



UNIVERSITY *of*
TASMANIA

As-Installed Information and Data Manual

Infrastructure Services and Development

Version 1.3

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

This document has been produced for use and reference by all persons and parties involved in the delivery of built environment works for the University of Tasmania (University) (e.g. Contractors, Consultants, Project Managers, Facilities Managers, Works/Maintenance Officers).

All effort has been made to simplify the instructions within this manual. Feedback on its content and the assets covered is appreciated and should be directed to Infrastructure Planning and Compliance or provided to the University staff managing the works being undertaken.

Document change log

Version	Date	Revision
1.0	15/11/2017	Initial Release
1.1	10/09/2019	ArchiCAD layer translate, weblinks update
1.2	24/01/2020	Updated UTAS Staff Section
1.3	22/11/2021	Removed Building Handbook requirements, added provision methods for projects, such as folder structure use for Building Folder information and asset data spreadsheet

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Introduction

Maintaining accurate records of physical infrastructure is critical for a range of operational and legal reasons, such as enabling Form 46 maintenance, and meeting regulatory requirements and contractual commitments.

Legislative maintenance requirements for buildings are stipulated in the Form 46 Schedule of Prescribed Features and Measures issued by a Building Surveyor and in other Acts and Regulations, such as gas and electricity codes. The purpose of this manual is to ensure that the University holds sufficient information and data on its facilities and assets to meet all legal requirements and to satisfy its own policies, frameworks, guidelines and asset management procedures.

Persons performing built environment works for the University should be aware that the data and information provided will be regularly reviewed and utilised by University staff and other contracted parties such as architects, engineers, builders, plumbers, electricians and HVAC technicians. Accordingly, the quality of the work performed and the accompanying data will be a critical factor in future works.

Summary of Requirements

The University requires for all works (as applicable):

- updated as-installed models, drawings, and schematics (or new for green-field/total replacement);
- information and data for new maintainable assets
- notification of changes to existing maintainable assets, such as removal, relocation or inactive redundancy
- functional descriptions of building features, services, and systems;
- copies of certifications, permits and notices as submitted to, required by, or issued by local authorities and laws (e.g. Form 46, Form 13, Glazing Certificates, Electrical Installation, Gas Fitting Notice, TFS Acceptance. etc.);
- testing / commissioning results and reports;
- updated spatial and room information (or new for green-field);
- updated emergency management plans and evacuation guidelines, also required by local fire authority;
- emergency services documents (fire panel, booster and valve box drawings and documents);
- updated asbestos register for removed or discovered asbestos;
- updated Switchboard Schedules (new for green-field/total replacement);
- registration / deregistration of hazardous plant;
- maintenance compliance statement and reports for Form 46 stipulated maintenance during defects liability period (when applicable); and
- onsite briefing and familiarisation for operational and facilities management staff.

Record Systems

The University uses four principal systems/methods for the recording and retention of the information and data identified in the summary of requirements.

Building Information Folder

Electronic folders are maintained for each building and site. These contain electronic versions of the hard copy information found in traditional operating and maintenance manuals, such as plans, permits, commissioning records, and reports.

Asset Management Information System (AMIS)

AMIS is the University's core operational database for asset management. It contains spatially integrated data relating to all sites and buildings including:

- assets;
- space and occupancy;
- real property;
- leases;
- capital works and maintenance projects;
- work requests;
- maintenance scheduling;
- parking spaces and permits;
- asbestos register;
- emergency wardens;
- utilities; and
- audio-visual equipment.

SISfm Mapping

A component of the AMIS, SISfm mapping is a web-based plan viewing system based on AutoCAD dwg files and integrated with AMIS data.

Roles and Responsibilities

This section nominates the roles and responsibilities for creating, editing, providing and maintaining as-installed information and data.

Timely provision of all relevant as-installed information and data is a default requirement of any built environment works undertaken for the University, unless specifically excluded.

Fulfilment of the relevant nominated responsibilities must be taken into account when submitting any fee proposal or quotation to undertake University works, unless they are otherwise specified by University commissioning briefs or preliminaries.

Works without Principal Consultant or Managing Contractor

Generally, these will be works performed under a purchase order, works request, minor works or supply-and-install contracts (e.g. AS4906, AS4920) and will be directly managed by the University.

Task	Role	University Staff Managing Works	Building Surveyor	Builder	Services Contractor
Update Buildings Form 46			X		
Building Information Folder Content					X
Room Data Update		X			
Completion of Asset Forms				X	X
Asset Form Validation		X			
Base Model Update / Mark-up				X	
Model As-installed Services Update / Mark-up					X
Emergency Services Documents					X
Asset Labelling				X	X
Model As-installed Services validation		X			
Emergency Management Plan Update		X			
University Staff Familiarisation		X		X	X
Asbestos Register Update		X			
Keying and key register update		X			

Works with Principal Consultant or Managing Contractor

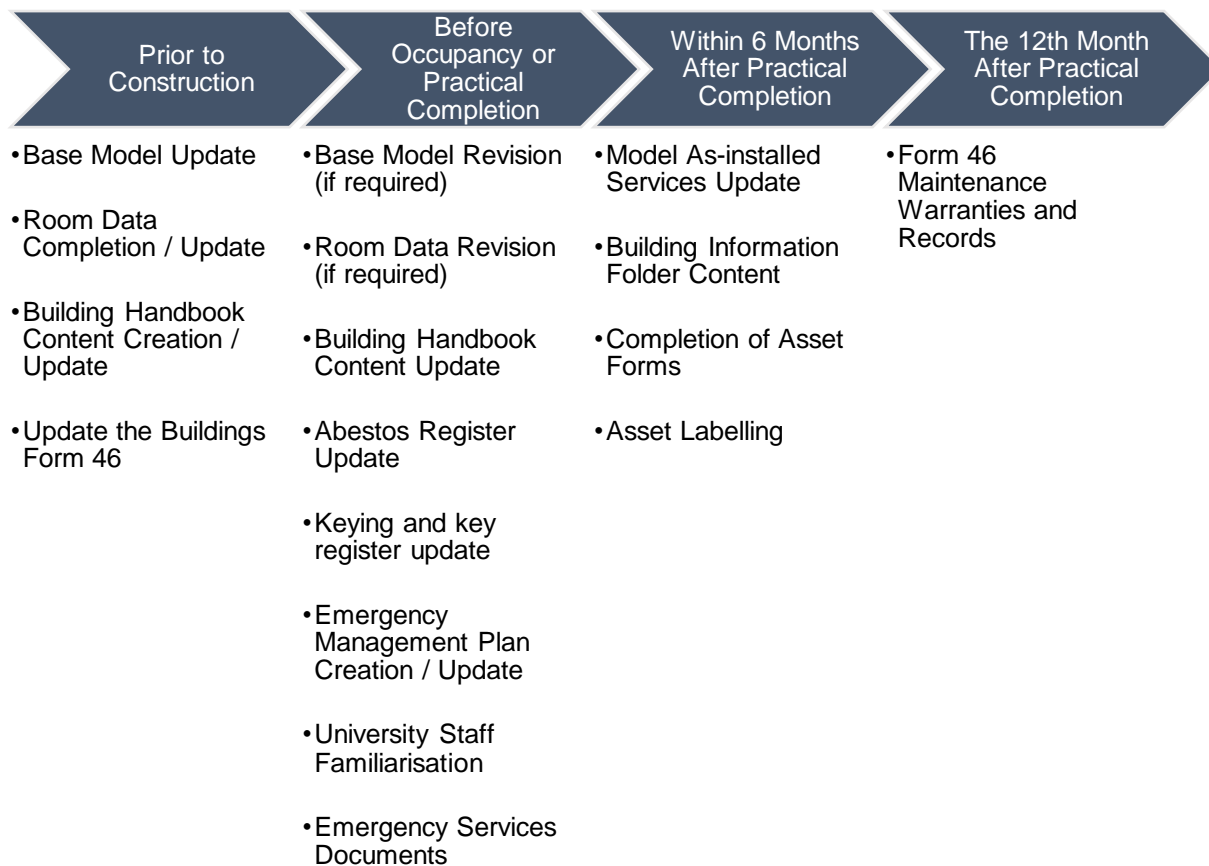
Generally, these will be works performed under Managing Contractor or Principal Consultant type contracts (e.g. AS4122, AS4000, AS4905, AS4902) with a non-University staff superintendent.

Task	Role	University Staff Managing Works	Building Surveyor	Designer Building (Architect)	Designer Services (Engineer)	Builder	Services Contractor
Update the Buildings Form 46			X				
Building Information Folder Content						X	X
Building Information Folder Content Validation					X		X
Room Data Completion / Update	X			X			
Completion of Asset Forms						X	X
Asset Form Validation				X	X		
Base Model Update				X			
Asset Labelling						X	X
Model As-installed Services Update							X
Model As-installed services validation				X	X		
Emergency Services Documents							X
Warrant Completion of Form 46 Maintenance for Works Undertaken						X	X
Emergency Management Plan Creation / Update	X						
University Staff Familiarisation	X					X	X
Asbestos Register Update	X					X	X
Keying and key register update	X						

Time Requirement

The following timeline for the supply of as-installed information and data applies to all works, irrespective of contract type.

Information and data can be provided earlier than as stipulated by the timeline but no later.



Designers

Any designer documenting works for the University (including its staff) shall incorporate the relevant requirements of this manual into their documentation. It is strongly recommended to check standard specification clauses including NATSPEC against this manual.

All as-installed information must be validated prior to submission to the University staff managing the works for correctness and quality and to ensure it meets the requirements of this manual.

Form 46 Obligations

For existing buildings, the University staff managing the works will provide the buildings Form 46 upon request.

Designers must ensure that documentation (e.g. specifications) clearly references and stipulates the Form 46 maintenance for the works proposed in their design. Form 46 maintenance must be undertaken by the contractor/s during the defects liability period (DLP). The requirements must include provision of, at minimum, annual warranty statements from the contractors for the defects liability period addressed to the University to warrant that the maintenance has been undertaken as required by the Form 46.

In addition to the Form 46 maintenance completion warranties, contractors must provide copies of maintenance test results and maintenance activity logs covering all required and recommended activities (i.e. any maintenance not contained within the Form 46). This information is required to enable the University to create maintenance plans for any maintenance activities required beyond the minimal Form 46 requirements.

All Form 46 maintenance completion warranties, maintenance test results and maintenance activity logs are to be forwarded to the University staff member managing the works, who will forward the documents to the University's maintenance section.

Fulfilling Form 46 and other maintenance requirements (excluding DLP defect/warranty responsibility) can be novated to University maintenance contractors if agreed by the University staff managing the works.

Any novation arrangement must include a project cost credit and be made at least three months prior to award of practical completion of the works.

A sample copy of a Form 46 is included for information towards the end of this manual.

General Instructions

This section provides details of data and information requirements, including further definition of roles and responsibilities. Following this section are trade specific sections that cover additional requirements.

Building Information Folder

The University maintains a centralised suite of electronic folders containing information pertaining to its buildings and sites. Consultants, contractors and University staff engaged in works to buildings are required to provide and update, or create the content for these electronic folders.

For minor refurbishment or replacement projects all updates to information is to be provided to the Project Manager (University staff managing the works) for incorporation into the existing Building Information Folders.

To obtain copies of the Building Information Folder content for review or updating, simply request it from the University staff managing the works.

For new major or complex projects the consultants, contractors are required to create the Building Information Folders and populate relevant ones. A template folder structure is available as a zip from this website <https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants> under the Forms and Templates Section named Template Building Information Folders

If Aconex Field and Handover or similar, is being used for a project, the folder structure will be setup for population and submission when complete.

Manufacturer Operational Manuals

Manufacturer manuals detailing specific maintenance requirements or operation information for installed equipment are to be provided with as-installed information and in electronic format. The University will determine whether to include each manual in the Building Information Folder.

Certifications and Permits

Copies of all permits, approvals, and legally required certifications relating to the works and installations that are supplied by or submitted to authorising bodies (such as building surveyors, local/State government, utilities providers/regulators, fire service, etc.) shall be provided to the University staff managing the works and placed in the Building Information Folder.

Warranty Certificates / Cards

All warranty certificates or cards are to be retained by the installer. All information required to enable successful claim of warranty (i.e. serial number, installation date, e.g.) must be provided to the University on the appropriate maintainable asset form. If the asset form does not contain enough information for this notify the University staff managing the works.

Keying & Key Register

For any new, updated or modified master key systems, a ProMaster Key Manager file must be provided by the locksmith and emailed to the University staff member managing the works.

University Staff Familiarisation

To ensure that buildings are properly maintained and operated, University facilities maintenance staff and in some cases, building occupants, must be familiarised with building and services infrastructure. Familiarisation is to be achieved by means of a site survey/briefing, during which relevant contractors (including construction, mechanical, electrical, fire and hydraulics) guide University staff through the works that have been undertaken.

The survey/briefing should include:

- recommended and required maintenance;
- system and plant operation, including control points (valves, thermostats, buttons, isolation points, etc.);
- any known issues; and
- any potential problems.

Familiarisation should be provided as soon as practicable for each trade either when sufficient works have been completed to allow for a thorough briefing, or – should the works program prevent this - immediately prior to practical completion or occupation.

For some trades it may be desirable to provide the familiarisation, or a preliminary one, before fit off/out, e.g. hydraulic, electrical.

Asbestos Register Update

Any discovery, removal or treatment/sealing-up of asbestos must be reported to the University staff managing the works so that relevant information can be recorded on the University's asbestos register.

Where material strongly suspected of being asbestos is tested and found not to be asbestos, this information should also be reported for recording purposes, to prevent future misidentification.

To fulfill these requirements an Asbestos Treatment and Removal Permit Application and Advice Form must be completed and is available from this website: <https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

The University's asbestos register can be viewed at: <https://amis.utas.edu.au/AsbestosRegister/>

Additionally the ISD Connect app, available from Apple App Store or Google Play Store can be used to view the asbestos register, including images. Information can be added / edit also such as new photos, test results, or the like.

Asset Labelling

All University assets must be physically labelled with an identifier and with a University asset number sticker. The exception to this requirement are assets identified on the asset form as a 'one per site' or 'one per building' asset.

Unless otherwise designated by the University, the identifier is to be the same as the identifier used by the installer of the asset. In the case of assets for which the University has a designated identification system (e.g. switchboards) the identifier will be provided by the University staff member managing the works and determined prior to undertaking the works.

In addition to being affixed to the asset on a label, the identifier must also be used on any as-installed material related to the asset, such as drawings, schematics and head-end system graphics (e.g. Honeywell EBI, Gallagher, GSIM).

Asset numbers will be generated by the University within 14 days of receipt an asset form. A barcode sticker bearing the asset number will be created and must be placed on the asset in an appropriate location.

Asset number stickers will be provided by the University staff managing the works.

Asset Data (Completion of Asset Forms)

The University has a significant register of its maintainable assets. It is critical that any changes to the maintainable asset base are captured.

Contractors/consultants performing works are required to record any changes to existing assets and/or details of newly-installed assets on a University Asset Form. Asset Forms must be completed fully and accurately before being returned to the University staff member managing the works.

If the University's commissioning brief or request for tender/quotation does not include a listing of existing assets in the area of works, request a copy from the University staff managing the works.

Details of the information required are provided on the Asset Forms themselves, or alternatively a spreadsheet template can be used for larger projects/works when submitting multiple new assets for recording.

The Maintainable Asset Forms document and spreadsheet template are located at:
<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Complete the asset change form, as required for demolition, disposal, relocation, storage or inactivation of assets.

Room Data

Current and accurate space data is critical to the University's facilities management and business intelligence functions. Where works involve creation of new spaces or reconfiguration of existing spaces, it is critical that:

- numbering or renumbering of spaces/rooms is carried out in consultation with, and approved by, the University Space Planning Officer prior to the commencement of works: and
- a base as-installed model is provided to the Space Planning Officer prior to occupancy so that room data can be validated, created or modified.

Details of the information required are provided in the Room Data Specifications section of this document.

For Projects all documents related to room data to be placed in the projects Building Information Folder under Project Data\Space Room Data.

As-Built/As-Installed Model

At present the University utilises 2D models for mapping and facilities management purposes. Contractors/consultants are encouraged to provide electronic copies of additional drawings such as 3D models, sections, elevations, schematics, details, etc. for reference purpose, but these are not mandatory unless otherwise specified.

The base unit for all University .dwg models is metres:

1 unit/measurement = 1 metre;
0.01 unit/measurement = 100mm;
0.001 unit/measurement = 1mm.

For all buildings and structures, the University utilises a 2D floor/site plan and 2D reflected ceiling plan as its Base Model with additional services represented in 2D on a number of layers.

The site model shall only be updated by a surveyor to accurately locate the asset or works (to GDA 94) for new structures, underground assets such as electrical cables, gas, sewer, domestic cold water, fire main, stormwater pipework and above-ground assets such as fire hydrants, substations, aerial electricity reticulation and poles. For underground assets, the depth of the services must also be noted on the drawing. Typical or specific cross sections for underground services should also be provided but are not mandatory.

For assets and works located externally (not within or on top of a building) the sites model shall be used and updated. Where an asset is closely connected to the building (e.g. ground or wall mounted AC outdoor units) it shall be shown on both the site model and building model.

For works in existing buildings or on existing sites, the University will provide a 2D AutoCAD .dwg format model, which must be updated to as-installed status. The only exception to this is very minor, single-trade works, for which a marked-up drawing or sketch will be sufficient. The marked-up drawing or sketch must show the same level of detail required for an electronic drawing. It must be provided to the University staff managing the works so that the 2D AutoCAD dwg model can be updated (in house).

Hard and soft copies of models and drawings can be obtained from the University staff member managing the works.

For new buildings or sites, a model must be created in accordance with the requirements of this section.

It should be noted that not all existing models/drawings provided by the University will comply with the dimensions, accuracy and other standards specified in this document. This is because these models predate the establishment of these specifications, were created prior to the introduction of the metric system and/or were produced in soft copy by scanning tracings of original imperial-measurement drawings. If the model provided by the University is dimensionally inaccurate or does not adhere to the requirements of this sections, consultants/contractors are requested to notify the University staff managing the works. In such cases, the existing model must be corrected, or a new model provided, that provides an equivalent or greater level of detail and complies with the requirements of this section.

A template AutoCAD .dwg format model with the required layers and styles to be used for all models can be found on this website: <https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>. A list of the layers in the model and their defined use is further specified in this manual.

No scaling, rotation, text, dimensioning, line scale, settings and styles, or layer modifications are to be made to a model provided by the University, unless the model provided does not conform to the current model template.

If the provided drawing / model contains existing symbols or polyline shapes in lieu of blocks these must be used.

For the Base Model, all entities are to have their colour and line type properties set to BYLAYER prior to being added to the model. For services parts of the model, entities must be simply on the correct layer.

Should the source elements be of a different scale to the model, undertake all line type, dimension, and text scaling required to suit the model scale, ensuring readability.

The University's model viewing system is not compatible with blocks or hatching. Hatching is preferred to be left in the model on the appropriate layer. All blocks must be either replaced with polyline entities / shapes or exploded. Care should be taken to retain block attribute values.

When updating or creating a model/drawing, consultants/contractors may only add or alter the layers relevant to their specific discipline or scope of work. If an updated / current model's floor or reflected ceiling plan (the Base Model) is thought to be inaccurate or incorrect revision cloud the identified area or elements and leave a note, or correct and revision cloud the area or elements.

When updates to a model have been completed, the amended electronic copy is to be saved under the original file name with the addition of:

- the word "UPDATED" for an updated base model; and
- the words "UPDATED SERVICES" where services layers (e.g. hydraulic, mechanical, electrical) have been updated.

The file must then be emailed to the relevant consultant or University staff member managing the works.

Consultants using ARCHICAD are to convert .pln files to .dwg format prior to returning them to the University staff member. To save a drawing in this format:

- select 'SAVE AS' from the file drop down menu
- From the Translator drop down list select Special Built-in Translator
- From the save as type drop down list select DWG File .dwg

The University does engage surveying and drafting service providers for its own model / drafting work. If you wish to engage these same providers experienced with University requirements and models, ask the University staff managing the works for their details.

Model Layers

Layer Name	Layer Use / Description
Base Model	
RM\$TXT	Room numbers
A_AED	Automated external defibrillator locations
A_BASEPLAN	Adjacent land titles/building outline
A_CEILING	Reflected ceiling plan. Including ceiling height & type tags
A_COLUMN	Columns
A_DOOR	All doors incl fire/smoke doors
A_DOWNPIPE	Down pipes from gutter to stormwater pipework connection
A_FENCE	For external fences only
A_FIRESEPERATION	Polylines depicting fire and smoke separation
A_FIXEDEQUIPMENT	Fixed equipment
A_FLOOR	Floor finishes, changes in level and floor finish
A_FURNITURE	Loose furniture. Include dividers and workstation partitions, electrical appliances
A_GRID	Reference Grid for the building
A_JOINERY	Fixed joinery
A_LIFT	Lift car. Lift walls included on walls layer
A_PARTITION	Fixed partitions
A_RAMP	Include relevant handrails. Include gradient
A_ROOF	Roof, eaves, gutter, lines
A_SANITARYFIXTURES	Sinks, basins, toilets, etc
A_STAIR	Include relevant handrails. Include direction arrow
A_TEXT	Dimensions, text and grid
A_WALL	Finished wall outline. Includes hatches and shading devices
A_WALLTYPE	Wall type tags and legend (if in CAD already)
A_WINDOW	Outline of windows as per standard drawing
A_WINDOWTYPE	Window type tags and legend (if in CAD already)
C_BRIDGE	Incl walkways, overpasses
C_CONTOUR	Contour lines including level numbers
C_LEVELS	All spot levels
C_PATHS	Includes external steps/stairs/handrails/ramps/arrow direction/tactile stuff/gradients
C_ROADFEATURES	Bollards, parking stops, gates, voucher machines
C_ROADMARKINGS	Painting and markers on the road
C_ROADS	Includes kerb, gutters, crossings, speed humps
C_TITLEBOUNDARIES	Includes easements, boundary line, relevant text
L_EXTERNALFIXTURES	Bins, drinking fountains, way finding signage, help points, fixed seating
L_GENERAL	Level changes, retaining walls, garden beds, swales

L_IRRIGATION	
L_NOTES	
L_VEGETATION	Identify trees, treated as an asset
L_WATERFEATURES&BODIES	
Electrical	
E_CABLEPATH	Dedicated electrical services trays, conduits, pits etc
E_DATA	Data outlets complete with numbers as per ITS requirements. Backbone cabling
E_EXIT	Exit and Emergency Light Fittings including circuit numbers and fitting number corresponding to the log book
E_FIBREOPTIC	Fibre Optic cabling
E_FIBREOPTIC-NONUTAS	Fibre Optic doesn't belong to the University ie NBN or TasNetworks
E_GENERATOR	Electrical generation assets such as, diesel generator, photovoltaic generator
E_HIGHVOLTAGE	High voltage electrical distribution such as mains cables
E_LEGEND	Blocks or symbols for use
E_LIGHT	Lighting, switches, sensors, circuit numbers and type reference as per lighting schedule
E_LIGHTSWITCHING	Spline, lines, arcs, etc indicating switching of each light
E_LOWVOLTAGE	Low voltage electrical distribution such as mains cables
E_POWER	General purpose outlets and hardwired appliance wiring points with circuit numbers
E_SUBSTATION	Substation outlines, or if in a building the switchgear, transformer, etc outlines.
E_SWB_DELINEATION	Delineation polyline for switchboard area served and indication arrows with switchboard labels
E_SWITCHBOARDS	Distribution switchboards with labels
E_TELECOMMUNICATIONS	Copper telephony cable (generally redundant)
Fire	
F_DCIE	Fire indicator and control panels including sub panels
F_DETECTORS	Fire detectors
F_DETECTORS_CABLING	Fire detector cabling
F_DETECTORS_CONCEALED	Concealed fire detectors
F_EWIS	EWIS system, speakers and WIPs (includes sounders)
F_EWIS_WIRING	EWIS system wiring
F_EXTINGUISHERS	Portable firefighting equipment such as extinguishers and blankets
F_GASEOUS	Gaseous suppression system pipework, cylinders, notes
F_HOSEREEL	Fire hose reels
F_HYDRANTS	Fire hydrants, boosters and pumps
F_LEGEND	Blocks or symbols for use and display
F_SPRINKLER	Sprinkler valve box, reticulation pipework and heads
F_SPRINKLER_CONCEALED	Concealed sprinkler heads
F_SPRINKLER_PIPE	Sprinkler Pipework

F_VESDA	VEDSA Detector pipework and samplers (including addresses)
Gas	
G_AIR	Compressed air &/or vacuum pipework, size, isolation/safety valves, regulators
G_GAS	Natural or LP gas pipework, size, isolation/safety valves, regulators, meters
G_LAB	Lab gas pipework, size, isolation/safety valves, regulators, gas type
G_MEDICAL	Medical (or simulated medical) use gas pipework, size, isolation/safety valves, regulators, gas type
Hydraulics	
H_BOILINGWATERUNIT	Boiling hot water units
H_DCWMAINS	Domestic cold supplies/outlets, pipework, isolation and control valves, meters. Noting pipework material, sizes, valve numbers/types
H_DCWMAINS-NONUTAS	
H_DHWMAINS	Domestic hot/tempered, supplies/outlets, pipework, isolation and control valves, meters. Noting pipework material, sizes, valve numbers/types
H_FIREMAINS	Dedicated fire mains pipework, control valves (if any), thrust block locations. Noting pipework material & sizes
H_HOTWATERSYSTEM	Domestic hot water system assets including tempering and thermostatic mixing valves. Noting valve numbers/types, equipment names
H_NEUTRALISING	Trade waste sewer from point of collection (e.g. sink) to where treatment tank/pit discharge joins into sewer mains. Includes pit/traps/tanks and details. Text notes and dimensions for material, size, depth, waste points (fw, shr, wc, etc)
H_SEWER	Sewer pipework, text notes and dimensions for material, size, depth, waste points (fw, shr, wc, etc)
H_SEWER-NONUTAS	
H_STORMWATER	Stormwater pipework, pits, text notes and dimensions for material, size, depth, collection pits, downpipes
H_STORMWATER-NONUTAS	
Mechanical	
M_AIR	Ductwork, Supply Air Diffusers, Return Air Grilles, Undercut Doors, etc including notes, register numbers, air quantities, internal duct dimensions. Delete centre lines from circular duct, note size with diameter symbol
M_CHW	Cooling Water Pipework and Valves, etc including notes and details
M_DRAIN	Drain pipework and tundishes or points for mechanical systems
M_FLEXDUCT	Flexible Ductwork
M_FLOORCOIL	Heating or cooling coils within floors, including notes and details
M_HATCHING	Hatches in relation to duct type or insulation
M_HTW	Heating Water Pipework and Valves, etc including notes and details
M_PLANT	For HVAC (Mechanical) Assets and Controls, including notes
M_REF	For Refrigerant Pipework and Valves, etc including notes and details

Trade Specific Instructions

This section details trade-specific as-installed data and information requirements.

Building

Consisting of the exterior and interior surfaces or claddings/finishes such as roof, carpet, walls and facades. The structural elements of the building ie columns, beams, trusses, loadbearing walls, foundations etc.

Read the General Instructions section before reading this section.

As-installed Base Model requirements

Use the template or existing model provided and its layers as per the As-Built / As-Installed Model section to create the Base Model and show for this discipline as a minimum.

- Reflected ceiling plans and heights as above finished floor level
- Fire or smoke rated walls
- Columns
- Down pipes
- Doors
- Stairs (including direction of travel)
- Set out dimensions
- Fixed Furniture
- Fixed Joinery
- Loose Furniture
- Sanitary Fixtures
- Ramps
- Partition Walls
- Windows (including opening indication)
- Roofing
- Concealed Beams / Trusses
- Reflected Ceiling plan
- Denotation of Wall, Window, Door, Floor and Ceiling Types

The newly completed or updated Base Model must be forwarded to the University to issue to services contractors for their use.

Building Information Folder Content

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Building Folder.

As-Installed Drawings

All 3D/2D models, sections, elevations and details are to be forwarded in electronic format for future reference.

Whilst not usually included in the University's models, electronic copies of all structural drawings and details (e.g. footings, beam layouts, reinforcement plans and tension cables) should also be submitted for future reference. These may be incorporated into the model if the construction drawings provided do not contain sufficient detail (e.g. concealed beams installed but not shown on drawings).

Builder's Report

Provide a single consolidated electronic document (or email) of items to note regarding the general construction of the building that would prove useful for maintenance or future works i.e. rare or unusual materials/finishes used and their installation or issues found during the construction of the building including difficult to install materials or parts.

Name the document file, or email subject if an email, with the University project or work request number, followed by Builders Report, and email to the University staff managing the works.

Glazing Certification

Provide copies of any glazing certificates for installed glazing.

Permits and Certifications

Provide electronic copies of applications to and notifications or certifications given to or by authorities regarding the building construction.

Commissioning Reports or Records

Provide electronic copies of any commissioning reports or records

Schedules

Provide electronic copies of schedules for windows, doors, walls, floors, ceilings, etc detailing sizes, types, finishes, etc.

Fire Penetration Register

Provide an electronic copy of a Fire Penetration Register to enable annual inspections to be undertaken. Penetrations of a fire rated element may be recorded as a group of penetrations rather than each individual separate one.

Add the University project or work request number to the filename of the fire penetration register provided and email to the University staff managing the work alternatively for Projects all documents related to Fire Penetrations data are to be placed in the projects Building Information Folder under Project Data\Fire Penetration Data.

Details required in the Fire Penetration Register is shown in the example below and can be used as a template:

Building	Floor	Room	Element	Description	FRL	Date Inspected
SB.AC06	L02	216	FLOOR	150x30mm data cables, 200x50mm mains, 150 dia pipe, 50 dia conduit	-/120/120	
SB.CH60	L01	110	WALL	200x200mm duct	60/60/120	
SB.CH60	L04	220	CEILING	3x25 dia pipework armoflex	120/120/120	

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Civil

The external built environment, consisting of roads, paving etc.

Read the General Instructions section before reading this section.

As-installed Base Model requirements

Use the template or existing model provided and its layers as per the As-Built / As-Installed Model section to create the Base Model and show for this discipline as a minimum.

- Contours of natural and formed surfaces (referenced to Australian Height Datum – AHD)
- Fall direction for hard surfaces
- Sumps and Agricultural drains
- Roads including kerbs
- Paving
- External fixed furniture (bins, seats)
- Paths and handrails
- Stairs (inc direction of travel)
- Set out dimensions
- Fences
- Permanent Markers (car parking, etc)
- Signage locations
- Bollards and boom gates.

The completed or updated Base Model must be forwarded to services contractors for their use.

Building Information Folder Content

Add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Civil Folder,

As-Installed Drawings

All sections, elevations and details are to be provided in electronic format for future reference.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Communications

Comprising of telecommunications, data, fibre optic and copper reticulation, audio visual systems.

Read the General Instructions section before reading this section.

Refer to University of Tasmania ITS Policies, Standards and Procedures website (link below) for further details.

<http://www.utas.edu.au/it/communication-technologies/standards>

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Data outlets complete with identification as per ITS requirements.
- Backbone data and telephony cabling.

Building Information Folder Content

Add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Comms Folder,

As-Installed Data

All Asset information details are to be provided in electronic format for future reference.

Electrical

Comprising of electrical distribution systems, artificial lighting including exit & emergency and generation plant.

Read the General Instructions section before reading this section.

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Assets as defined in this manual
- Access panels or points specifically for concealed plant and equipment
- Low voltage mains cables with noted submain cabling installation method (surface, buried direct, etc.), insulation material and size in mm².
- High voltage mains cables with noted submain cabling installation method (surface, buried direct, etc.), insulation material and size in mm².
- Exit & Emergency light fittings including circuit numbers and fitting number corresponding to the log book
- Cable trays, conduits, pits etc
- Data outlets complete with identification as per ITS requirements
- Backbone data and telephony cabling
- Light switching, sensors, circuit numbers and type reference as per lighting schedule
- General purpose outlets, hardwired appliance wiring points all with circuit numbers
- Distribution switchboard delineation lines

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Electrical Folder,

As-Installed Drawings

Provide electronic copies of final approved switchboard shop drawings, light fitting shop drawings or other detail plans when applicable.

Schematics

Provide electronic non-dimensionally constrained schematics in .dwg format prepared in accordance with AS1102 for the following.

- Building electrical distribution consisting of switchboards with sub-mains, sub-circuits, circuit identification, protection devices and their ratings/settings.

It is the strong preference of the University for schematics to be complete from point of supply to final distribution boards sub circuits as they will be referenced electronically and only have sections printed if required, i.e. a single fully connected schematic for the entire electrical distribution.

Some buildings may have existing schematics to be updated, ask the University staff managing the works for the electronic file.

Schedules

Provide the following electronic schedules:

- Distribution switchboard schedules for each distribution board. Schedules must have for each pole a sub-circuit use description (i.e. GPOs, Lighting, Autoclave, etc.) and room number(s) as a minimum. **These must be in an electronically editable format and named the same as the switchboard identifier.**

Lighting type schedule, matching types on the provided as-installed model. Manufacturer, model (including option/accessory codes and details) and supplier is to be provided for each type. Name the file Lighting Schedule, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Electrical Folder.

Functional Description

Provide detailed functional descriptions in a single electronic document for any automatic controls including control interfaces with other systems such as security and fire. Where appropriate, include wiring diagrams.

Functional descriptions should include a description of the location of sensors (or reference them on the as-installed model) and any adjustable or fixed settings like timeout's or lux levels.

Name the file Electrical FD, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Electrical Folder.

Permits and Certifications

Provide electronic copies of EWR's, new / altered connection applications and installation notifications or certifications given to or by electrical authorities including distribution network providers.

Commissioning Reports or Records

Provide electronic copies any commissioning reports or records not submitted to electrical authorities, e.g. exit and emergency light tests.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Fire

Consisting of fire protection and detection, sprinkler and gaseous suppression systems, excluding extinguishes and blankets. Fire and smoke alarm and detection systems including Early Warning and Intercommunication Systems (EWIS).

Read the General Instructions section before reading this section.

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Assets as defined in this manual
- EWIS system speakers, warden intercom phones, and sounders
- Portable firefighting equipment such as extinguishers and blankets
- Fire hose reels
- Fire hydrants, boosters and pumps
- Fire indicator and control panels, including sub panels
- Door releases, break glass alarms (including addresses)
- Fire detection and circuits including head addresses and types
- VESDA detector pipework and samplers (including addresses)
- Sprinkler valve boxes, reticulation pipework and heads

Emergency Services Documents

A4 Walkabout Drawings

A drawing with standard title block and symbols will be provided for use. When completed an electronic copy must be provided to the University.

The requirements of AS1670.1 shall be met when producing or altering A4 Walkabout Drawings for storage in indicator panels or the like.

Failure to update or provide A4 Walkabout drawings within fire indicator panels may be reported to Tasmania Fire Service and will result in the University producing the required drawings for occupancy at the contractors cost.

Sprinkler and Booster Block Diagrams

Provide electronic copies of diagrams contained within sprinkler and booster cabinets.

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Fire Folder,

Schematics

Provide electronic non-dimensionally constrained schematics in .dwg format for the following.

- Sprinkler systems

Some buildings may have existing schematics to be updated, ask the University staff managing the works for the electronic file.

Functional Descriptions

Provide a detailed functional description in a single electronic document for the fire detection and protection system including control interfaces with other systems such as security and HVAC. Where appropriate included wiring diagrams.

Functional descriptions should include a summary of integration and operation by means of Cause and Effect schedule or matrix as outlined in example below.

Alarm / Input	FDCIE I/O	Device	Location	Function
Smoke / Heat Detected	01-10	Relay	MSSB1	Shutdown signal for AHU1, 2 & 4
Sprinkler System Activated	01-10	Relay	MSSB1	Shutdown signal for AHU1, 2 & 4
Manual Call Point	01-10	Relay	MSSB1	Shutdown signal for AHU1, 2 & 4
Smoke / Heat Detected	ROMTEK	ASE	FDCIE	Alarm to Brigade
Smoke / Heat Detected	STROBE	STROBE	Outside Building	Signal strobe indicating FDCIE location and alarm active

Name the file Fire FD, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Fire Folder..

Permits and Certifications

Provide electronic copies of applications and installation notifications or certifications given to or by fire authorities.

Commissioning Reports or Records

Provide electronic copies of any commissioning reports or records not submitted to fire authorities, e.g. flow rate and sounder tests.

Hydraulic Calculations

Provide an electronic copy of hydraulic calculations including a copy of the calculation program file.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Hydraulic

Sanitary and amenity water based systems, domestic cold & hot water, sewer and stormwater including trade waste.

Read the General Instructions section before reading this section.

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Assets as defined in this manual
- All pipework including sizes and material. Where external depth must be noted
- All control / isolation valves that are not inside units or equipment including their **commissioned** settings
- Access panels or points for concealed plant and equipment
- Boiling hot water units
- Domestic hot water system assets
- Trade waste sewer from point of collection (e.g. sink) to where treatment tank/pit discharge joins into sewer mains. Includes pit/traps/tanks and details. Text notes and dimensions for material, size, depth, waste points (fw, shr, wc, etc)
- Domestic cold supplies/outlets, pipework, isolation and temperature control valves, meters, pumps and filters. Noting pipework material, sizes, valve numbers/types
- Domestic hot water supplies/outlets, pipework, isolation and temperature control valves, meters and pumps. Noting pipework material, sizes, valve numbers/types
- Dedicated fire main pipework
- Fire hose reels
- Fire hydrants, boosters and pumps
- Sewer pipework, text notes and dimensions for material, size, depth, waste points (fw, shr, wc, etc), manholes
- Stormwater pipework, pits, text notes and dimensions for material, size, depth, collection pits, downpipes

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Hydraulics Folder,

As-Installed Drawings

Provide electronic copies of shop drawings for manufactured tanks or pits for the project and any detail or valving arrangement drawings.

Schematics

If produced, non-dimensionally constrained schematics will be accepted for the following.

- Domestic water supplies isometric
- Sewer isometric

Schedules

Provide the following electronic schedules:

- Plant and equipment schedule (assets and also non-assets) detailing capacities/sizes and other useful information for a designer/contractor
- Temperature control / balancing valve schedule with commissioning settings

Functional Descriptions

Provide a detailed functional description in a single electronic document for the installation. Where appropriate, include wiring diagrams.

Functional descriptions should include a description of the location of controls (or reference them on the as-installed model) and any adjustable or fixed settings like pressure or temperature.

Name the file Hydraulic FD, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Hydraulics Folder.

Permits and Certifications

Provide electronic copies of new / altered connection applications and installation notifications or certifications given to or by water authorities.

Commissioning Reports or Records

Provide electronic copies any commissioning reports or records not submitted to water authorities, e.g. TMV, backflow prevention, tests.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Gas

Generally all plumbed gases. Natural, LPG, medical, laboratory gas supply and distribution, compressed air and vacuum reticulation and systems.

Read the General Instructions section before reading this section.

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Assets as defined in this manual
- Natural or LP gas pipework, size, isolation/safety valves, regulators, meters
- Medical (or simulated) use gas pipework, size, isolation/safety valves, regulators, denoting gas type
- Lab gas pipework, size, isolation/safety valves, regulators, denoting gas type
- Compressed air &/or vacuum pipework, size, isolation/safety valves, regulators, drains
- Where pipework is external, location and depth must be noted
- All regulating, control / isolation valves that are not inside units or equipment including their **commissioned** settings
- Alarm panels, detectors, pressure proving devices, shut off buttons and fire indicator panel
- Access panels or points for concealed plant and equipment
- Meters

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Gas Folder,

Schematics

Non-dimensionally constrained schematics must be provided for the following.

- Gas pipework and its distribution to plant and equipment with flow rates, pressure, flow direction and control valves (including isolation), safety controls and equipment ratings (MJ/hr).

Schedules

Provide the following electronic schedules:

- Plant and equipment schedule (assets and also non-assets) detailing capacities/sizes and other useful information for a designer/contractor
- Regulator schedule with commissioning settings

Functional Descriptions

Provide a detailed functional description in a single electronic document for the installation including any automatic controls and interfaces with other systems such as fire. Where appropriate, include wiring diagrams.

Functional descriptions should include a description of the location of controls (or reference them on the as-installed model) and any adjustable or fixed settings like gas pressure.

Name the file Gas FD, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Gas Folder.

Permits and Certifications

Provide electronic copies of new / altered connection applications and installation notifications or certifications given to or by gas authorities including distribution network providers.

Commissioning Reports or Records

Provide electronic copies any commissioning reports or records not submitted to gas authorities, e.g. pressure testing.

Emergency Services Documents

Gas Safety Management System

For complex installations of natural gas and LPG the University will require a gas safety management system, which is simply a collection of documentation.

To assist the University in preparing this, provide a clear plan of the general pipework route from supply point to the last termination with main isolation points shown and numbered. Provide photos of the isolation points with numbered labels to match the isolation valves on the plan.

Place a copy of this in the building fire indicator panel.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Mechanical

Made up of HVAC&R (Heating, Ventilation, Air-Conditioning and Refrigeration) systems that provide thermal comfort and ventilation to enable occupation such as electric and hydronic heating, exhaust, refrigerant based cooling/heating and mechanical ventilation. Includes built-in temperature controlled rooms such as freezer rooms, cool rooms and constant temperature rooms.

Read the General Instructions section before reading this section.

As-installed model requirements

Use the Model provided and its layers as per the As-Built / As-Installed Model section to show for this discipline:

- Assets as defined in this manual
- All air diffusers/outlets/grilles including their **commissioned** air flow rate and neck size
- All control / isolation valves that are not inside units or equipment including their **commissioned** settings
- All air dampers and type noting motorised
- All ductwork with risers, turn downs, turning vanes etc shown, noting insulation thickness, internal or external application and clear airway dimensions
- All pipework, noting insulation thickness, pipework size and material (i.e. copper, steel, poly etc).
- Filter withdrawal direction
- Access panels or points for concealed plant and equipment
- Controller locations
- Sensor locations
- Afterhours push button locations
- Test points in pipework and ductwork
- Meters
- Branch selector boxes or other VRV / VRF control devices

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the HVAC Folder,

As-Installed Drawings

Provide electronic copies of final approved shop drawings and any section or detail drawings.

Schematics

Non-dimensionally constrained schematics must be provided for the following:

- Building air balancing, showing air volumes for intake points (or noted infiltration) and exhaust / spill
- Heating water pipework and its distribution to plant and equipment with flow rates, pressure, flow direction and control valves (including isolation)
- Cooling water pipework and its distribution to plant and equipment with flow rates, pressure, flow direction and control valves (including isolation)

Schedules

Provide the following electronic schedules:

- Plant and equipment schedule (assets and non-assets) detailing capacities/sizes and other useful information for a designer/contractor
- Air grille/diffuser/outlet schedule with design flows and final commissioning flow
- Balancing valve schedule with commissioning settings

Functional Descriptions

Provide detailed functional descriptions in a single electronic document for the installation, specifically covering any automatic controls including control interfaces with other systems such as Security, HVAC and Fire. Where appropriate included wiring or air diagrams.

Functional descriptions should include a description of the location of controls (or reference them on the as-installed model) and any adjustable or fixed settings.

Name the file Mechanical FD, add the University project or work request number to the filename and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the HVAC Folder.

Permits and Certifications

Provide electronic copies of installation notifications or certifications given to or by electrical authorities including distribution network providers.

Commissioning Reports or Records

Provide electronic copies of any commissioning reports or records not submitted to electrical authorities, e.g. NATA air flow/quantity tests.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Security

Made up of Closed Circuit Television (CCTV), intruder detection, access control and duress alarming.

Read the General Instructions section before reading this section.

Drawings / maps for CCTV, access control, intruder detection and duress alarms will be provided within head end management systems as directed by the University or specified within the UTAS CCTV Specification Guidelines.

Provide a copy of Commissioning Check List

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

As-Installed Drawings

Help points, located on plans.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Vertical Transportation

Generally lifts of varying types including goods and disable access lifting platforms.

Read the General Instructions section before reading this section.

As-installed model requirements

Nil.

Building Information Folder Content

Some of the documents required may already exist electronically and be held by the University. It is recommended to request a copy from the University staff managing the works as updating them will take less time and result in consolidated records.

Unless specified otherwise add the University project or work request number to the filename of any documents provided and email to the University staff managing the work, alternatively for Projects add documents to the appropriate sub-directory under the Vertical Transportation Folder,

As-Installed Drawings

Provide electronic copies of final approved drawings.

Permits and Certifications

Provide electronic copies of hazardous plant registrations and inspection certificates.

Commissioning Reports or Records

Provide electronic copies any other commissioning reports or records not submitted to safety authorities.

Asset Forms

Complete asset forms or the Asset Data spreadsheet for all installed assets as identified and defined in the Maintainable Asset Forms document/spreadsheet located at:

<https://www.utas.edu.au/infrastructure-services-development/contractors-and-consultants>

Complete additional asset change forms, as required for demolition, disposal, relocation, storage or inactive.

If Aconex Field and Handover, or similar, is being used for a project, the spreadsheet template will be added for population and submission when complete.

Room Data

For single room data changes, contact the University's Space Planning Officer with details of the change.

For multiple room data changes, or creation, the University Staff managing the works will organise a meeting with the designer (Architect) and Space Planning Officer to review the plans and the rooms to create the data required.

The following information is required and will be determined by Space Planning Officer, to enable space data to be entered promptly into the University's facilities management systems. Current and accurate space data is needed to inform changes to contracted services and is particularly critical for spaces available for booking through the University timetabling system.

Data Definitions

For each corresponding column heading used in the Room and Teaching Space Schedules, (examples P 37 and 38) add the defined data or values as specified.

Room Number

From the .dwg model, unless documented, room numbering has been approved by the University.

Room Name

The room's name as approved by the Space Officer.

Room Category	Room Type (applicable to the Room Category)
ADMIN	Admin Office, Security Control Room, File Room, Mail Room, Resource Room, Store for Admin Purposes, Office for Technical Staff, Vacant Space, Video Conference Room, Waiting Room, Uni Maintenance Workshop
ANIMAL	Controlled Holding Area, Coolroom, Freezer, Animal Holding Room, Laboratory, Store Rm, Supporting Holding Rms
CHILDCARE	Bathroom, Childcare Room, Corridor, Kitchen, Laundry, Office, Reception, Staff Common Room, Store, Toilet, Waiting Room
COMMON	Assembly Area, Auditorium, Balcony / Sundeck, Breastfeeding Room, Cafeteria, Retail/Bank/Dr etc, Staff or Student Common Room, Conference Room, Photocopying & Printing, Common informal Bookable Display Area, Gymnasium, Kitchen Area, Lounge Area, Lobby Area, Meeting/VideoConf, Meeting Room, Outside Area, Parenting Room, Reception Area, Staff or Student Resource, Sports Recreation Area, Tearoom
PERSON	Bathroom inc Shower, Bed Room, Carpark Area, Dining Room, Hall, Kitchen, Laundry, Lounge Room, Residential Unit, Study Area, Separate Toilet
RESEARCH	Clinical Area, Computer Laboratory, Darkroom, Glass House, Instrument Room, Interview Room, Observation Room, P/G Student Lab (Dry), P/G Student Lab (Wet), Preparation Room, Research Lab. (Dry), Research Lab. (Wet), Research Staff Office, Resource Room, Specialised Room, Store, Hot or Cold Work Area, Workshop, Xray Machine Room
SERV	Air Lock, Bathroom, Change Room, Corridor, Delivery Bay, Universal Access, Electrical Substation, Entrance, Female Bathroom, Female Change Room, Fire Hose Cupboard, Female Shower, Female Toilet, Service informal Bookable Display Area, Hot Water Service, Laundry Room, Lobby, Locker Room, Male Bathroom, Male Change Room, Medical (First Aid) Room, Lift Motor Room, Male Shower, Male Toilet, Plant Room, Security Equipment, Computer Equipment, Shower, Vacant space, Unusable, Telecom Room, Toilet, Unisex Bathroom, Unisex Shower, Unisex Toilet, Washing Room
STORE	Cleaners Cupboard, Cool Room, Freezer, Garage, General Storage, Hazardous Goods Store, Warehouse

Room Category	Room Type (applicable to the Room Category)
TEACHING	Academic Staff Office, Biobox, Class Room, Clinical Teaching Area, Computing Laboratory, Cool Room, Dark Room, Display Room, Flexible Learning Space, Freezer, Gallery / Display Area, Gen Access & Teaching Lab, Gymnasium or Related Space, Immersive Video Conference Room, Instrument Room, Interview Room, Learning Hub - with computers, Lecture Theatre, Lecture Theatre with Video Conf, Lecture Room, Library, Museum, MusTeaching or Pract Room, Observation Room, PG Lab or studio, Preparation Room, Reading Area, Resource Room – teaching, Tutorial Room with Video Conf, Seminar Room, Special Purpose Room, Store, Student Office, Dry Studio, Wet Studio Space, Teaching Laboratory (Dry), Teaching Laboratory (Wet), Academic Office & Teachin, Training Room, Tutorial Room, Video Conference Room, Students Workshop
VERT	Atrium, Lift Space, Lightwell, Shaft, Duct, Stairs

Floor Type

Flat, Sloping or Stepped

Floor Covering

Bitumen, Carpet, Carpet Tile, Concrete, Cork, Earth, Metal, N/A, Parquetry, Paving, Sealed Timber, Sheet Vinyl, Special, Terrazzo, Timber or Tiled.

Where a room has more than one floor covering type use the one with the largest area. If roughly equal, then use the one requiring the more cleaning effort.

Bookable Space Type

Meeting, Video Conference, Teaching or Venue Hire

Occupant Capacity

The designed occupancy capacity for an occupiable/habitable space, i.e. excludes foyers, corridors, stairs, plant rooms etc.

Seating Capacity

The total number of loose & fixed seating provided.

Furniture Types (multiple per room)

Fixed Seating, Lecturer's Table, Moveable Furniture, Table / Bench Seating, Tablet Arm Seats - Fixed, Tablet Arm Seats - Loose, Tablet Seating or Tablet Seating – Moveable.

AV Amenities (multiple per room)
AMX Controller
AV Controller / (projector input control)
AV Controller / Touch Panel (full control inc lights) (AMX)
AV Controller / Touch Panel (projector control) (AMX)
Amplifier
Audio Cassette
Audio Mixer
Audio Recording Output
Auxiliary Audio / Video & Data
Computer - House
Computer - Pods
Computers - Multiple
DVD Capability
Digital Sound Processor
Document Camera
E-Media Recording (MyMedia)
Fax
Flat Panel Display
Hand Held Microphone
Hearing Loop

Lapel Microphone
Lectern Microphone
Lighting Dimmers
Multimedia Projection
Multimedia Projector (with builtin speakers)
Network Connection
Over Head Projector
Projection Screen (fixed)
Projection Screen (interactive)
Projection Screen (mobile)
Projection Screen (motorised)
Scaler
Slide Projector
Speakers
TV Monitor
Telephone
Video Cassette Recorder
Video Conference Equipment
Video Display Unit (LCD screen)
Video Display Unit (Plasma screen)
Video Distribution Amplifier (including Interfaces)
Video Switcher
Whiteboard (electronic)
Whiteboard (interactive)
Whiteboard / Writable Surface
Wireless Connection

Room Schedule

The Room Schedule must be completed for all new or altered rooms.

Project No. / WR No.				Est. Handover Date		/ /	
Site					Building		
Room No.	Room Name	Room Category	Room Type	Floor Type	Floor Covering	Bookable Space Type	Occupant Capacity

Teaching Space Schedule

In addition to the Room Schedule, this schedule is to be completed to provide additional information specific to teaching spaces.

Furniture Type and/or AV Amenity must be listed for all applicable rooms, with each room listed as many times as required for the amenities it as per the example.

Room No.	Furniture Types	AV Amenities

Example:

Room No.	Furniture Types	AV Amenities
234	Fixed Seating	Whiteboard / Writable Surface
234	Lecturer's Table	Over Head Projector
234		Hearing Loop
234		Lapel Microphone
236	Moveable Furniture	Whiteboard / Writable Surface
237	Tablet Seating - Moveable	Computers - Multiple

Form 46 Sample

To clearly evidence the requirement for information and the type of information a blank Form 46 for reference is below.

SCHEDULE OF MAINTENANCE – PRESCRIBED ESSENTIAL BUILDING SERVICES		Section 206 Regulation 72
For: <input style="width: 95%;" type="text"/>	<i>Building description</i>	Form 46
<input style="width: 95%;" type="text"/>	<i>Address</i>	
<input style="width: 45%;" type="text"/> <input style="width: 45%;" type="text"/>	<i>Suburb/postcode</i>	
Building Surveyor details:		
Building Surveyor: <input style="width: 95%;" type="text"/>	Category: <input style="width: 20%;" type="text" value="BS"/> <input style="width: 20%;" type="text" value="BSL"/>	
Address: <input style="width: 95%;" type="text"/>	Phone No: <input style="width: 40%;" type="text"/>	
	Fax No: <input style="width: 40%;" type="text"/>	
Licence No: <input style="width: 20%;" type="text"/>	Email address: <input style="width: 80%;" type="text"/>	
This Schedule is in relation to Building Surveyor Project No: <input style="width: 80%;" type="text"/>		
This Schedule is in relation to Building Permit No: <input style="width: 20%;" type="text"/> issued on: <input style="width: 20%;" type="text"/> Date: <input style="width: 20%;" type="text"/>		
Or Certificate of Likely Compliance No: <input style="width: 20%;" type="text"/>		
This Schedule is in relation to Occupancy Permit No: <input style="width: 20%;" type="text"/> issued on: <input style="width: 20%;" type="text"/> Date: <input style="width: 20%;" type="text"/>		

PART 1 Details of essential building services:

Regulation 72 of the *Building Regulations 2016* requires that the following **essential building services** are to be maintained. (*Delete those not applicable and list the specific features or measures where provided for*)

"NCC" refers to National Construction Code provisions in Volume One (building features or measures) or Volume Three (plumbing features).

Table 1.1 BUILDING FIRE INTEGRITY		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Building elements <i>required</i> to satisfy prescribed <i>fire-resistance levels</i>	Section C, D1.12	As prescribed in AS 1851 - 2012.
Materials and assemblies <i>required</i> to have <i>fire hazard properties</i>	C1.10	As prescribed in AS 1851 - 2012.
Elements <i>required</i> to be <i>non-combustible</i> , provide fire protection, compartmentation or separation	C2.5 to C2.14, C3.3, C3.11, D1.7, D1.8, E1.3, G3.4	As prescribed in AS 1851 - 2012.
Wall-wetting sprinklers (including doors and windows <i>required</i> in conjunction with wall-wetting sprinklers)	C3.4, C3.8, C3.11, D1.7, D1.8, G3.8	As prescribed in AS 1851 - 2012.
Fire doors (including sliding fire doors and their associated warning systems) and associated <i>self-closing, automatic closing</i> and <i>latching mechanisms</i>	C2.12, C2.13, C3.4 to C3.8, C3.10, C3.11, D1.7, D1.8, D1.12	As prescribed in AS 1851 - 2012.
Fire windows (including windows that are <i>automatic</i> or permanently fixed in the closed position)	C3.4, C3.8, C3.11, D1.7 to D1.8	As prescribed in AS 1851 - 2012.
Fire shutters	C3.4, C3.5, D1.7, D1.8	As prescribed in AS 1851 - 2012.
Solid core doors and associated <i>self-closing, automatic closing</i> and <i>latching mechanisms</i>	C3.11	As prescribed in AS 1851 - 2012.

Table 1.1 BUILDING FIRE INTEGRITY		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Fire-protection at service penetrations through elements required to be fire-resisting with respect to integrity or insulation, or to have a resistance to the incipient spread of fire	C3.12, C3.13, C3.15	As prescribed in AS 1851 - 2012.
Fire protection associated with construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation	C3.16	As prescribed in AS 1851 - 2012.
Smoke doors and associated self-closing, automatic closing and latching mechanisms	Specification C2.5, D2.6	As prescribed in AS 1851 - 2012.
Proscenium walls (including proscenium curtains)	H1.3	Annual inspection for damage, deterioration or unauthorised alteration.

Table 1.2 MEANS OF EGRESS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Paths of travel to exits	D1.6	Inspection every 3 months to ensure there are no obstructions and no alterations.
Discharge from exits (including paths of travel from open spaces to the public roads to which they are connected)	D1.7, D1.9 to D1.11, D2.12, G4.3, G4.6, G4.7	Inspection every 3 months to ensure there are no obstructions and no alterations.
Exits (including fire-isolated stairways and ramps, non-fire isolated stairways and ramps, stair treads, balustrades and handrails associated with exits, and fire-isolated passageways)	D2.2, D2.3, D2.8 to D2.11, D2.13, D2.16, D2.17	Inspection every 3 months to ensure there are no obstructions and no alterations.
Smoke lobbies to fire-isolated exits	D1.7, D2.6	Annual inspection for damage, deterioration, or unauthorised alteration.
Open access ramps or balconies for fire-isolated exits	D2.19 to D2.23	Annual inspection for damage, deterioration, or unauthorised alteration.
Doors (other than fire or smoke doors) in a required exit, forming part of a required exit or in a path of travel to a required exit, and associated self-closing, automatic closing and latching mechanisms	D1.6, D2.19 to D2.21, D2.23	Inspection every 3 months to ensure doors are intact, operational and fitted with conforming hardware.

Table 1.3 SIGNS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Exit signs (including direction signs)	Specification D1.12, E4.5, E4.6, E4.8	Every 6 months to AS/NZS 2293.2:1995.
Signs warning against the use of lifts in the event of fire	E3.3	Annual Inspection to ensure the warning sign is in place and legible.
Warning signs on sliding fire doors and doors to non-required stairways, ramps and escalators	C3.6, Specification D1.12	Annual inspection to ensure the warning sign is in place and legible.
Signs, intercommunication systems, or alarm systems on doors of fire-isolated exits stating that re-entry to a storey is available	D2.22	Annual inspection to ensure the warning sign is in place and legible.

Table 1.3 SIGNS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Signs alerting persons that the operation of doors must not be impaired	D2.23	Annual inspection to ensure the warning sign is in place and legible.
Signs <i>required</i> on doors, in <i>alpine areas</i> , alerting people that they open inwards	G4.3	Annual inspection to ensure the warning sign is in place and legible.
Fire order notices <i>required</i> in <i>alpine areas</i>	G4.9	Annual inspection to ensure the warning sign is in place and legible.

Table 1.4 LIGHTING		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Emergency lighting	E4.2, E4.4	Every 6 months to AS/NZS 2293.2 -1995.
Artificial lighting <i>required</i> to assist occupant movement and egress	F4.4, H1.7	Inspection every 3 months.

Table 1.5 FIRE FIGHTING SERVICES AND EQUIPMENT		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Fire hydrant system (including on-site pump set and fire-service booster connection)	E1.3	As prescribed in AS 1851 - 2012.
Fire hose reel system	E1.4	As prescribed in AS 1851 - 2012.
Sprinkler system	E1.5, G3.8, H1.2	As prescribed in AS 1851 - 2012.
Sprinkler system designed in accordance with AS 2118 as a residential or domestic system	E1.5	As prescribed in AS 1851 - 2012.
Fire control centres (or rooms)	E1.8	Annual inspection to ensure compliance of construction and contents with NCC.
Provisions for special hazards	E1.10	As prescribed in AS 1851 - 2012.
Portable fire extinguishers	E1.6	Every 6 months as prescribed in AS 1851 - 2012.
Fire blankets	-	Every 6 months as prescribed in AS 1851 - 2012.

Table 1.6 AIR HANDLING SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Smoke hazard management systems: - <ul style="list-style-type: none"> • <i>Automatic</i> air pressurisation systems for fire-isolated exits • Zone smoke control system • <i>Automatic</i> smoke exhaust system • <i>Automatic smoke and heat vents</i> • Air handling systems that do not form part of smoke hazard management system and which may unduly contribute to the spread of smoke 	E2.2	As prescribed in AS 1851 - 2012.
		As prescribed in AS 1851 - 2012.
		As prescribed in AS 1851 - 2012.
		As prescribed in AS 1851 - 2012.
		As prescribed in AS 1851 - 2012.

Table 1.6 AIR HANDLING SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
<ul style="list-style-type: none"> Miscellaneous air-handling systems covered by Sections 5 and 11 of AS/NZS 1668.1 serving more than one fire compartment Other air-handling systems 		As prescribed in AS 1851 - 2012.
Carpark mechanical ventilation system	F4.11	As prescribed in AS 1851 - 2012.
Atrium smoke control system	Specification G3.8	As prescribed in AS 1851 - 2012.

Table 1.7 AUTOMATIC FIRE DETECTION AND ALARM SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Smoke and heat alarm system	Clause 3 of Specification E2.2a	As prescribed in AS 1851 - 2012.
Smoke and heat detection system	Clause 4 of Specification E2.2a	As prescribed in AS 1851 - 2012.
Atrium fire detection and alarm systems	Clause 4 of Specification G3.8	As prescribed in AS 1851 - 2012.

Table 1.8 OCCUPANT WARNING SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Sound system and intercom system for emergency purposes	E4.9 Clause 5 of Specification G3.8	As prescribed in AS 1851 - 2012.
Building occupant warning system	Clause 8 of Specification E1.5, Clause 6 of Specification E2.2a	As prescribed in AS 1851 - 2012.

Table 1.9 LIFTS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Stretcher facilities in lifts	E3.2	Annual inspection to ensure compliance of facilities with NCC.
Emergency lifts	E3.4	Periodic inspection as per manufacturer's specification, however no less than annual inspection.
Passenger lift fire service controls	E3.7	Periodic inspection as per manufacturer's specification, however no less than annual inspection.

Table 1.10 STANDBY POWER SUPPLY SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Standby power supply system	E3.4, Clause 6 of Specification G3.8	Testing every 6 months to ensure auxiliary power is operable.

Table 1.11 NATURAL OR MECHANICAL VENTILATION		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Natural or mechanical ventilation	F2.7, F4.5, F4.11, F4.12 AS 1668.2	As prescribed in the "Guidelines for the Control of Legionella in Regulated Systems" issued by the Director of Public Health under the <i>Public Health Act 1997</i> on 23 April 2012.

Table 1.12 ACCESS FOR PERSONS WITH A DISABILITY		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
For access for a person with a disability.	Relevant parts of Volume One of the NCC	Inspection every 3 months to ensure no changes and continuing compliance.

Table 1.13 HOT WATER, WARM WATER AND COOLING WATER SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Hot water, warm water and cooling water systems in buildings other than a system only serving a single <i>sole-occupancy unit</i> in a Class 2 or 3 building or Class 4 part	F2.7, F4.5, F4.11, F4.12 AS 1668.2	As prescribed in the "Guidelines for the Control of Legionella in Regulated Systems" issued by the Director of Public Health under the <i>Public Health Act 1997</i> on 23 April 2012.

Table 1.14 ENERGY EFFICIENCY		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
For the energy efficiency of the building.	Not less than the standard when built.	Annual inspection to ensure no changes and continuing compliance.

Table 1.15 WATER EFFICIENCY		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
For the water efficiency of the building.	Not less than the standard when built.	Annual inspection to ensure no changes and continuing compliance.

Table 1.16 THE SAFETY OF OCCUPANTS OF PREMISES IN CASE OF BUSHFIRE, FLOOD, LANDSLIP OR COASTAL INUNDATION		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
In a bushfire-prone area, for the safety of occupants (includes firefighting water supply and access road).	G 5.2 Not less than the standard when built.	Annual inspection to ensure no changes and continuing compliance.

Table 1.17 BUILDING CLEARANCE AND FIRE APPLIANCE ACCESS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Open space around large isolated buildings	C2.3, C2.4	Annual inspection to ensure that unobstructed access to buildings and firefighting facilities are maintained.
Vehicular access around large isolated buildings	C2.3, C2.4	Annual inspect to ensure clearances are maintained

Table 1.18 BUILDING USE AND APPLICATION		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Classification and use of building	A3.2 to A3.4	Annual inspection to ensure that building is being used and occupied in accordance with its classification.
Occupancy hazard	E1.5, E1.6, E1.10	Annual inspection to ensure that hazards do not exceed approved levels.

Table 1.19 EMERGENCY EVACUATION PROCEDURES		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Emergency control organisation and procedures	AS 3745-2002 and AS 4083-1997 for Class 9a and 9c buildings	As provided in the relevant Standards.

Table 1.20 ON-SITE WASTEWATER MANAGEMENT SYSTEMS		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC (Volume Three) provisions for determining standard of performance	
On-site wastewater management systems	F1.2; <i>or</i> The Certificate of Accreditation issued by the Director of Building Control.	As prescribed in the relevant Certificate of Accreditation issued by the Director of Building Control; <i>and</i> As prescribed in the Plumbing Permit issued by the relevant Permit Authority.

Table 1.21 TESTABLE BACKFLOW PREVENTION DEVICES		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC (Volume Three) provisions for determining standard of performance	
Testable Backflow Prevention Devices	B1.2	As prescribed in AS 2845.3 - 2010

Table 1.22 THERMOSTATIC MIXING VALVES AND TEMPERING VALVES		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC (Volume Three) provisions for determining standard of performance	
Thermostatic mixing valves and tempering valves installed in early childhood centres, primary and secondary schools, hospitals and nursing homes, or similar facilities for people with disabilities, young people, elderly people or sick people	B2.2	Thermostatic mixing valves, annually; Tempering valves, as prescribed in AS 4032.3 - 2004.

Table 1.23 ON-SITE LIQUID TRADE WASTE PRE-TREATMENT EQUIPMENT		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC (Volume Three) provisions for determining standard of performance	
On-site liquid trade waste pre-treatment equipment	F2.2 <i>and</i> The TasWater Guidelines	As prescribed by the relevant Permit Authority; <i>or</i> As prescribed in the Trade Waste consent from the Network Utility Operator.

Table 1.24 OTHER PLUMBING INSTALLATIONS, FEATURES OR MEASURES		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC (Volume Three) provisions for determining standard of performance	
A swimming pool discharge management system	-	As determined by the relevant Permit Authority.
A private drinking water supply for a Class 1b building or Class 2 to 9 building	B1.2	As determined by the relevant Permit Authority.

A pump station, whether domestic or commercial, a wet well or pump-out toilet	C1.2	As determined by the relevant Permit Authority.
Plumbing work that involves a performance solution or alternative solution	-	As determined by the relevant Permit Authority.
A unique plumbing product	-	As determined by the relevant Permit Authority.

Table 1.25 OTHER SAFETY FEATURES		Frequency of testing or inspection specified by the Director of Building Control:
Feature	NCC provisions for determining standard of performance	
Glazed assemblies	B1.4, F1.13	Annual inspection to ensure no changes and that replacement complies with standard of performance.
Balconies	Part B1	Annual inspection to ensure that deterioration of the balcony has not occurred.
Balustrades and barriers	Part B1, D2.16	Annual inspection to ensure that balustrades and barriers are in place and check for damage and deterioration.
Swimming pool safety fencing	G1.1	Annual inspection to ensure that barriers, safety fencing and gates are in place and check for damage and deterioration.
Refrigerated chambers, strong rooms and vaults	G1.2	Inspection every 3 months to ensure safety devices are in place and operable.
Bushfire protection measures	G5.2	Annual inspection to ensure continuing compliance.

PART 2		
	<ul style="list-style-type: none"> • Performance Solutions, or • Other features or measures specified by the building surveyor as an <i>essential building service</i>: 	
Feature or Measure <i>(List specific features)</i>	Provisions for determining standard of performance	Frequency of testing or inspection specified by the Building Surveyor:

Building Surveyor: Signed: Date: Schedule No.

Explanatory Notes:

- The relevant building surveyor is to list all the prescribed essential building services of the building on this Maintenance Schedule.
- This Schedule is provided to the owner (or permit applicant) with a copy to the Permit Authority and the builder.
- The owner is to maintain the features or measures listed in the Schedule.
- The Schedule is to be attached to the Occupancy Permit issued for this building.
- For alterations or additions to the building, a building surveyor is to update and consolidate the Schedule.
- The Owner may be required to produce this schedule and provide evidence that the listed maintenance has been carried out.

Appendix 1 – University Staff Use

This appendix for the use of University staff managing works.

Building Information Folder

All staff have access to existing content for minor updates and sending to consultants and contractors. New content can be emailed to csdsys.support@utas.edu.au for filing.

A number of documents identified as belonging in Site or Building Information Folders may be required to be stored in the University's Records Management Unit's Electronic Document and Records Management System (EDRMS). Currently this is Hewlett-Packard Enterprise Records Manager (HPE RM).

To avoid duplication of records, it is advised to file these documents in HPE RM and save a reference in the Site or Building Information Folder as required. Both HRE RM folders and documents can have references created for them (right click on file/folder/send to/save reference).

Location

Building information folders are located on N:\CSD\BE Info\

Link: [N:\CSD\BE Info](#)

Folder Documents, Structure and Use

Site Information and Building Information Folders are contained within the root of the BE Info folder.

Site Information Folders have a naming convention of: !SITECODE–SITE ie SB.Site

Building Information Folders have a naming convention of: SITECODE.BUILDINGCODE–BUILDINGNAME ie SB.AP16-Engineering

Under each Site or Building Information Folder, create the following folders as required:

Root Folder Name	Description & Usage
3D MODEL	3D models
BUILDING	Files regarding the structure and fabric
CIVIL	Files regarding civil infrastructure and landscaping
COMMS	Files regarding communications infrastructure
ELECTRICAL	Files regarding the electrical services infrastructure
EVAC PLANS	Evacuation drawings and plan documents
FIRE	Files regarding the fire services infrastructure
GAS	Files regarding the gas services infrastructure
HVAC	Files regarding the mechanical (HVAC) services infrastructure
HYDRAULICS	Files regarding the hydraulic services infrastructure
PERMITS & CERTS	All obtained permits & certificates for the building and its works*
PHOTOS	Photos of the building, including services infrastructure
PROJECT DATA	Files regarding Asst Data Forms, Fire Penetration Data and Space Room Data
RATINGS	Documents for any building rating, e.g. Green Star, NABERS (environmental rating system)
REPORTS	Any reports regarding the building, pre and post construction, inc audits*
SURVEY PLANS	Copies of surveyor plans and drawings

TITLE	Title for the property *
VERT TRANS	Files regarding vertical transportation infrastructure

*Must be saved in HRPM

Folders as identified in the above table, may include subfolders within them as per the following:

- Standard BE Info Folder
 - 3D Model
 - Building
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Permits & Certs
 - Form 13
 - Form 46
 - Plans
 - Schedules
 - Specifications
 - Civil
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Plans
 - Schedules
 - Specifications
 - Comms
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Plans
 - Schedules
 - Schematics
 - Specifications
 - Electrical
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Permits & Certs
 - Plans
 - Programs
 - Schedules
 - Schematics
 - Specifications
 - SWB Schedules
 - Evac Plans
 - Fire
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - FIP Documents
 - Functional Descriptions
 - Permits & Certs
 - Plans
 - Schedules
 - Schematics
 - Specifications
- Gas
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Permits & Certs
 - Plans
 - Schedules
 - Schematics
 - Specifications
- HVAC
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Permits & Certs
 - Plans
 - Programs
 - Schedules
 - Schematics
 - Specifications
- Hydraulics
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Functional Descriptions
 - Permits & Certs
 - Plans
 - Schedules
 - Schematics
 - Specifications
- Photos
- Project Data
 - Asset Data Forms
 - Fire Penetration Data
 - Space Room Data
- Ratings
- Reports
- Survey Plans
- Titles
- Vertical Transportation
 - Commissioning
 - Data Sheets & Manufacturer Manuals
 - Permits & Certs
 - Plans
 - Schedules
 - Specifications

Permissible Root Folders	Subfolder Name	Description & Usage
PROJECT DATA	ASSET DATA FORMS	Completed Asset Data forms
	FIRE PENETRATION DATA	Fire Penetration Register
	SPACE ROOM DATA	Space Data
PERMITS & CERTS(Sub Folder in Building)	FORM 13	Subfolder for just occupancy certificates
	FORM 46	Subfolder for the current Form 46
ELECTRICAL	SWB SCHEDULES	Contains switchboard schedules. Must be word or excel files and be named as per the switchboards name
BUILDING, CIVIL, COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS, VERT TRANS	DATA SHEETS & MANUFACTURER MANUALS	Any received data sheets or manufacturer manuals for installed equipment/assets
BUILDING ELECTRICAL FIRE GAS HVAC HYDRAULICS VERT TRANS	PERMITS & CERTS	
BUILDING, CIVIL, COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS, VERT TRANS	PLANS	Old, unconsolidated (or non-model) drawings such as detail drawings, sections, elevations and design drawings
BUILDING, CIVIL, COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS, VERT TRANS	SCHEDULES	Equipment or finishes schedules
COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS	SCHEMATICS	Schematics as described in each Trade specific section
BUILDING, CIVIL, COMMS,	SPECIFICATIONS	Pre or post construction project/works specifications

ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS, VERT TRANS		
FIRE	FIP DOCUMENTS	'A4 Walkabouts'. All documents located in the FDCIE such as block diagrams, zone & head drawings.
BUILDING, CIVIL, COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS, VERT TRANS	COMMISSIONING	Certifications, tests results, reports, certificates, etc as produced and required for commissioning.
HVAC, ELECTRICAL	PROGRAMS	Copies of any programs used in programmable controllers
CIVIL, COMMS, ELECTRICAL, FIRE, GAS, HVAC, HYDRAULICS	FUNCTIONAL DESCRIPTIONS	Function descriptions of components, or the entire relevant services infrastructure including controls programming

Emergency Management Plan Creation / Update

Emergency Management Plans and Evacuation Guidelines are to be developed or revised and updated in conjunction with the Risk and Compliance Officer and generally include engagement of a preferred consultant to ensure consistency of evacuation plan material across the entire University.

It is essential that development of the Evacuation Plan is commenced 3 months prior to occupancy or minor update undertaken immediately before or after occupancy. For larger projects the Emergency Management Plan should be developed during the design phase.

Floor Plans for Tas Fire

Tas fire request copies of any changed or new floor plans for uploading into their mapping system. Email them to, FireComm FireComm@fire.tas.gov.au .

Keying and Key Register Update

All keys must be requested and issued through Shared Services via Service Now.

To enable this, request the ProMaster keying system file from the locksmith and forward to UTAS Security.

Room Data

The Space Planning Officer must be involved prior to finalising works documentation to approve room numbering when rooms are being created or changed. They must also be advised of any changes of use or incorrect information from that within SISfm.

Shared Services, Time Tabling and AMIS Familiarisation

For new buildings and works involving bookable or public spaces, a site tour must be organised to allow shared services, time tabling and AMIS to gather photos, venue information and a general understanding to assist with updating venue hire system data and plans.

Internal University Workflows / Process – ISD email contacts

Item	Details	Who To
Asbestos register updates	Complete in the app, via web or mobile, ISD Connect, contractor should do this though.	Risk and Compliance Officer Alan.mason@utas.edu.au
Keying and key register updates	Email ProMaster Key manager file either of the parties identified	Mark.campton@utas.edu.au Mark.white@utas.edu.au Campus.services@utas.edu.au
Permits & Certs documents	Store in HPRM and email link file from HPRM to AMIS	ISD system support (AMIS) csdsys.support@utas.edu.au
University Staff Familiarisation	Send outlook invitation to managers, they are to forward on as required	Maintenance Manager M.bird@utas.edu.au Engineering Services Manager Mark.white@utas.edu.au
Shared Services Time Tabling AMIS Familiarisation	Send outlook invitation to managers, they are to forward on as required	Angela McManamey Angela.mcmanamey@utas.edu.au
Room data and update	Email brief of works and plans to the Space Planning Officer. For multiple room updates or creation organise a meeting with the Architect, yourself and the Sapce Planning Officer	Space Planning Officer Ewan.lickiss@utas.edu.au
Asset Forms	Once form data is validated email to AMIS	ISD system support (AMIS) csdsys.support@utas.edu.au
Building Information Folder New Content	Email to AMIS for storage	ISD system support (AMIS) csdsys.support@utas.edu.au