**DOCUMENT CONTROL**

**REVISION LOG**

**Current issue**

UWA Specification for As Constructed Documentation - M, Version 3.0 (September 2019)

**Previous issues**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Author(s)** | **Description** | **Date completed** |
| 3.0 | Campus Management | UWA Specification for As Constructed Documentation - M | September 2019 |

**REVISION MANAGEMENT**

It is envisaged that revisions to this document will be undertaken at intervals of not more than two (2) years. This version differs from the previous version in the following areas:

|  |  |  |
| --- | --- | --- |
| **Section** | **Title** | **Description** |
| Various | General | Changes have been made throughout this document. |

**ENDORSEMENT BODY**

To be determined.

**OWNER**

Director, Campus Management

**AUTHOR(S)**

The Standards have been developed by Campus Management with the assistance of UWA staff, external consultants, contractors and colleagues from other education institutions.

**CONTACT PERSON**

Associate Director Capital Projects, Campus Management

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Table of Contents

[1 Introduction 3](#_Toc19278710)

[2 Documentation Specifications 4](#_Toc19278711)

[2.1 Documentation 4](#_Toc19278712)

[2.2 Consultants 4](#_Toc19278713)

[2.3 Submission of As Constructed Data 5](#_Toc19278714)

[2.3.1 Schedule of Submission 5](#_Toc19278715)

[2.4 As Constructed DRAWING Data TABLES 6](#_Toc19278716)

[2.5 Asset Registers 6](#_Toc19278717)

[2.5.1 Submission of Asset Register 6](#_Toc19278718)

[2.6 Drawing Register 6](#_Toc19278719)

[2.7 Drawing Requirements 7](#_Toc19278720)

[2.7.1 CAD Drawing Requirements 7](#_Toc19278721)

[2.7.2 Drawing Title Block 8](#_Toc19278722)

[2.7.3 Record Drawing Numbers 8](#_Toc19278723)

[2.7.4 Architectural Space Layers 10](#_Toc19278724)

[2.8 Manual and Specification Requirements 10](#_Toc19278725)

[2.9 Feature Surveys and Underground Services 11](#_Toc19278726)

[2.9.1 Underground Services 11](#_Toc19278727)

[3 Room Numbers 12](#_Toc19278728)

[3.1 Room Numbering policy 12](#_Toc19278729)

[3.1.1 Room Numbering for New Buildings 12](#_Toc19278730)

[3.1.2 Room Numbering for Existing Buildings 13](#_Toc19278731)

[4 Specific Requirements 15](#_Toc19278752)

[4.1 Architectural 15](#_Toc19278753)

[4.2 Mechanical 15](#_Toc19278754)

[4.3 Hydraulic 17](#_Toc19278755)

[4.4 Electrical 17](#_Toc19278756)

[4.5 Fire Systems 19](#_Toc19278757)

[4.6 Communications 19](#_Toc19278758)

[4.7 Security – Access Control 20](#_Toc19278759)

[5 Appendix A – Drawing / Manual / Specification Matrix 21](#_Toc19278760)

[6 UWA CAD Drawing Checklist 22](#_Toc19278761)

[7 References 23](#_Toc19278764)

# Introduction

The University of Western Australia (UWA) collects and stores information relating to all buildings and associated service data relevant to its operational requirements. The volume of data collected so far is extensive and in a variety of formats. The purpose of this specification is to clearly state the documentation and required format for all “As Constructed” drawings and associated data including assets, specifications, manuals and test reports. It is a requirement of the contract that all data is presented in the correct format required by the University. Refer to the Appendices later in this document for full details.

For any queries about this document please contact Campus Management at [spacemanagement-cm@uwa.edu.au](mailto:spacemanagement-cm@uwa.edu.au).

**The contents of this document takes precedence over any requirements specified in other discipline manuals.**

# Documentation Specifications

## Documentation

Documents included in the ‘UWA As Constructed Documentation’ zip file are:

* UWA Campus Management Specification for As Constructed Documentation
* Drawing Register
* Asset Register
* Decommissioned Asset Register
* Distribution Board Circuit Schedule
* Door Schedule
* Finishes Schedule
* Grille Schedule
* Light Fitting Schedule
* Paint Schedule
* Window Schedule
* Asset Register – Example
* Drawing Register – Example

## Consultants

UWA uses Internal & External specialists in the design and construction of projects. The term “Consultants” will be used within this document to mean any organisation external or within UWA who are required to supply Campus Management with “As Constructed Data” at the completion of a project.

Information may be prepared by subcontractors, but it is the responsibility of the Consultant to review and deliver all required documentation to Campus Management.

Consultants are to allow for the provision of these services within their fee agreements. Final payment of fees will not be authorised until all the necessary documentation has been received and confirmed acceptable by Campus Management. Consultants should note that checks will be made to confirm the accuracy of the supplied data and that the data conforms to UWA requirements.

## Submission of As Constructed Data

**Four weeks** prior to the Date for Practical Completion, Campus Management requires draft As Constructed documentation to be provided to the Superintendent / Lead Design Consultant / Project Manager.

**Within four weeks** of the Date of Practical Completion, Campus Management requires final As Constructed documentation to be provided to the Superintendent / Lead Design Consultant / Project Manager.

The final documentation will then be submitted to the UWA Space Team and the Maintenance Scheduling Officer for review. Any modifications that are required will be communicated to the Project Manager.

Final payment of fees and release of Bank Guarantees will not be authorised until all As Constructed data has been received and is acceptable to Campus Management.

### 2.3.1 Schedule of Submission

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Stage | Format | Purpose |
| **CONSTRUCTION DRAWINGS**   * Architectural floor plans with furniture layout | Tender | PDF | For assigning/reviewing room numbers |
| **CONSTRUCTION DRAWINGS**   * Architectural floor plans with furniture layout | End of construction documentation | AutoCAD & PDF | For updating WebSIS & Archibus |
| **AS CONSTRUCTED**   * Architectural drawings * Structural drawings * All disciplines & services * Site & feature surveys * Underground services | Within four weeks of practical completion | AutoCAD & PDF | For operational readiness |
| **MANUALS & SPECIFICATIONS**  (Includes Asset Register) | At practical completion | PDF |
| **CERTIFICATE OF OCCUPANCY, BUILDING PERMITS AND ALL REPORTS** | Minimum of one week prior to opening date or as advised by the Superintendent / Project Manager | PDF |

## As Constructed DRAWING Data TABLES

Any table of data/schedule on an As Constructed drawing should be provided in excel format. Template schedules and examples are included in the UWA As Constructed Documentation Specification.

## Asset Registers

Consultants are required to supply a completed Asset Register and Decommissioned Asset Register (UWA Asset Register/Decommissioned Asset Register excel spreadsheets) with the As Constructed Documentation for all construction and refurbishment projects. The asset register is for each asset. Even if there are multiple assets in one room of the same type, they need to be uniquely identified on each line as each of these require their individual service records maintained in the system for preventative maintenance.

### 2.5.1 Submission of Asset Register

Within four weeks of practical completion, Campus Management requires that Consultants supply, with the As Constructed Documentation, the required asset information pertaining to the project in its completed state to the Project Manager.

Final payment of fees and release of Bank Guarantees will not be authorised until the Asset Register has been received and is acceptable to Campus Management.

## Drawing Register

Consultants are required to supply the completed Drawing Register (UWA Drawing Register excel spreadsheet) to cross reference the following:

* UWA Record Drawing Number
* Drawing Name
* Consultant’s Drawing Reference
* Date of As Constructed Drawing

Any drawings supplied without a drawing register will not be accepted and will be returned for resubmission.

## Drawing Requirements

### 2.7.1 CAD Drawing Requirements

AutoCAD DWG and PDF files must be supplied for all drawings together with a drawing register and the CAD Drawing checklist for all submissions. CAD files shall be in AutoCAD (DWG) format.

Where drawings are created from a 3D BIM model, the model shall be provided in Revit format (RVT). Revit drawings shall also be converted to AutoCAD format with all layers as per UWA specifications.

* **Version:** 
  + CAD files shall be in AutoCAD 2010 or onwards
* **Scale:** 
  + Building works 1:1 – 1 drawing unit = 1 millimetre
  + Surveys 1:1 – 1 drawing unit = 1 metre
* **Setup:**
  + There shall be one AutoCAD file per completed drawing. Multiple drawing sheets shall not be contained in one AutoCAD file
  + File name to include the UWA Record Drawing Number (RDN)
  + The RDN is entered in/near the title block
  + All floor plans are to be provided with North up the page, unless floor plans are drawn to represent their on-site location angle
  + Files must be purged
  + Drawing entities shall be in model space
  + CAD systems not capable of writing DWG format files are to supply data in the CAD System’s native file format and a conversion to DXF format
  + Software routines e.g. LISP in AutoCAD is not acceptable
* **Layers:**
  + Layers must be used to clearly identify elements within the drawings with like elements on the same layer to allow subsequent segregation of required data. Drawings on a single layer are not acceptable
  + All entities within the drawing file must have the colours and line types set to BYLAYER
  + See Architectural Space Layers section
* **X-Refs:**
  + No external references. All x-refs must be bound to the drawing (AutoCAD BIND)
  + Blocks can be used to draw repetitive items
* **Fonts/Linetypes:**
  + Use fonts and line type files supplied with standard installation of AutoCAD,
  + Differing line styles are to be used to designate services; continuous lines with text notes added to designate services are an acceptable alternative
  + Consultants are to include plot configuration, character & line-style files such that drawing files can be plotted in their original format and appearance

### 2.7.2 Drawing Title Block

All drawings (DWG and PDF) are required to be clearly labelled with the following information:

* UWA Record Drawing Number (RDN) from Tender issue (see Record Drawing Numbers section)
* UWA Building Name and Project Name
* Drawing Title
* Consultant Name and Author
* Consultant Drawing Reference and Revision Number (with date of current revision)
* Drawing to be labelled As Constructed at the final issue. Refer to Figure 1 (Record Drawing Numbers section) for typical details. The revision will be AC

### 2.7.3 Record Drawing Numbers

Campus Management maintains an electronic drawing register (HPE Content Manager (TRIM)) and data is recorded against a Record Drawing Number (RDN). All drawings supplied by Consultants are to have a RDN assigned before issue to Campus Management.

A range of numbers for each discipline is to be obtained at Tender stage from Campus Management at [spacemanagement-cm@uwa.edu.au](mailto:spacemanagement-cm@uwa.edu.au). The following information is required:

* Project name
* Project number
* Project manager
* Number of drawings

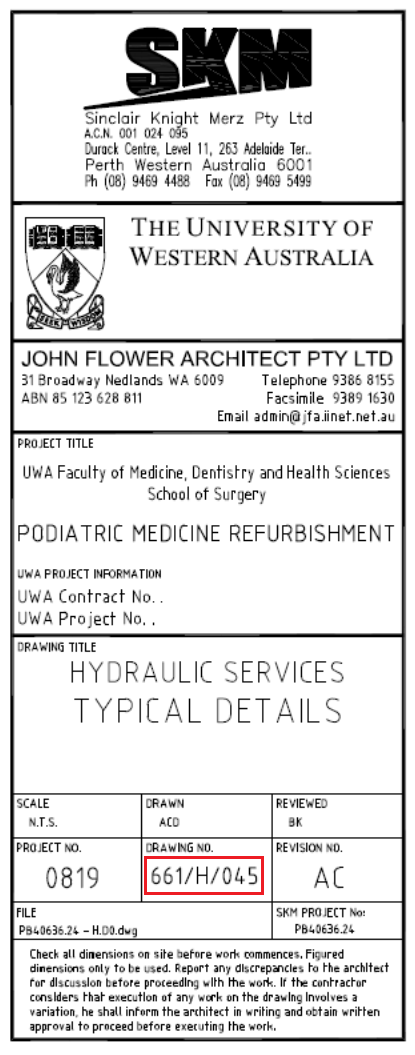
The RDN is to be attached to the drawing in an area within or adjacent to the title block in a bold font prior to issue to Campus Management.

*Drawing disciplines:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Reference** | **Discipline** |  | **Reference** | **Discipline** |
| A | Architectural |  | H | Hydraulic |
| C | Communication |  | M | Mechanical |
| D | Drainage |  | S | Structural |
| E | Electrical |  | R | Road |
| FR | Fire |  | V | Surveying |

The format of the number will be, for example, 661/H/045.

* 661 = UWA building asset number.
* H = Discipline reference.
* 045 = Drawing number allocated by Campus Management.

*Figure 1:*

### 2.7.4 Architectural Space Layers

In addition to building information, space information is recorded on UWA CAD plans. This includes room areas, GFA and UCA. Closed polylines shall be used to define these areas and shall be placed on the corresponding layer as outlined in table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Layer Name** | **Layer Colour** | **Definition** |
| Gross Floor Area (GFA) | GROS | Magenta | Measured from the inside face of the exterior walls including minor projections such as columns. This total is the sum of FECA (Fully Enclosed Covered Area) and UCA (Unenclosed Covered Area). |
| Unenclosed Covered Area (UCA) | UCA | Red | Measured between the exterior wall and balustrade, edge of paving or cover (roof or upper roof). UCA includes any trafficable covered and unenclosed areas such as verandas, balconies, under crofts, car parks and attached covered walkways. |
| Net Room Area | RM | Cyan | Measured from the inside face of a room or space excluding structural projections such as columns which cannot be useable. |
| Room Number | RM\_NUM | Cyan | Displays the room number of a room or a space. |

## Manual and Specification Requirements

Operating and Maintenance Manuals and Specifications shall be created with a view to addressing operating and maintenance requirements for all disciplines and services including architectural, structural, electrical, mechanical, hydraulic, fire, communications and essential services.

All components of the final document must be combined to **one** Adobe PDF file with a Table of Contents.

These files are to be on a CD/DVD-ROM, USB, or supplied electronically to the Project Manager. Hard copies are not required.

Each manual shall include but not be limited to the following items:

* A contents index complete with subject headings
* Details of all consultants, project managers, contractors and subcontractors
* A comprehensive system description including drawings or diagrams for clarification purposes, as required
* Operating and maintenance instructions for all plant and equipment including plant faults and failures
* Full details of commissioning, testing, and balancing reports, certificates and warranties
* Manufacturer and supplier information with the installed equipment clearly identified
* A register of all maintainable plant and fittings
* Shop drawings, schematic diagrams, wiring diagrams, design data, performance curves, control system details, flow rates, methods of control, measuring and control instruments and their locations, schedules of settings for all control and alarm devices, inputs and outputs to BAS etc.
* As Constructed drawings shall be provided in accordance with the standards specified in this document

## Feature Surveys and Underground Services

All feature surveys and underground services drawings are to be supplied in electronic format as an AutoCAD (DWG) file. As an exception to the CAD Drawing Requirements section, Feature Surveys and Underground services CAD files shall comprise of external reference files.

Where drawings were created from a 3D BIM model, the model shall be provided in Revit format (RVT). Revit drawings shall also be converted to AutoCAD format.

These files are to be on a CD/DVD-ROM, USB, or supplied electronically to the Project Manager or Manager, Project Management Office. Hard copies are not required.

### 2.9.1 Underground Services

There shall be one AutoCAD CAD file for each service type surveyed.

Campus Management is able to provide records of known services upon request.

# Room Numbers

Room number allocation requests and approvals are to be directed to the University at Tender stage. Contact Campus Management at [spacemanagement-cm@uwa.edu.au](mailto:spacemanagement-cm@uwa.edu.au).

## Room Numbering policy

Numbering shall start near the main entry of the ground floor. Room numbers shall be inserted with odd and even numbers either side of any central or major corridor starting with G01 for the ground floor, with odd numbers on the left, and even numbers on the right. If there is no obvious direction for flow of numbers from the entrance, numbers shall go in a clockwise direction. All other floor room numbers shall start in a similar position to the ground floor.

Rooms which open off a major room shall have the same number with an alphabetic suffix (example 187, 187A, 187B, 187C, etc.).

### 3.1.1 Room Numbering for New Buildings

**Floor Level Prefix**

All internal rooms, external covered areas and roof spaces shall be given their own room number when separable by walls, doors or movable walls. The first character of each room number shall represent the floor level except where there are multiple basements which would be two characters.

* Ground Floor Level e.g. G01
* Mezzanine Floor Level e.g. M01
* First Floor Level e.g. 101
* Second Floor Level e.g. 201
* Third Floor Level e.g. 301, etc.

When there is a single Basement:

* Basement Level e.g. B01

When there are multiple basement levels the closest to ground level will be B1:

* Basement Level 1 e.g. B101
* Basement Level 2 e.g. B201, etc.

When a roof space has an enclosed room it shall be given its own floor number.

* Fifth Floor Level e.g. 501

**Stairs/Lifts**

Allow 20-30 digits above the existing highest room number on any floor and start with the lowest floor level which stair/lift occurs and maintain that number through all floors. If there is a second stair/lift, it gets the next number in the sequence above the previous stair/lift.

Example:

* Highest office room number is G31, the first lift or stairs numbered would be G60
* Same stair well up all floors would be B61, G61, 161, 261, 361, etc.

**Corridors/Access Ways**

Allow 10 digits above highest stair/lift number. Corridor numbers are broken where doors occur within its length and are numbered with an alphabetical suffix (for example G22, G22A, G22B, etc.).

Separate corridor gets new number in sequence above previous.

**Service Ducts, Risers, Plant Rooms and Comms Rooms**

Allow 10-20 digits above highest corridor number. Number generally as for rooms (odds and evens either side of corridor). Number separately from any rooms. Number ducts the full height of buildings as for stairs.

Example:

Electrical Service Duct rises through multiple floors would be B90, G90, 190, 290 etc.

### 3.1.2 Room Numbering for Existing Buildings

**Where a project covers a room and no walls or doors have changed the existing room number shall remain unchanged.**

Follow existing floor level prefix for all rooms on a given floor.

Where a room is split into two by a new wall or partition the room will have the same number with an alphabetic suffix.

Example:

* Wall added to divide room 187 would become 187A and 187B.

Where a room has been expanded to encompass another room by the removal of a wall or partition the lowest existing room number shall be used, or if both rooms have an alphabetic suffix with no other related suffix the suffix shall be removed.

Example:

* Wall between 122 and 124 is removed the room number would be 122.
* Wall between 187A and 187B is removed and 187 or 187C do not exist then the room number would be 187.
* Wall between 187A and 187B is removed and 187 does exist room number would be 187A.

# Specific Requirements

The following requirements are in addition to those specified in the Manual and Specification Requirements section, broken down into the following disciplines:

* Architectural
* Mechanical
* Hydraulic
* Electrical
* Fire Systems
* Communications
* Security – Access Control

## Architectural

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

* All building floor Plans, Sections, Elevations and Details
* Any sketch sheets relevant to the project as full size or readable hard copy as appropriate
* All painting & finishes schedules as separate electronic text files. These are to be supplied irrespective of their inclusion in specification or drawing documents

## Mechanical

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

All plans with sections, details, notes, legends and schedules including but not necessarily limited to:

* Duct airway sizes including building ducts and plenums used for airflow
* Diffuser, register and egg crate grille sizes
* Air flow rates at diffusers, registers and egg crates
* Fan static pressure and air flow rate
* Pipe sizes
* Control valve KVs
* Plant make and model numbers, e.g. Fan coil units, boilers, pumps, fans
* Air and water schematic showing all flow rates
* Wiring diagrams and DDC Logic Flow Charts
* Grid lines and room numbers, where available
* Insulated and non-insulated ducting
* VAV parameters

Information not required on As Constructed drawings:

* Drawing Register
* Ducting fabrication lengths
* Working layout dimensions
* All dimensions to be placed on one layer and be turned off.

Any hatch patterns to have a line weight so as not to stand out on the layouts.

**New Buildings:** In new buildings, or where other installed systems have not been previously documented for the building:

* Electronic copy of Operations and Maintenance Manuals including Manufacturers Name and model number
* Commissioning, Balancing, Control data and Maintenance requirements
* Control function description and Logic flow diagrams

**Existing Systems:** Systems installed or upgraded in Buildings where other systems have been previously documented in an Operation and Maintenance Manual:

* Electronic copy of Equipment Manufacturers Name and model number
* Wiring Diagrams for site wiring and Equipment in –built hard wiring
* Commissioning, Balancing and Control data to update the existing Building Manual
* Preventative Maintenance Schedule

Revisions to existing drawings, where appropriate, are to show the whole system on one drawing or set of drawings.

Copies of appropriate original drawing will be supplied by Campus Management to Consultant on request.

## Hydraulic

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

Drawings to include all as constructed layouts. Design notes and Calculations are not to be displayed.

Operating and Maintenance manual is to include the following:

* Contractors and Contractors Contract Certificate
* Suppliers Names and Addresses
* Preventative Maintenance Schedule
* Certificates:
  + PLB Compliance Certificate
  + Energy Safety WA Notice of Completion
  + Fire Stopping Compliance
* As Constructed Drawings
* Maintenance Contracts
* Equipment warranty
* Equipment Operating and Maintenance Instructions
* Contractor to provide letter testifying installation has been installed as per documentation and applicable standards
* Contractor to provide contact names and numbers for equipment maintenance and operations

## Electrical

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

* Site plan
* Supply Single line, Incoming supply, Main Switch Board, sub Distribution Boards, Mechanical Services Boards, Cable Sizes and Types
* Switchboard Layouts, Equipment lists, CT Ratio’s, Metering & Protection, Fault Level current ratings, Circuit Schedules & Schematics
* Preventative Maintenance Schedule
* Floor plans showing power and data outlet locations, circuit identification. Wall and skirting duct sizes and types
* Schematic control diagrams relating to power
* Ceiling plans showing luminaries and Emergency luminaire location and types. Location of switching and control points, circuit identification
* Where digital or other control systems are installed provide equipment schedules, schematic control diagrams, location of control panels
* Operational and Maintenance information related to specific or specialized equipment e.g. UPS, Standby Generators, Power Filter and Conditioners
* Any additional information considered essential for the ongoing operation and maintenance of the installation

The following information is to be supplied as electronic files on CD/DVD or electronically:

* Test, Compliance and Commission documents
* RCD Test results
* Earth Loop Impedance test results
* Insulation Resistance test results
* Earth System test results
* Copies of Statutory Authority Notifications
* Warranty Information
* Schedule of Luminaries and Suppliers

Power and data can be shown on same floor plan, on individual layers to allow each to be shown on separate plans.

Lighting & Emergency lighting can be shown on same floor plan, on individual layers to allow each to be shown on separate plans.

Product information related to Standard Commercially available components, e.g. power outlets, switches, conduit fittings etc. are not required.

## Fire Systems

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

* Plans showing Detector, EWIS points, Manual Alarm points, Bell and Strobes, Emergency Pumps, Booster points, Hydrants, Hose reels and Portable Extinguishers.
* Detector Numbers and Zones
* Location of FIP and EWIS Panels
* Schedule of Detection Points and Zones
* Compartmentation, Fire doors, Fire Dampers and Penetrations
* Control connections to Electrical MSB, Mechanical Services Board, Access Control Panel and Auto Doors Systems
* Cause and Effect Schedule
* Supply updated copy of Zone Block Plan (Tactical Fire Plan) UWA. Campus Management will supply updated building key plan on request
* Any additional information considered essential for the ongoing operation and maintenance of the installation.

## Communications

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

* Site and building floor location plans showing the location and size of pathways and cables installed therein, cable routes, pit locations and enclosure/distributor locations
* Scale drawings shall be dimensionally accurate. (See Figure C1 of AS/NZS 3085.1)
* Schematic diagrams detailing the quantity and types of cables linking distributors. (See Figure C2 of AS/NZS 3085)
* Equipment room layouts
* Physical enclosure layouts. (See Figure C3 & C4 of AS/NZS 3085)
* Schematic diagrams detailing patch panel layout and port numbering
* Physical layout drawings detailing outlet positions and identification numbers
* Cabling infrastructure patching records
* (See appendix D and Appendix E of AS/NZS 3085)
* Equipment lists detailing (type/make/model) the installed equipment including enclosures, patch panels, outlets and the like
* Test reports detailing procedures, equipment configuration and test results for optical fibre cable
* Certificate of Compliance to AS/NZS 3080 performance as specified for the particular cabling system
* Certificate of Compliance to AS3000 regulations
* TC1A Telecommunications Compliance Advice
* 15/20 year Warranty documentation
* Contractor details

## Security – Access Control

These are to be supplied on a CD/DVD-ROM, USB, or electronically (see Drawing Register). Drawings must be in DWG + PDF formats, and RVT where applicable.

* Commissioning Sheets,
* Wiring Reports,
* Test Plans and Results,
* Technical Documents,
* Configuration details,
* Manuals and User Guides,
* Security Drawings.

The security drawing, layout or plan shall be in DWG + PDF. The PDF format shall have a security layer separating it from fire, electrical or other services.

Supply to Campus Management as part of As Constructed Project data package.

# Appendix A – Drawing / Manual / Specification Matrix

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Drawings Only** | |  | **Manuals / Specifications / Test / Other Data** | | | | | | |
|  | Format \* | |  | Format \* | | | | | | |
| *Important - The Drawing Register must be supplied with all drawings* | **CAD** | |  | **Adobe** | | | | | | |
| **Discipline** | **.dwg** | **.rvt \*\*** |  | **.pdf** | | | | | | |
| Architectural | 1 | 1 |  | 1 | | | | | | |
| Structural | 1 | 1 |  | 1 | | | | | | |
| Electrical | 1 | 1 |  | 1 | | | | | | |
| Mechanical | 1 | 1 |  | 1 | | | | | | |
| Hydraulic | 1 | 1 |  | 1 | | | | | | |
| Fire Services | 1 | 1 |  | 1 | | | | | | |
| Communications | 1 | 1 |  | 1 | | | | | | |
| Security | 1 | 1 |  | 1 | | | | | | |
| Landscape | 1 | 1 |  | 1 | | | | | | |
| Irrigation | 1 | 1 |  | 1 | | | | | | |
| Paint / Finishes | - | - |  | 1 | | | | | | |
| Test Reports / Other Data | - | - |  | 1 | | | | | | |
| \* If electronic format is unavailable then full size hard copy documents must be provided  \*\* Where applicable | | | | |  |  |  |  |  |  |

*Format and number of copies required.*

# UWA CAD Drawing Checklist

**UWA PROJECT NAME:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**UWA PROJECT NUMBER:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**UWA PROJECT MANAGER:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CONSULTANT COMPANY:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CONSULTANT CONTACT:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**[🗸] Tick box to indicate compliance**

[ ] All files are free of virus infections

[ ] All files are named with the UWA Record Drawing Number

[ ] The UWA Record Drawing Number is entered in/near the title block

[ ] There is one AutoCAD file per completed drawing

[ ] Each “As Constructed” drawing is clearly labelled as such

[ ] The current layer to all drawings is set to “0”

[ ] The drawing is in model space

[ ] All Layers are turned on

[ ] Any “x-refs” are bound to the drawing file

[ ] All entities not required have been deleted

[ ] Formatting, layers and line types conform to the UWA Specification for As Constructed Documentation

[ ] All entities are place on their correct layer

[ ] All drawings have all unused layers, line types, blocks, text styles etc. purged from the drawing(s) and all extraneous information is erased

[ ] A UWA Drawing Register spreadsheet has been completed and attached with the disc

Consultant Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# References

UWA acknowledges the following organisations and documentation:

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