.21 DIMENSIONS

The contractor shall be responsible for taking all dimensions from the site that are necessary to complete the contract.

A.22 TEMPORARY SERVICES

The Contractor shall provide and maintain any temporary services necessary for the execution of the Works, the ongoing operational requirements of the University and in accordance with the regulations of the relevant Authorities. The Contractor must also pay for all costs and charges in connection with their installation.

Where required the Contractor is to provide a temporary water supply for the Works connected to the existing reticulation system. The provision of this connection will be at the Contractor's own cost. The Contractor shall provide and install all piping, taps, storage tanks etc. required and must remove these on completion of the Works.

The Contractor shall provide all necessary electric cabling, ducts, switchboards, power outlets, extension leads and other equipment required for temporary power supply to the Works and must remove these on completion of the Works. All necessary temporary lighting for the Works must also be provided.

Power for construction works may be taken from local distribution boards. The contractor shall establish his power needs and ascertain available spare capacity on the existing electrical Distribution Boards, in conjunction with the Project Manager. Distribution Boards are not to be shut down without the prior written approval of the Project Manager. Following approval, the Contractor shall provide and install all additional circuit breakers, cabling, sub-distribution boards etc. Cable routes shall be approved by the Project Manager prior to installation. All work on the Distribution Boards etc shall be done as a permanent installation. Workmanship of an untidy nature will not be accepted.

On completion remove any temporary service and restore all services and surfaces to original condition.

The Contractor will not be charged for the usage of water and electricity.

A.23 WORKER'S AMENITIES

Contractor to provide all worker's amenities and buildings as required by any statute, regulation or regulatory authority.

A.24 TOILETS

The Contractor may use toilet facilities if these are already available in the building. The location of these facilities will be agreed to with the Contractor by the Project Manager on site. Contractor will be responsible for assisting in maintaining the toilets designated in a clean and tidy state.

A.25 TELEPHONE

The Contractor shall arrange for the provision at his own cost of a telephone service to the site office of his supervisor, shall pay charges in connection therewith, including calls, and arrange for its removal on completion, allow for all costs in the tender sum. Connection of all temporary telephones shall be arranged through the University's Information Technology Division.

A.26 PUBLICITY

The Contractor shall not disclose any information concerning the project for distribution through any communications media without the Proprietor's prior written approval. The Contractor shall refer to the Proprietor any enquiries from any media concerning the project.

A.27 LIMITS OF WORKING AREA

The Contractor shall confine all activities in connection with this contract, including temporary structures, storage, workshops, sheds, toilet accommodation, etc., to the area defined by the Project Manager.

A.28 PROTECTION OF PROPERTY

The Contractor shall be responsible for protecting all materials and work executed from damage by the elements, the public and sub-contractors and shall make good at his own expense any damage to the exterior or interior of the existing buildings and all other buildings, roads, kerbs, gutters, gratings, drains, fencing, signs, gateways, and any other property, whether owned by the University or others, that may be caused by any operation in carrying out this contract. All such property shall be left in a state of repair equal to that when commenced.

Temporary doors shall be erected and padlocked to maintain security of the Works and of the building.

A.29 PROTECTION OF WORK

The Contractor shall be responsible for the safety and protection of every part of the works through out the contract, including the structure and finishing of the existing building, and including the work of all sub-contractors, from all damage arising from weather, carelessness of workmen, or from any other causes arising from the carrying out of this contract.

All sills, arises, fittings, and any other work liable to damage shall be protected to the satisfaction of the Project Manager, and any work (new or existing) damaged from any cause shall be removed and replaced or made good at no extra cost.

A.30 PROTECTION OF EQUIPMENT

Areas worked in by the Contractor shall be adequately screened off to prevent dust spreading to other user occupied areas.

The Contractor shall provide protection of office equipment (including computers) from the effects of dust and grime caused by Contractor's work and notify the Project Manager in advance of impending dust protection work.

A.31 CLEANING UP

Remove all debris, surplus materials and plant accommodation progressively from site and maintain the site in a reasonably neat and tidy condition to the satisfaction of the Project Manager.

Remove all stains, clean surfaces, ease and adjust all doors, locks and moving parts, test all services and fittings, check and oil hinges etc., tab and hand over all keys and leave the whole ready for full and immediate occupation.

On completion completely clean the site and all parts of the building affected by the works.

A.32 WASTE REMOVAL BY UNIVERSITY

The University will supply, install and remove from site all skip bins used on their premises. The bins shall only be used for general building type wastes and no other materials. The University will pay all costs associated with the supply, installation and removal of these skip bins. The Contractor is responsible for contacting Building Services on telephone number 9514 7476 to establish the location of the nearest skip bin or to arrange the placement of a skip bin on site if applicable.

Contractors shall ensure that:

- All demolition and waste removed from the specific site of the Works within the University's premises shall be transported in a safe and clean manner to the designated skip bin locations.
- NO HAZARDOUS WASTES shall be placed in the skip bins, that is no materials containing asbestos, PCBs, paints etc.
- No putrefiable rubbish shall be placed in the bins.
- All waste materials shall be placed neatly within the skip bins provided.
- Materials shall be placed in the skip bin in a manner that maximises the storage volume of the bins. Bulky materials shall be broken down or stripped apart prior to placing in the bins.
- Bins shall not be filled above the level indicated on the bin.
- Clean up all dust and spills in the area of the bin.
- When a new bin is required, phone Building Services on 9514 7476. A minimum of 24 hours notice shall be given prior to the delivery of a bin to site. The University will not be responsible for delays in work programs due to the lack of notice provided.
- Bins shall only be delivered in the early morning, Monday to Friday.

A.33 DISPOSAL OF CONTAMINANTS

The Contractor shall properly dispose of solid, liquid and gaseous contaminants in accordance with all statutory requirements in particular the Environmental Protection Authority's requirements. The Contractor shall dispose of all such contaminants at its own cost.

A.34 TIMES OF WORKING

The accepted working hours at the site is to be between the hours of 7:30 am and 6:00 p.m., Monday to Friday, Public Holidays excepted.

If the Contractor wishes to work outside these hours, he must first seek and obtain the approval of the Project Manager.

All noisy, disruptive or noxious work is to be carried out before 9:00 am or after hours and to be agreed upon with the Project Manager prior to the work being executed.

A.35 NON-SMOKING AREA

The Contractor shall abide by the University Policy which specifies that no smoking will be allowed in any of the buildings/vehicles of the University.

A.36 ASBESTOS, PCB ETC.

It is the Contractor's responsibility to make allowances in his pricing and programming for the discovery, removal and/or treatment of asbestos and like materials. The discovery and treatment of asbestos and like materials will not be grounds for any variation claimed under the Contract.

The Contractor will be deemed to have allowed for the possibility of this eventuality in his price unless specifically agreed to the contrary in writing by the Project Manager.

A.37 OCCUPIED PREMISES

The University and persons authorized by the University will continue in possession and occupancy of the parts of the building not affected by the work.

The Contractor is to restrict his activities to the area specified or agreed with the Project Manager and to secure any such area by the use of approved temporary screens.

Secure and maintain safe access by approved means to occupied premises for authorized persons and prevent unauthorised access.

Carry out all work of this contract in a manner so as to cause the minimum of inconvenience to and in no way endanger the safety of the Public or the University's employees and students.

The contractor's area as approved shall be enclosed by a physical barrier and the contractor shall restrict activities to that area except for the transporting of materials.

A.38 DISRUPTION OF SERVICES

Prior to the shut down of any services or work being carried out on a service which will or may result in any inconvenience to a user of that service, approval must be obtained from the Project Manager.

Application for approval must be made a minimum of one working day prior to the work being undertaken or as otherwise specified.

A.39 SHOP DRAWINGS

Shop Drawings mean complete Drawings showing details of fabrication, assembly, installation and fixing of specific items or components, and shall include necessary explanatory notes and specifications.

When preparing Shop Drawings, the Contractor shall perform the following:

- A. Include provision in construction program for the production and distribution of shop drawings.
- B. Refer discrepancies discovered in the Contract Documents to the Project Manager for direction.
- C. Verify relevant dimensions. Dimension Drawings so that the items or components fit accurately into required positions.
- D. Ensure that Shop Drawings conform with the requirements of the contract.
- E. All drawings shall be of consistent standard size and presentation.
- F. Submit two initial copies to the Project Manager for examination. If amendments are required, one copy will be marked and returned to the Contractor for amendments to the original Shop Drawings. (This process may be repeated until the Project Manager considers that the Shop Drawings are satisfactory).
- G. When the Shop Drawings are satisfactory, one copy will be stamped by the Project Manager. Supply two additional copies of the satisfactory Shop Drawings to the Project Manager.
- H. Acceptance of Shop Drawings shall imply only that the Contractors interpretations of the relevant requirements of the Contract are generally correct, but shall in no way relieve the Contractor of his obligations under the Contract to construct and complete the Works correctly and accurately.
- I. Do not order, manufacture, assemble or supply any item or component needed according to requirements of Shop Drawings until the Project Manager returns the applicable stamped drawings or otherwise orders manufacture to proceed.

A.40 JOINING-UP/MAKING GOOD

Carry out the joining of new work to existing work and any consequent cutting away in manner appropriate to the materials and adjacent structure and make good to existing work.
Make good damage caused by removal of fixing devices and restore to match existing.

A.41 ISOLATION OF EXISTING SERVICES

Where there is a particular requirement to isolate an existing service, prior notification (24 hours) shall be given to the Project Manager and any relevant authorities, of the intended shut down date and its duration. In particular:

Fire Detection System and EWIS:

Where detector circuits are required to be isolated to prevent false alarms in areas where work is being carried, out and where new systems connect to existing systems, notify the Project Manager, UTS Building Services and UTS Security.

Sprinklers:

Where the existing sprinkler system is required to be decommissioned to cut into existing pipework or to rectify leaks etc, notify the Project Manager, UTS Building Services, UTS Security and the Fire Brigade.

Security:

Where existing security systems are to be disconnected notify the Project Manager and UTS Security. Shut down of services shall also not proceed unless written approval is received from the Project Manager. It is the Contractor's responsibility to ensure that no security systems remain isolated over night, when security is not present. The Contractor shall pay all costs associated with any requirement to maintain a security presence, where deemed necessary by the Project Manager to adequately protect the building.

A.42 ATTENDANCE BY FIRE BRIGADE

The existing buildings may have operational fire protection systems, which may include sprinkler and smoke and thermal detectors. The Contractor shall ensure that the detector system is isolated prior to performing any operation that produces smoke, heat or fumes likely to activate the system. If, during the course of the Works, the automatic alarm is triggered, the Fire Brigade will attend the Building. Should any triggering be caused by the Contractor or any of his Sub Contractors, the Contractor will be required to bear the cost of any charges levied by the Fire Brigade.

A.43 FIRE PROTECTION

The Contractor shall provide such fire protection as is necessary during the course of building construction to adequately safeguard the Works and personnel on the site of the Works.

A. 44 HOT WORK

The Contractor shall comply with "Guidelines for Controlling 'Hot Work' on Project Construction Sites at UTS". Compliance with these Guidelines do not discharge the Contractor from their ongoing obligations to undertake all work with due care and in a safe and workmanlike manner and to protect the University's property. "Hot Work" is an operation involving open flame operations, abrasive grinding, and cutting, welding, thermal or oxygen cutting or heating and other heat-producing or spark-producing operations.

A copy of the Guidelines are available on the UTS, Facilities Management Unit web page at <http://www.fmu.uts.edu.au/policies/Downloads/HotWorkGuidelines.pdf> or can also be obtained from the Project Manager.

The Contractor shall notify the Project Manager and obtain a Hot Work Permit before commencing any hot work on UTS Sites.

The Contractor shall complete the relevant boxes on the Hot Work Permit form and forward the form to the Project Manager for approval. The Project Manager will grant approval and forward a copy to UTS Security and to the Contractor. UTS Security will arrange for fire detector isolation if required.

The Contractor shall collect the Hot Work Permit from UTS Security and will be responsible for the final inspection of the hot work location to ensure the site is safe, before commencement **and after completion of the hot work.**

The Contractor shall return the Hot Work Permit to UTS Security at completion of the work with the completed signed declaration that the location is safe for normal operations to resume.

A.45 AS BUILT DRAWINGS

The Contractor shall provide an 'as built' record of all new or altered electrical, plumbing and drainage lines, all mechanical work, fire services, inspection covers etc and, if requested, any other concealed new services. The record is to be drawn to scale, dimensioned and provided preferably immediately after installation but not later than 21 days after practical completion. Failure to provide as above will be considered to be incomplete work and payment may be withheld accordingly.

As built records required by this specification, shall be provided in accordance with the requirements of the University of Technology, Sydney - Facilities Management Unit CAD DRAWING STANDARDS, (P-ST01).

A copy of these Standards are available on the Facilities Management Unit web page <http://www.fmu.uts.edu.au/policies/>

A.46 PROCEDURES FOR ELECTRICAL WORK

1. A licensed electrician shall carry out all work. Evidence of trade licenses shall be submitted to the Project Manager for verification.
2. Prior to working on a circuit **always test the circuit to ensure that it is not live.**
3. No work is permitted on any live installation.
4. No circuit shall be isolated without the permission of the Project Manager.
5. Isolation of any circuit shall be done using an isolation tag at the circuit breaker, no matter how short a period of time is involved. The tag shall state the name of the person undertaking the isolation and the date the tag was placed. It is not permitted to remove someone else's isolation tag. Notify the Project Manager immediately if there are any existing untagged isolated breakers.
6. The electrical schedule in each Distribution Board where work is occurring shall be copied prior to the commencement of any electrical work and a copy given to the Project Manager.
7. Where no circuit legend is available in a Distribution Board notify the Project Manager. The contractor shall test for circuit connectivity and label the circuit schedule for those circuits worked on. Testing of circuits by switching off circuits is not permitted due to the possibility that teaching classes may be in progress or computers/servers, laboratory equipment etc. may be in operation.
8. Prior to extending or modifying any electrical circuits, Contractors shall check the electrical loading on the circuit to ensure that overloading will not occur.
9. Contractors **shall submit a Certificate of Compliance Electrical Work** (Compliance Certificate) which replaces the Notice of Electrical Work – NOEW, to the Project Manager prior to commissioning. This Compliance Certificate is required by the *Electrical (Consumer Safety) Act* and the *Electrical (Consumer Safety) Regulation 2006*. Substantial penalties apply for each occasion when a Compliance Certificate is not supplied to the consumer (or network provider if relevant). The Compliance Certificate shall be in the form prescribed by the legislation.

Supplies of Compliance Certificates can be obtained from electrical wholesalers or from the National Electrical and Communications Association (NECA).

10. The Contractor shall test all new electrical installations, modifications or repairs to an existing electrical installation etc at completion of the work, in accordance with the requirements of AS 3000, Clause 6.3.
11. Where, as part of the works, emergency lighting and exit signs have been installed or layouts modified, the Contractor shall demonstrate to the Project Manager or his representative exactly how the electrical circuits have been arranged or modified. Further the Contractor shall arrange for the Project Manager or his representative to witness the acceptance testing of the emergency lighting and exit sign circuits.
12. Redundant cabling as part of the project shall be either totally removed or clearly tagged/labeled at both ends. No cables to be left connected at the circuit breaker.
13. Redundant cabling in any switchboard not forming part of the project shall be notified to the Project Manager.

A.47 PROCEDURES FOR HYDRAULIC / PLUMBING WORK

1. A licensed plumber or gas fitter shall carry out all work. Work on gas systems shall only be carried out by a licensed gas fitter. Evidence of trade licenses shall be submitted to the Project Manager for verification.
2. Valves shall be installed at all major branches in pipework or at every point where an existing line is extended.
3. Isolating valves shall be installed on all hot and cold water pipework runs in each local area i.e. group of fittings e.g. series of basins and at all items of equipment e.g. boiling water units, hot water units, dishwashers etc.
4. Provide clear unobstructed access, via access panels etc, to all fittings, inspection eyelets, valves etc.
5. Provide pipe identification markers with correctly orientated directional arrows at minimum of 3 m spacing for all services on both exposed runs and within ceiling spaces in accordance with AS 1345.
6. All penetrations in fire rated floors, walls etc. shall be appropriately fire sealed.
7. All new gas pipework shall be pressure tested.
8. All valves not in active service shall be fitted with end caps.
9. Contractors shall submit a Notice of Compliance to the Project Manager.

University of Technology, Sydney

HOT WORK PERMIT - Contractor

Permit No.:

Application (to be completed by Contractor)

Site (Bldg / Flr / Campus):		Date for Hot Work:
Specific Location:		
Details of Hot Work:		
Equipment to be Used:		
Fire fighting Equip to be located at Hot Work Site:		
Name of Sub Contractor performing the work: (if applicable)	(Print name & contact Mobile Phone No.)	Signature
Contractor's Responsible Person:	(Print name & contact Mobile Phone No.)	Signature

Is fire detector isolation required? (To be completed by Contractor)

Contractor to list fire systems in immediate vicinity of the Hot Work:	
<input type="checkbox"/> Smoke Detection	<input type="checkbox"/> Sprinklers <input type="checkbox"/> Hydrant <input type="checkbox"/> Hose Reel <input type="checkbox"/> Fire Extinguishers
Will the Smoke Detectors in the area be affected during the Hot Works?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Form to be faxed to UTS Project Manager for Approval	

Approval

Approval Granted:	(UTS Project Manager)	Date of Approval
Project Manager to fax approval to Security (Fax: 9514 1191) and copy to Contractor.		
UTS Security to arrange any required Fire Detector isolation and issue this Hot Work Permit to the Contractor.		

Completion (To be completed Contractor)

I have inspected the Work Site at completion of the works and declare it to be safe for normal operations to resume.	
Contractor's Responsible Person:	(Print name & contact Mobile Phone No.) Signature
Fax to UTS Security on x1191 or lodge at the Security Office: Building 1, Building 5, Building 6, Building 10 or Kuring-gai.	

UTS Security

UTS Security to arrange de-isolation of all isolated fire detectors.	
Completed:	(Name of Security Officer and Date) Signature
Fax completed form to FMU Project Manager.	

To be read in conjunction with "Guidelines for Controlling 'Hot Work' on Project Construction Sites at UTS"
<http://www.fmu.uts.edu.au/policies/Downloads/HotWorkGuidelines.pdf>