0001c Design Checklist – Field Data Capture

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00 Design Principles

It is a requirement to undertake the 00 PLANNING AND DESIGN/ 0001R - DESIGN REFERENCE and GLOSSARY OF TERMS information into all aspects of design, detailing and delivery when developing the content here within. Clear demonstration of adherence to these requirements is part of the services and will be called upon at key points in the project and during at the discretion of the Department of Education (DoE).

01 General

1.01 Scope of Work

Requirement

As part of the further development of the NSW Department of Education Asset Management System (AMS), the Department requires scaled current plans and certain textual data for state schools within New South Wales.

The captured information will be utilised by the Department of Education for their graphic based AMS which incorporates Geographic Information System (GIS) technology. The Department may also use the information for other purposes.

The scope of the work is for the field data capture of the work carried out under this Contract. Field data capture for any existing buildings and site may be available from the Field Data Capture Contact Officer.

The nature of the data required is summarised below and detailed in the Tender Document headed “SPECIFICATIONS FOR FIELD DATA CAPTURE”.

The data provided by the Consultant pertaining to graphic elements will be loaded into a Digitised system by NSW Public Works Surveying & Spatial Information Services.

1.02 Field Data Capture Officer

For advice regarding data capture contact the Field Data Capture Contact Officer:

Mr Shaun Epe

CAD & Spatial Manager

Level 3 Block E 84 Crown Street,

Wollongong NSW 2500

Phone: 02 4226 8514

Email: shaun.epe1@finance.nsw.gov.au

Refer to Preliminaries - 7.4 Preferred Subcontractors Schedule for the current list of Prequalified Field Data Consultants

1.03 Description of Work

This work requires the engagement of a suitably qualified consultant to capture information on the works carried out under this contract. Consultants are required to:

- Visit the school site
- Locate certain features of the school to a specified linear accuracy and measure certain elements to a specified area accuracy
- Develop dimensioned field plans and provide field notes that can be readily interpreted
- Obtain textual data

Required graphic data includes school property boundaries, building outlines, floor plans and certain site details.

Textual data must be subsequently loaded into the supplied DoCDET format by the Consultant to allow its importation to a Department of Finance and Services database. This data includes details on building fabric, building function, details on fume extraction, dust extraction, evaporative coolers and the like.

A full list of the above data elements and their required format is provided in the Tender Document “SPECIFICATIONS FOR FIELD DATA CAPTURE”.

The Consultant shall carry out the work in accordance with the Tender Document “SPECIFICATIONS FOR FIELD DATA CAPTURE”.

1.04 Deliverables

The Consultant shall provide the following deliverables:

- Site Detail Information
- Field notes and diagrams of all required graphic elements
- Site photographs
- DoCDET files containing all required textual elements
- Signed Quality Assurance (QA) documents for the textual data produced from DoCDET
- Completed QA checklists and Consultant Reports signed by the registered surveyor supervising the fieldwork.
- Certification by the registered surveyor and the Principal of the Consultancy of:
    - Department of Finance and Services hardcopy output produced from the Consultant's data
    - Dimension tables of buildings and rooms
- All source documents supplied as part of the information package

1.05 Principal Supplied Material

In addition to these Tender Documents, the Principal will supply the following material in information packages, on request by the Contractor (give 3 weeks notice):

- Plots of existing data capture information
- DoCDET containing existing textual information

1.06 Access

The Consultant must arrange suitable times for field data capture with School Principal. Access to schools during school holidays and examination periods may not be available.

1.07 Completion

All data must be returned to The Person with Full Authority/Superintendent's Representative or his/her nominated officer within four (4) weeks of commencement of the separable portion for this work.

Data captured by the Consultant will be processed by the Principal and returned to the Consultant for certification within two weeks of receipt of the data.

Data capture will be deemed to be complete upon receipt of written certification by the Consultant that the BIM/CAD output is a true representation of the field data captured.

02 Document Specifications

2.01 General

This is an asset capture project. The intention is to record attribute information. Site features, that are a closed shape (polygon) have a display TAG in them. Small site features are shown as a point symbol.

Building features, that are a closed shape (polygon) have a unique polygon number. These polygon numbers are added to a portable Microsoft Access Database (DocDET.mdb). Small building features are shown as a point symbol.

This specification sets out the process of asset data capture related to TAFE Colleges and school facilities. The specification includes the data elements to be captured, the accuracy to be achieved and the format of the data to be submitted.

All data must be returned to The Project Manager, of the Schools Field Data Capture Project within four (4) weeks of commencement of the field data capture for each site.

A Registered Surveyor is to supervise all fieldwork and sign the compliance statements that the Consultant has met the accuracy requirements of the specifications prior to data being submitted to The Principal.

Plots in the form of a site plan, a plan of each floor of each building with dimension tables and a printout of the attribute data will be returned to the Consultant for verification. Each separate printed page must be signed by the Consultant as certification that they are an accurate and complete representation of the data captured.

2.02 Data provided by NSW Public Works

- PDF plans (A3) of existing buildings and rooms.
- DXF files.
- Access Database (DocDET) containing existing building data and room listing.

All textual data must be returned in the DocDET file. This file contains all the available choices and rules for the various types of facilities.

2.03 When to Capture

Site features are captured when they are changed or added or deleted.

Rooms are captured when they are new rooms or the area of the room is changed. Rooms in a shared building that have an institution user change, are captured. This way the new user information is passed to the client.

Rooms are captured when the new works are completed.

03 Field Notes Returned

3.01 Site Features

As preferred shall be up to A1 size, although where possible A3 size preferred.

3.02 Building Detail Sheets

Building detail sheets must be A3 size and show one floor of one building on each page. Sheets must be numbered to indicate that they are one of a series within a particular site ie Sheet 1 of 20, Sheet 2 of 20 etc.

Building Details Sheets are to be marked with the appropriate headings including building number/letter and floor level. Plans of the building may be used for field notes, provided a red pen is used to clearly show all information, including walls, doors, dimensions etc. A north point required.

Copies of field notes and text data are to be retained by the Consultant for 12 months after the Consultant's final certification of data of the last Site in the engagement. This data must be made available upon request to The Project Manager, of the Schools Field Data Capture Project during this 12-month period.

The QA checklists provided must be completed by the Consultant and submitted with the data for each Site.

3.03 Field Data Packages

All returned Field Data Packages must contain the following:

- Plans with external dimension for new buildings, internal room dimensions, (you can use the architectural if you have them) and room numbers or DXF, DWG.
- All field notes have a north point.

- STAIRS- width between rails and number of rises. RAMPS – width between rails and length of ramp. Stair polygon to be width of stairs. Refer to stair specifications.
- All Electrical Distribution Boards (EDB's)
- All bubblers
- Photos of new buildings
    - Vista photo (main entrance of the school or TAFE from the street)
    - Photos of works that have been captured for the school
    - All in JPG format.
- Photos of new works, ie new rooms. For TAFE'S its best to take a photo of the door with the room information on it as this is very important and has to be noted correctly. All in JPG format.
- All photos to be numbered ie P4568_01.jpg.
- Plan showing position of photos that were taken.
- Completed DoCDET with a copy of the QA Summary from the DoCDET (must be WinZipped if sending by email).
- Signed Representative Sign Off Checklist (SUCSU27).
- Signed Field Data Capture Consultant Job Completion sheet (SUCSU28).
- Signed copy of the Code of Conduct- Child Protection sheet (SUF0430).
- A cover sheet to reference issued contents.

3.04 Field Data Capture Delivery

NSW Public Works, Survey
The Project Manager, for the Schools Field Data Capture
Level 13, 2-24 Rawson Place
SYDNEY NSW 2000
02 9372 7957

04 Photographs

The data capture consultant should provide a comprehensive photographic record of the site.

4.01 New Buildings

New buildings at least two external photos should be taken from different perspectives.

4.02 Internal Photographs

Internal photographs, take lots. Particularly where interpretation is an issue, like STAIRS. At the top, middle and bottom. With digital photos, there are no excuses for taking lots.

4.03 Vista Photograph

A site vista photograph. A photograph generally of the front of the school, like Google street view taken from the road of the main access.

Photographs relating to a site not previously captured will include:

- front area of the college/school site including the facade of the main site buildings
- Heritage items notable
- site and building features (including internal features)
- any area where the consultant encounters difficulties with interpretation.

The Consultant must submit the photos in digital format. Each photo must be numbered, eg P4555_01.jpg and resized to 1024 pixels. A plan showing the position and direction in which each photograph was taken is to be provided. For all subsequent visits to a site the following are the minimum number of photos required.

05 Onsite Requirements

Upon arrival at each site, the Consultant shall report to the appropriate person in accordance with arrangements made with the nominated Institute/School. Members of the data capture team shall display their identification tag issued by Department of Finance, Services and Innovation where it can be readily seen.

5.01 Access to Spaces

Access to rooms and other spaces will be provided by the nominated Institute Representative in the case of TAFE Colleges or School Principal or School representative.

Any space, for which access cannot be gained, will be listed on the Representative Sign Off Checklist (Form SUCSU27) and certified by the nominated Institute or School Representative.

Should significant problems be encountered gaining access, then the Consultant should phone the Project Manager Denis Piccolo, Public Works on 02 9372 7957 who will assist in resolving the matter.

Where access to a space is not possible attribute data should be provided as set out for “NO ACCESS” rooms.

5.02 Conduct

During the site data capture work, the members of the Consultant's data capture team shall be courteous to all staff and shall ensure that any disruption to the facility is minimised. All persons must also read and certify that they have read the Code of Conduct – Child Protection Document (Appendix 2) before commencing data capture work.

5.03 Completion

On completion of the fieldwork, the Consultant shall report to the nominated Institute Representative in the case of TAFE Colleges or School Principal or School representative to obtain their certification of the Representative Signoff Checklist. This will confirm that the Site has been visited and that access has been provided to all spaces, except for those that are indicated on this Checklist.

06 Shared Sites/Shared Buildings

The data element specifications below describe data to be collected for TAFE and School facilities.

6.01 Shared Sites

TAFE Colleges and school facilities sometimes share a site but utilise separate parts of the site and separate facilities (eg buildings). Data capture for a TAFE or School facility on a shared site is confined to that part of the site and buildings utilised by the TAFE or School facility being captured. The arbitrary “boundary” between the TAFE or School facility referred to as a “DEMARCATION LINE”, show other, eg; university, private school.

6.02 Shared Building Sites

Where institution share one or more buildings on a site. Then the data capture consultant will be instructed by Public Works to collect all features within that building.

Where the site is a shared building TAFE/School all data elements relating to TAFE or School facility should be collected.

In other words, the attribute data will be collected twice as the polygon / room usages can be different between institutions.

07 Site

7.01 Graphic Definitions

All site elements should be shown on the site detail sheet and digital graphic file, DXF.

Access Roads

TAFE

- All access roads within the site boundary are to be defined.
- Accuracy: ≥90% positional, category E.

Schools

- Main access roads only are to be defined. Main access roads are those that serve the main car park, the waste disposal areas, the canteen, the Industrial Arts Building and Drop OFF zone within the site boundary.
- The extents of the access road should align with kerbs where they exist. If no formal kerbs exist define the outline of the road material.
- The tag “ACCESS ROAD – ##” is to be shown. The tag includes the code (##) from the materials table to indicate the predominant material of the surface of the road.
- Accuracy: ≥90% positional, category E.

Agricultural Plots

- The extents of all agricultural plots including any permanent agricultural/horticulture plots, vineyards, market gardens etc are to be defined.
- The element may be defined by a surrounding fence. Where no fence exists the extent of the cultivated area should be defined.
- The tag “AGRICULTURAL PLOT” is to be shown.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

Animal Enclosures (TAFE only)

- The extents of all permanent animal enclosures are to be defined.
- The tag “ANIMAL ENCLOSURE” is to be shown.
- Accuracy: ≥90% positional, ≥90% dimensional, category C.

Assembly Area (Paved – Schools only)

- All extents of all assembly areas are to be defined.
- A tag “ASSEMBLY AREA” is to be shown.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

Building Outline

- All buildings within the site boundary are to be defined. The building outline should extend over all rooms within the building, excluding external rooms.
- Coordinates of key points must be provided on the site detail sheet or within the DXF or TOPCODE ASCII file to orientate the position of the building with respect to the site boundary.
- Buildings have at least ¾ height walls on at least three sides.
- Only completed buildings should be captured. Buildings under construction should be noted in the Consultant's Report.
- Accuracy: ≥95% positional, ≥99% dimensional, category B.

CADD Note for Site Building Footprint Outline Display

Site Building Footprint outline is defined by all covered internal and external rooms. The Site Building Footprint outline is not a roof outline representation.

The BUILDINGS listed below should be collected in the following manner:

Explosive Store and Flammable Goods

Define the building outline as set out above and create a corresponding BUILDING ATTRIBUTE data record. The internal rooms are not to be measured and there is no requirement for the consultant to enter the building.

A room record is to be created in the ROOM ATTRIBUTE data and “EXPLOSIVE STORE” or “FLAMMABLE GOODS” must be entered in the Accommodation Code (TAFE) or in the Current Room Usage (SCHOOL) field. The fields following “EXPLOSIVE STORE” or “FLAMMABLE GOODS” must be empty.

Gate Keepers Structure

Define the building outline as set out above and create a corresponding BUILDING ATTRIBUTE data record. The internal rooms are not to be measured and there is no requirement for the consultant to enter the building.

A room record is to be created in the ROOM ATTRIBUTE data and “GATEHOUSE” must be entered in the Accommodation Code (TAFE) or in the Current Room Usage (SCHOOL) field.

The fields following “GATEHOUSE” must be empty.

Railway Carriages

Define the building outline as set out above and create a corresponding BUILDING ATTRIBUTE data record.

- **Schools**
  - The internal rooms are not to be measured and there is no requirement for the consultant to enter the building.
  - A room record is to be created in the ROOM ATTRIBUTE data and “RAILWAY CARRIAGE” must be entered in the Current Room Usage (SCHOOL) field.
  - The fields following “RAILWAY CARRIAGE” must be empty.
- **TAFE**
  - Railway carriages must be captured as for a permanent building and ATTRIBUTE data entered into the appropriate fields.

Residence

Define the building outline as set out above and create a corresponding BUILDING ATTRIBUTE data record. The internal rooms are not to be measured and there is no requirement for the consultant to enter the building.

- A room record is to be created in the ROOM ATTRIBUTE data and “RESIDENCE” must be entered in the Accommodation Code (TAFE) or in the Current Room Usage (SCHOOL) field.
- The fields following “RESIDENCE” must be empty.

Demountable Buildings

- **Schools**
  - Demountable buildings are not to be captured.
- **TAFE**
  - Demountable buildings must be captured as permanent buildings and ATTRIBUTE data entered into the appropriate fields.

Bubblers (Schools only)

- Bubblers are to be shown as a cross at the centre of the bubbler station with the text “#BU”. The text includes the number (#) of individual bubblers at the bubbler station.

- Accuracy: ≥90% positional, category E.

Bus Bay

- All bus bays within the site boundary are to be defined. The extents of the bus bay should align with kerbs where they exist. If no formal kerbs exist define the outline of the bus bay road material.
- A tag “BUS BAY” is to be shown.
- Accuracy: ≥90% positional, ≥90% dimensional, category C.

Bus Bay External to the Site Boundary

- External bus bays are to be shown as a cross with the text “BUS BAY” to approximate the centre.
- The extents of external bus bays are NOT required.
- Accuracy: ≥90% positional, ≥90% dimensional, category C. The installations must comply with the requirements of the BCA/NCC and related standards.

Car Parks

- All car parks are to be defined. The extents of the car park should align with kerbs where they exist. If no formal kerbs exist define the outline of the car park material. Car park markings are not to be defined.
- The tag “CAR PARK – ##” is to be shown. The tag includes the code (##) from the materials table to indicate the predominant material of the surface of the road.
- The tag should also reflect the number of levels of the car park in the case of multi-level structures.
- Where necessary the line of delineation between single, double and other multi-level structures should be clearly shown with separate tags reflecting the number of levels ie “2 LEVEL CAR PARK-##”, “3 LEVEL CAR PARK-##”.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

Containers

Schools

- Containers are considered as a non-permanent building. Where a container is installed onto a hard surface, consider it to be a shed.
- The tag “SHED” is to be shown.
- Accuracy: ≥90% positional, ≥90% dimensional, category C.

TAFE

- If the container is adjacent or near a building and has a definite usage, eg. storing tools, equipment or materials, teaching (confined spaces, etc), it shall be picked as a room of that building.
- If the container is adjacent or near a building and does not have a definite usage, it shall be located as a shed.
- If the container is used for storage and used for transporting the contents to various locations, such as work around or off the campus, it shall be located as a shed.
- If the container is on the campus but not in the vicinity of a building and within an ELA it will be included in the ELA confines and not shown separately.

Covered Way

- Covered ways are single or multi-level structures used to provide cover for access between buildings.
- Covered ways are to be defined as if the roof outline, regardless of height or floor level, was projected to the ground, excluding gutters.
- The tag “COVERED WAY” is to be placed within the limits of the polygon. Where necessary the line of delineation between single, double and other multi-level structures should be clearly shown with individual tags reflecting the number of levels, ie “2 LEVEL COVERED WAY”, “3 LEVEL COVERED WAY”.
- The width dimension of the covered walkway must be shown to facilitate CADD plotting. The width is defined as the width of the roof excluding gutters.
- Covered ways abutting buildings, have entry to that building should be captured as external room polygons with attribute data collected.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

External Learning Area (ELA) (TAFE only)

- The extents of all external learning areas are to be defined.
- The tag “ELA” is to be placed within the extents of the polygon.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

Fire Hydrants

- Fire hydrants are to be shown as a cross with the text “FH”.
- Accuracy: ≥90% positional, category E.

Fuel Tanks other than Gas Tanks

- Fuel tanks (other than gas tanks) within the site boundary must be shown as a cross with the text “OIL TANK” or “PETROL TANK”.
- Accuracy: ≥90% positional, category E.

Gas Tanks

- The extents of all gas tank enclosures must be shown or, where there is no enclosure, the tanks themselves are to be defined.
- The tag “GAS TANK” is to be shown.
- If a small GAS TANK is in a cage (see figure 01) use the GAS TANK point symbol.
- Accuracy: ≥90% positional, category E.

Figure 01: Gas tank enclosure

Gates

- Lockable vehicular access gates on main access roads to and within the site must be shown as a cross with the text “GATE”.
- Accuracy: ≥90% positional, category E.

Green House

Public Schools

- Green / Glass Houses must be located as a site feature. No internal details required.
- Green Houses are only collected for SCHOOLS and collected like Sheds.
- The tag “GREEN HOUSE” is to be shown.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

High and Central Schools

- Green / Glass Houses must be located as a building. Room usage is “Plant Space”.
- Accuracy: ≥95% positional, ≥99% dimensional, category B.

High Voltage Transmission Lines

- A centre line alignment of transmission lines must be defined by a line with the text “TRANSMISSION LINE”.
- Transmission towers are NOT to be shown.
- Accuracy: ≥90% positional, category E.

Plant

- Large equipment, like air-conditioning (bigger than domestic split system unit) must be located as a point feature.
- Plant must be shown with a cross and the text “PLANT” placed at the centre.
- Accuracy: ≥90% positional, category E.

Figure 02: Air-conditioning plant enclosure

Playground Equipment (Schools only)

- The extents of areas containing permanent playground equipment must be defined. The tag “PLAYGROUND EQUIPMENT” must be shown.
- A single piece of playground equipment must be shown as a cross with the text “PLAYGROUND EQUIPMENT”.
- Accuracy: ≥90% positional, category E.

Pumps – e.g. Water, Sewerage (Schools only)

- Pumps must be shown as a cross with the text “WATER PUMP” or “SEWERAGE PUMP”.
- Accuracy: ≥90% positional, category E.

Memorial (Schools only)

- Memorials must be shown as a cross with the text “MEMORIAL”.
- Accuracy: ≥90% positional, category E.

Satellite Receiver (Schools only)

- Satellite receivers must be shown as a cross with the text “SATELLITE RECEIVER”.
- Accuracy: ≥90% positional, category E.

Shade Structure

Shade Structures are covered freestanding structures with a solid or fabric roof material for Students. Shade Structures are to be defined as if the roof outline, was projected to the ground, regardless of height or floor level.

The extents of all Shade Structures must be defined as tags:

- TAFE - “COVERED AREA”
- SCHOOLS
  - “SHADE STRUCTURE-SOLID” - Areas that have solid roof sheeting material eg. metal, polycarbonate and fibreglass sheeting, or
  - “SHADE STRUCTURE-FABRIC” - Areas that have a fabric roof material eg. Shade cloth or the various types of sail structures.
- Accuracy: ≥90% positional, ≥95% dimensional, category D.

Shared Site: Demarcation Line

- Where the site is shared with another facility (School or TAFE), the arbitrary boundary between each facility is defined as a line with the text “DEMARCATION LINE”.

Shared Site: Name of Second Facility

- Where the site is shared with another facility (School or TAFE), the name of the second facility is to be placed within that part of the site occupied by the second facility, eg “PICTON HIGH SCHOOL”.

Sheds

- All permanent or difficult to remove sheds must be located as a site feature. Internal details not required, eg; “pump housing”.

- A shed becomes a building where its usage is listed under the Room Usage schedule for Schools or the Accommodation Code Table for TAFE.
- The tag “SHED” is to be shown.
- Accuracy: ≥90% positional, ≥90% dimensional, category C.

Site Boundary

Schools

- A SCHOOL site boundary is defined by the external boundaries of a compiled cadastre of the contiguous parcel/s of land in the name of the Department of Education and Communities.
- Where the “SCHOOL” comprises more than one site, the coordinates of each site should reflect the relative position of each site with respect to the other.
- This/these boundary/ies will be included in the data provided to a consultant by NSW Public Works for a SCHOOL update.
- Where the Data Capture Consultant finds differences in the site boundary from that included in the data delivered, details of the differences shall be included in the surveyor’s report.
- Where the Consultant has been engaged to collect data related to a new site the Consultant will provide the site boundary as a site element.
- If it is necessary to obtain a search, the Consultant will be paid in accordance with the rates in Section 3.10.1 in the Guide For Survey Fees published by the Institution of Surveyors, NSW. A limit of $30 will apply for any individual site. If search costs exceed this limit, prior approval must be obtained from The Principal. Any additional search obtained must be identified in the Consultant report for the Site. All searches must be returned to The Principal with the final data.
- Accuracy: locate on co-ordinate base supplied, category A.

TAFE

- A TAFE site boundary is defined by the external boundaries of a compiled cadastre of a single contiguous parcel of land in the name of the Department of Education and Communities.
- This boundary will be included in the data provided to a consultant by NSW Public Works for a TAFE update.

Sporting Facilities

- The extents of all sporting facilities including swimming pools, playing fields and sports courts and ovals within the site boundary are to be defined. The extents of the sporting facility should align with the following features in priority:

- Fencing, where it exists or formal line markings or the grass verge or any recognisable border

- The tag “SPORTS COURT – ##” is to be shown.
- Normal tags are, Sports Court – Bitumen, Sports Court – Concrete, Sports Court – Softfall, Sports Court – Grass, Sports Court – Synthetic Grass, Sport Oval and Sport Pool.
- Accuracy: ≥90% positional, category E.

Substation (TAFE only)

- Substations are to be captured as either a building or a point feature depending on the size of the structure. Refer to Building Outline for method of capture when the substation is regarded as a building. Smaller substations are to be shown as a cross with the text “SUB STATION”.
- Accuracy: ≥90% positional, category E.

Water Tank

- All water tanks are to be shown. This includes underground tanks if locality is known. Water Tanks are to be shown as a cross with the text “WATER TANK” or “WATER TANK U/G” placed at the approximate centre.
- Accuracy: ≥90% positional, category E.

Water Filtration Unit

- Filtration units for the external water tanks are to be shown. These may not necessarily be co-located with the water tank. A cross with the text “WFU” is to be shown.
- Accuracy: ≥90% positional, category E.

Figure 03: Water Filtration unit

7.02 Attribute Data Definitions

Definitions apply to TAFE Colleges and Schools except where otherwise defined or described.

Site attribute elements are to be delivered in the portable Microsoft Access Database (DocDET.mdb).

Site Identifier

Schools

The SCHOOL Site Identifier is the unique identifier for the SCHOOL “SITE” Eg. H8234S11756. The identifier comprises of:

1. SCHOOL Category Code
    - H – High School
    - P – Public School
    - C – Central School
    - I - Infants
    - F – Environmental Education Centres
    - A - Regional Office
2. SCHOOL Code
3. SCHOOL SITE Code

TAFE

The TAFE Site Identifier is the unique identifier for the TAFE “SITE” Eg. T6015S01000. The identifier comprises of:

1. TAFE Campus Code
2. TAFE SITE Code

Car Parking Spaces (TAFE only)

The number of formal car parking spaces should be provided by the nominated Institute Representative.

If the Institute Representative is unable to supply the number, the second field in the Site ATTRIBUTE file should be left blank.

Site Category (Schools only)

There are 4 categories that require identification:

- SOLE SITE – one school with one site number only.
- SHARED SITE – two schools or school/TAFE sharing one site number.
- SPLIT SITE – one or more site numbers physically separated for one school.
- SPLIT/SHARED SITE – one school on one or more sites and sharing another.

Number of Bubblers (Schools only)

Record the total number of bubblers on the site.

School Residence (Schools only)

Record a “Y” where a residence exists on the site. If none, record an “N”.

Satellite Receiver (Schools only)

Record a “Y” where a satellite receiver exists on the site. If none, record an “N”.

Computer Data Cabling (Schools only)

Record a “Y” where category five cabling is available on site. If none, record an “N”.

08 Building

8.01 Graphic Definitions

Definitions apply to TAFE Colleges and Schools except where otherwise defined or described.

All building elements are to be shown on the building detail sheets.

Building Outline

- The building outline is defined by the external, full height walls of the building at each level.

- Spaces outside the building outline including attached open sided corridors and balconies will not be included in the building outline but shown as external rooms and fully dimensioned and numbered.
- Buildings have at least ¾ height walls on at least three sides.
- Uninhabitable external features including engaged piers, buttresses, columns and eaves should not be included in the building outline.
- Dimensions and the relationship of each building outline to the “Site Building Outline” must be shown.
- Accuracy: ≥95% positional, ≥99% dimensional, category B.

CADD Note for the Site File Building Outline Display

- The Site File “Building Outline” includes the room Building Outline and any external covered areas at ground level or an aerial representation: see Figure 04.
- Showing trees within the building outline would have a Site File Building Outline having a void, e.g. A dough-nut type building, even though there is a underground covered area under the whole building, including the void.

Figure 04: Example of aerial representation of Building outline with void

Figure 05: Example drawing of voids and stairs within building outlines and external rooms

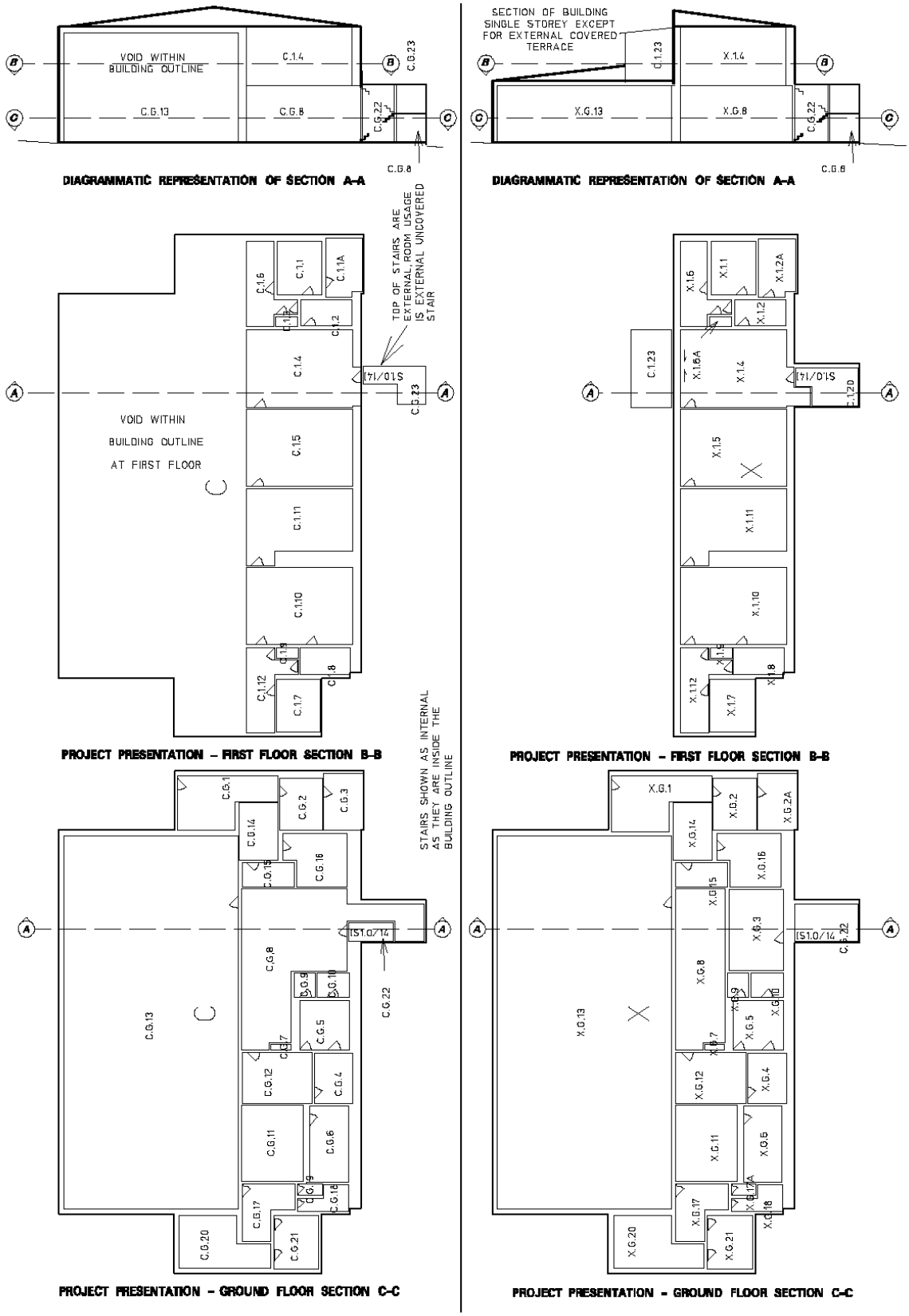
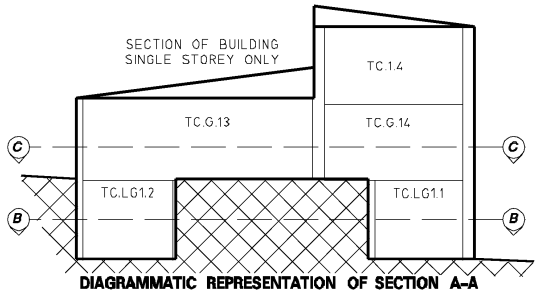
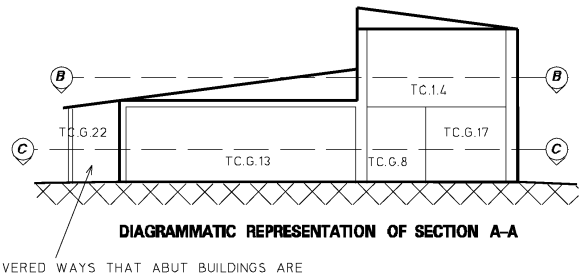


Figure 06: Example drawing of multiple building outlines and rooms outside building line

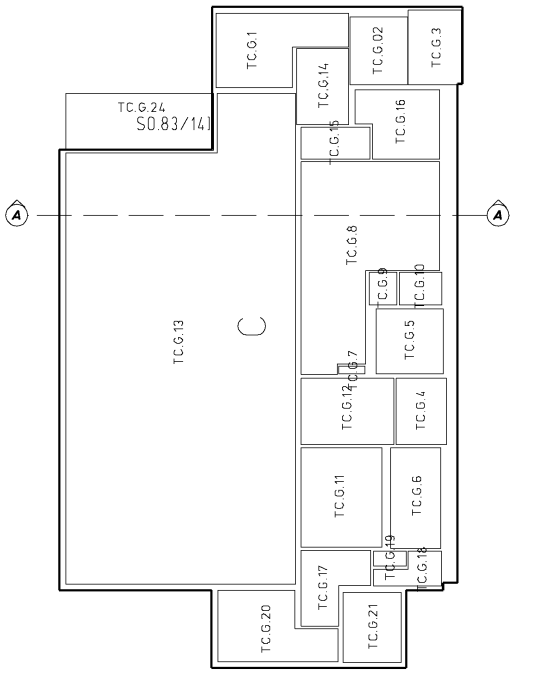


DIAGRAMMATIC REPRESENTATION OF SECTION A–A

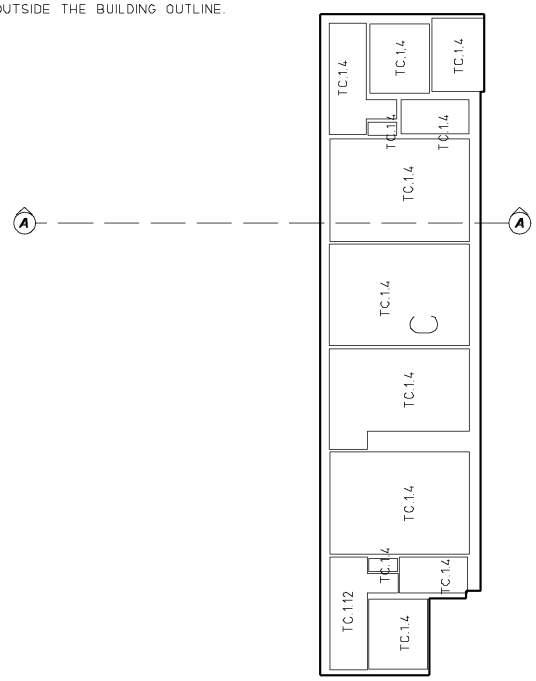


DIAGRAMMATIC REPRESENTATION OF SECTION A–A

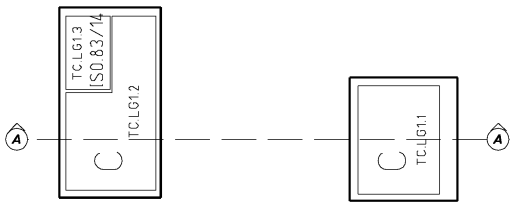
COVERED WAYS THAT ABUT BUILDINGS ARE CLASSIFIED AS EXTERNAL ROOMS. THEY ARE OUTSIDE THE BUILDING OUTLINE.



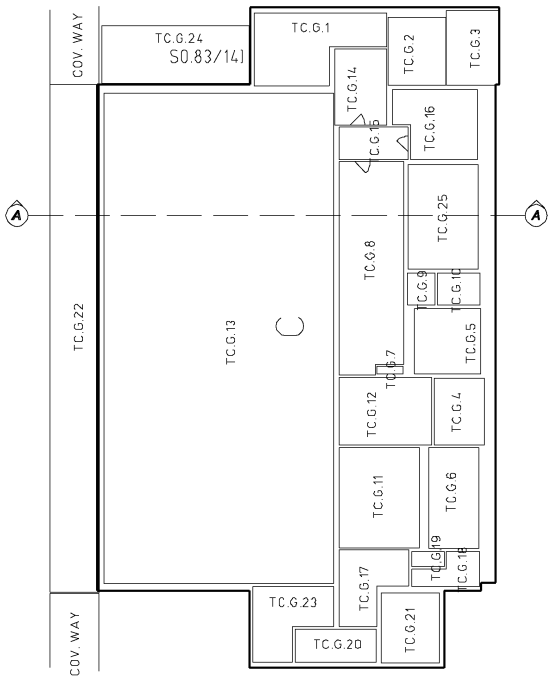
PROJECT PRESENTATION – GROUND FLOOR SECTION C–C



PROJECT PRESENTATION – FIRST FLOOR SECTION B–B

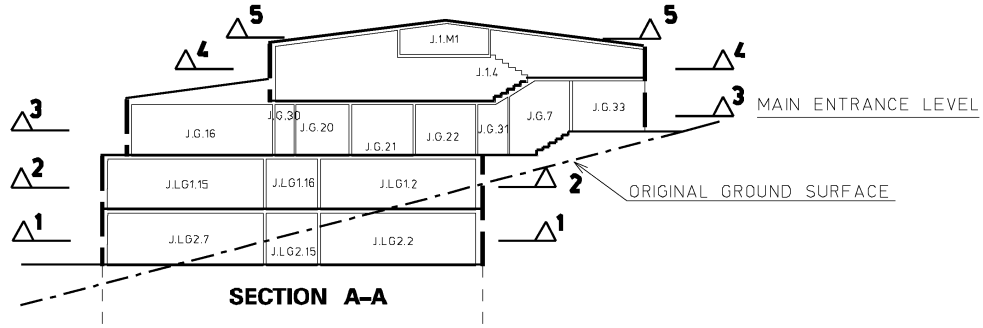


PROJECT PRESENTATION – BASEMENT SECTION B–B

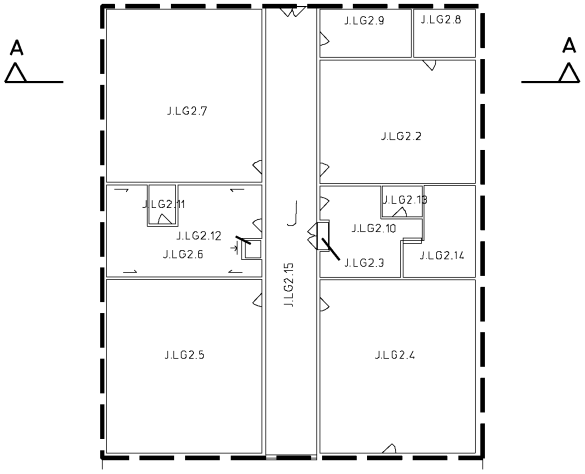


PROJECT PRESENTATION – GROUND FLOOR SECTION C–C

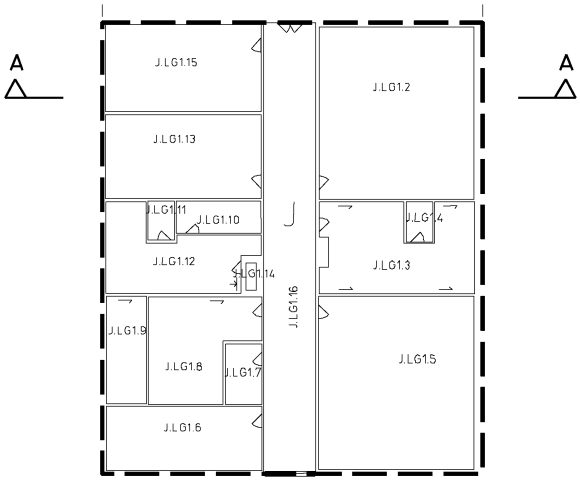
Figure 07: Example drawing of spaces within building outline on sloped site with split levels



SECTION A–A



LOWER GROUND 2 FLOOR PLAN (SECTION 1–1)



LOWER GROUND FLOOR PLAN (SECTION 2–2)

Figure 08: Example drawing of spaces within building outline on sloped site with split levels

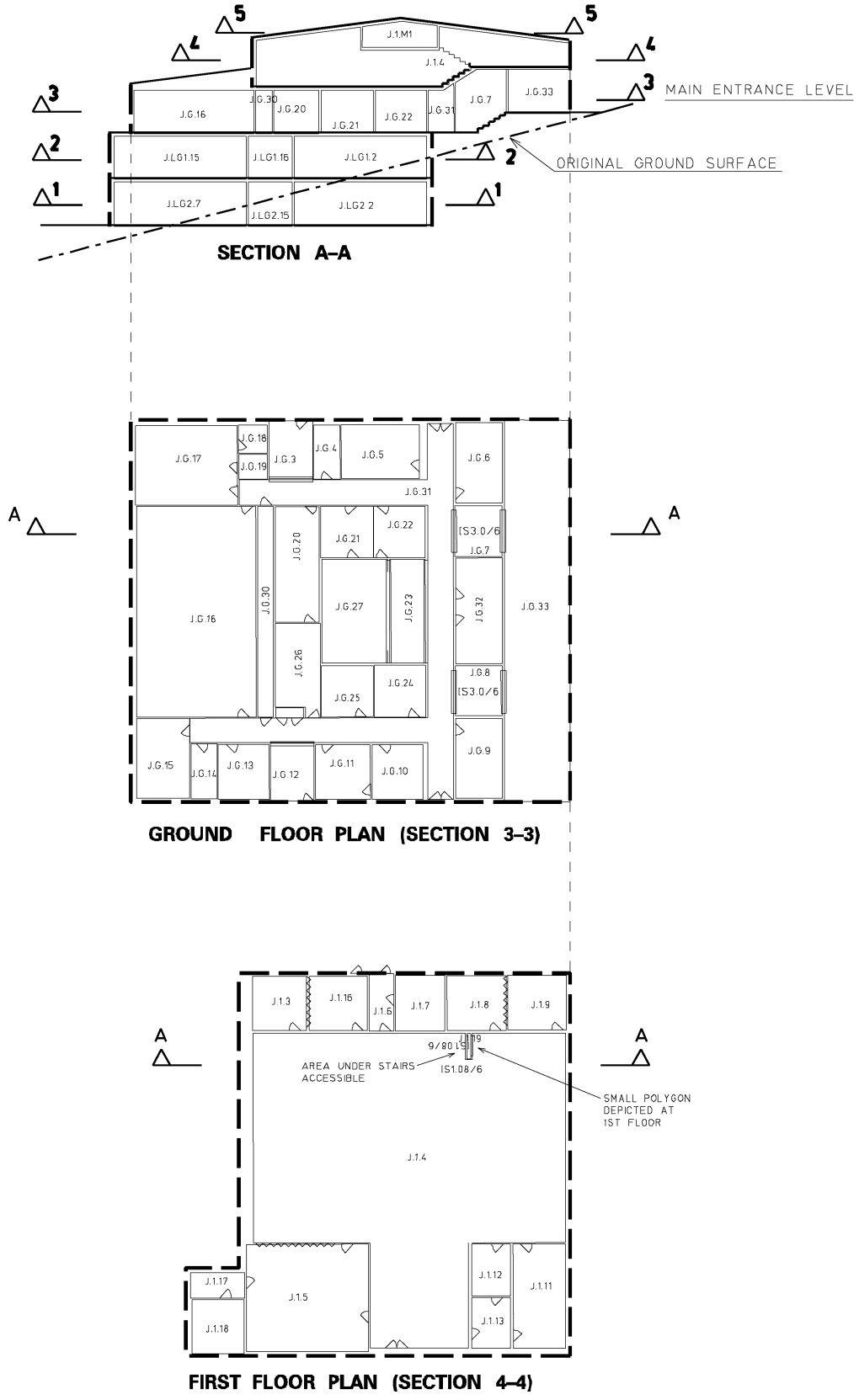
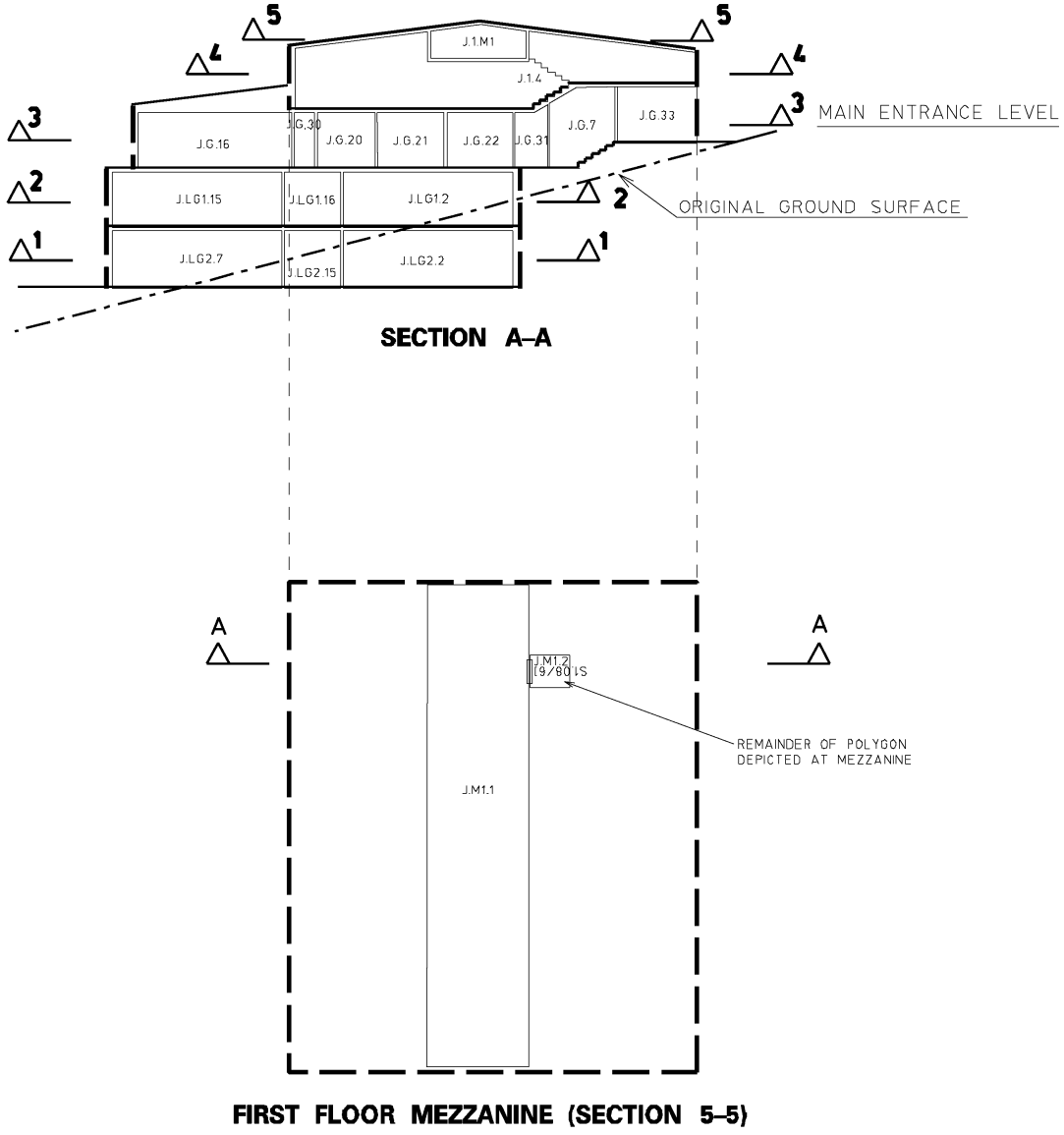


Figure 09: Example drawing of spaces within building outline on sloped site with split levels



Rooms/Polygons

The term "room" is interchangeable with the term "polygon". In this process we capture usages and record their attributes in a portable Microsoft Access Database (DocDET.mdb).

A space may have more than one usage, E.g. A physical classroom may have a kitchen in the corner, and then there would be two usages and two corresponding polygons.

The polygons would have a "no door" symbol where the polygons would touch, to show free movement between the two usage areas.

Room / Polygon Outline

Definitions

Room in a School. The area of a usable space, that is covered and on a hard surface.

Room in a TAFE. The area of a usable space, that is covered or un-covered and on a hard surface.

Measure every space within the building as a polygon including built in cupboards, storerooms and circulation/movement areas below stairs and ramps. Matching the Room / Polygon Usage Tables using the following requirements:

- Built-in cupboards are regarded as part of a polygon and should be included in the measured space. Where the cupboard has a specific usage, eg an EDB, it should be measured as a separate polygon.
- The space occupied by removable furniture is to be included in the polygon. Removable furniture includes a display cabinet or shelving.
- Measurements must be taken where the wall meets the floor (excluding skirting boards).
- A space accessed by a ladder is not excluded from being measured as a polygon.
- A space where access is by a manhole only is not considered a polygon.
- Ducts within the building are not to be measured as polygon.
- Spaces outside the building outline that function as part of the building should also be measured as polygon. These spaces include open sided attached corridors, balconies and stairs and ramps attached to the building.
- Any polygon with a Room Usage/Accommodation Code not included in the Room Usage/Accommodation Code schedule should be noted as “OTHER” in the attribute data and an explanation included in the Consultant’s report.
- The consultant should provide sufficient measurements to enable the polygon to be accurately plotted. This may require diagonals or angles to be measured.
- Partitions within rooms do not have to be measured unless there are different polygon usages on each side of the partition. Then each side of the partition must also be treated as a separate polygon.
- Accuracy: ≥95% positional, ≥99% dimensional, category B.

Mezzanine Rooms

- Mezzanine rooms share the same ceiling as another room. Commonly the other room has a high ceiling to accommodate a mezzanine, see Figure 10.
- A mezzanine room can also have full height walls.

Figure 10: Mezzanine rooms

Movement Areas, Covered for Schools and TAFE

Spaces outside the building outline that function as part of the building should also be measured as polygons. These spaces include attached corridors which has the majority covered and open sided, verandas and stairs and ramps attached to the building.

Dimensions are taken to reflect one of the two possible conditions:

- Dimensions to the inside of the railing if present.
- Dimensions to where the cover stops. This may be the outside face of columns or posts or even further. It is assumed that you can still walk on a man-made surface, like concrete / paving. Movement can be between columns.

The dimensions reflect where you can move.

Figure 11: Not an external room

An External Movement Room under eaves. If the eaves are greater than 1m and there is a door to access, then this space is a movement area,

Accuracy: ≥95% positional, ≥99% dimensional, category B.

Covered Area

An area which is covered that can be used, most likely has seats or tables that is attached to a building, probably does not have door into a building.

Much like an external Movement but students are not moving between places.

Use the “COVERED AREA” room usage code for High Schools. Use “SHELTER” for Public, Infants, Special and Central Schools.

External Room, Uncovered (TAFE)

These are external uncovered spaces that have a usage, such as “Loading Bays”, “Plant Canteen Areas” and so on. They don’t have to have walls or fences; they can be completely open. As long as these spaces have a usage.

These rooms are only shown in the building plan and shown on the Site plan.

Accuracy: ≥90% positional, ≥95% dimensional, category D.

Room / Polygon Number for TAFE and Schools

The polygon number as shown on the door should be used. If there is no number on the door, then the number on supplied drawings should be adopted where possible. If neither of these is appropriate then the next available number is to be used.

Polygon numbers cannot be duplicated with existing or deleted polygon numbers. The graphics tag will be depicted as:

- TAFE e.g. A.G.1, A.M.1, A.LG2.23, A.LM2.3, A.3.79, A.M3.1
- SCHOOL e.g. AR0001, AM0001, AR8023, AM8003, AR3079, AM3001

Bubblers (Schools only)

Bubblers within the building are to be shown as a cross at the centre of the bubbler station with the text “#BU”. The text includes the number (#) of individual bubblers at the bubbler station.

Accuracy: ≥90% positional, category E.

Electrical Distribution Boards

Electrical distribution boards within the building are to be shown as a cross with the text “EDB”.

Accuracy: ≥90% positional, category E.

Fire Hose Reels (TAFE only)

Fire hose reels within the building are to be shown as a cross with the text “FHR”.

Accuracy: ≥90% positional, category E.

Fire Hydrants (TAFE only)

Fire hydrants within the building are to be shown as a cross with the text “FH”.

Accuracy: ≥90% positional, category E.

Hoist Apparatus (TAFE only)

Hoists within the building are to be shown as a cross with the text “HOIST”. Where a hoist has been installed for the purpose of transferring equipment and materials to or from the building, the symbol should be placed within the building with an appropriate door symbol at the opening. Hoists are also a feature in motor industry teaching spaces.

Accuracy: ≥90% positional, category E.

Home Base Rooms – Open Plan layout

Open plan Home Bases are designed to have more than one class in a Home Base room. A single Home Base is about 60m sq; so, a double Home Base room, which can fit two classes, would be about 120m sq and have the room usage of “Home Base X2” and a triple home base follows this trend (180m sq, “Home Base X3”).

A practical activities area/withdrawal room attached to a Home Base X2 room is effectively serving two homebases, so the usage would be “practical activities 2hb”/” withdrawal 2hb”.

Doors/Door Swings

Doors providing access to and within the building must be shown by a symbol to identify the door type. The symbol should be placed diagrammatically in relation to the walls. Doors are full height only. Half doors are not doors, see figure 12.

Figure 12: Roller shutters on windows are not to be shown.

Personal Effects Storage

If there is an identifiable space, ie a bag room, then collect the room usage as “PERSONAL EFFECTS STORAGE”.

If there are hooks on a wall, it’s not a “PERSONAL EFFECTS STORAGE”, even if it is noted on the architectural plans.

Plant

Large equipment, like air-conditioning (bigger than a domestic split system unit) inside walls (may or may not be covered), is to be located as a room.

Use the “PLANT” room usage code.

Figure 13: Example of Plant room usage.

Shelter

An area which is covered that can be used, most likely has seats or tables, probably does not have door around it or into a building.

Use the “SHELTER” room usage code for Public, Infants, Special and Central schools. Use “COVERED AREA” for High Schools.

Tiered Learning Area

An area which has stepped seating. There may also be a stair on the side to allow movement to the higher levels.

Use the “TIERED LEARNING AREA” room usage code for High Schools. Use “TIERED LEARNING SPACE” for Public Schools.

Figure 14: Top of the Tiered Learning Area

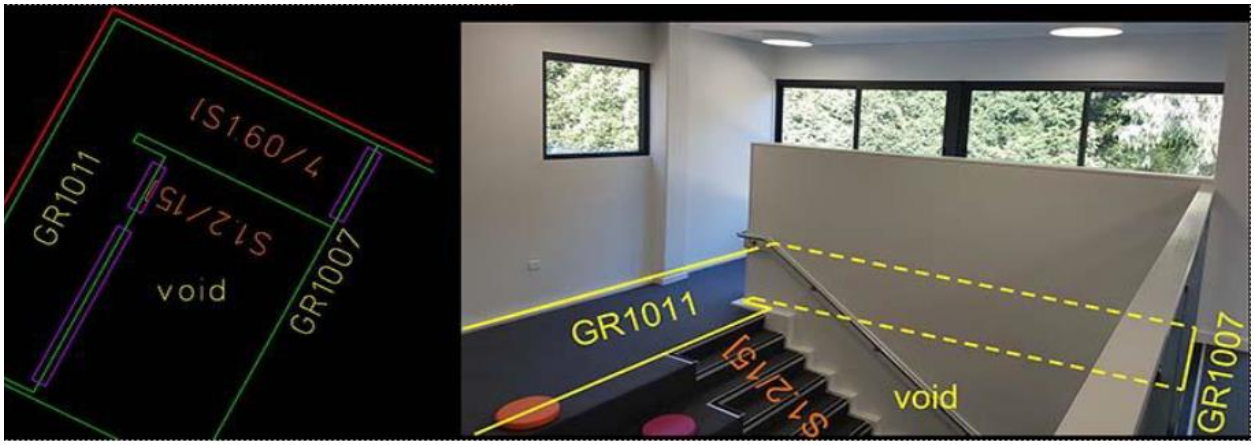
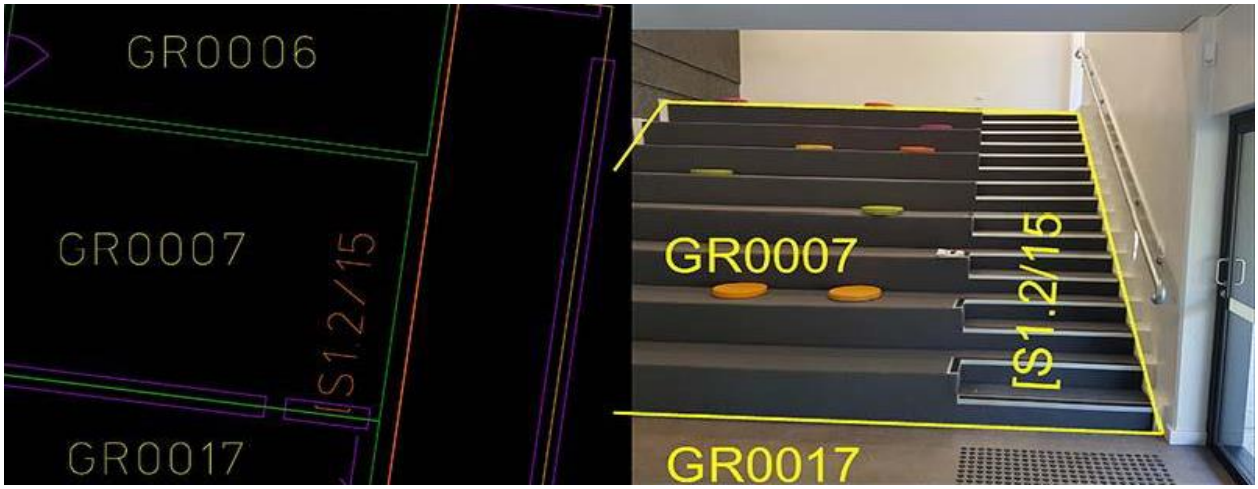


Figure 15: Bottom of the Tiered Learning Area



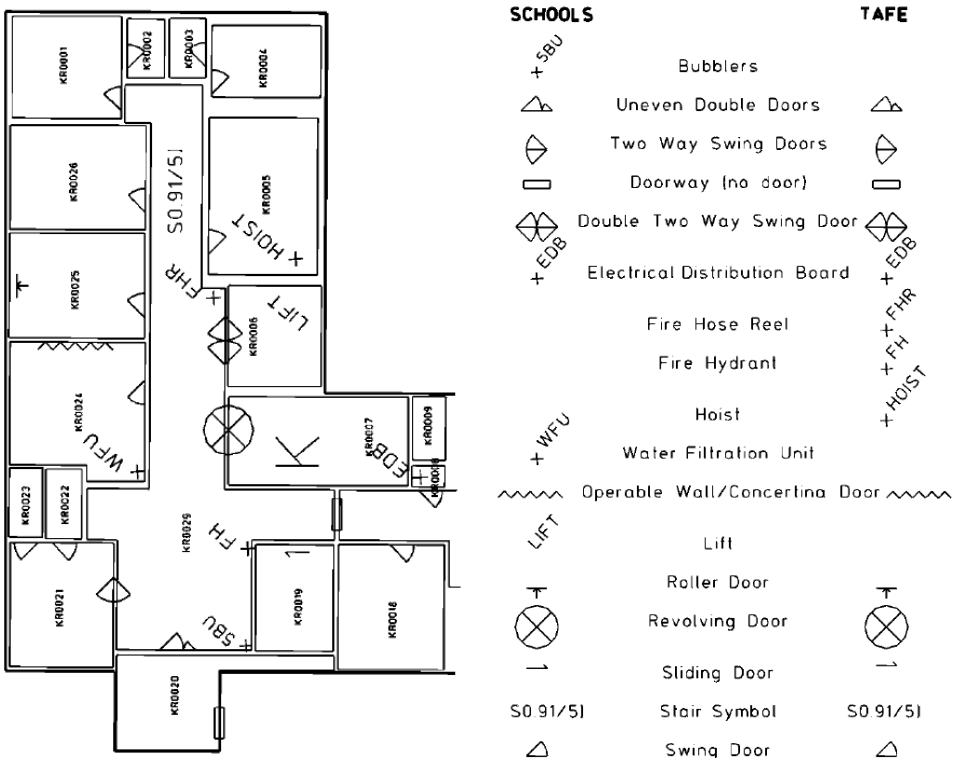
Animal Space / Agriculture Covered Area

Use the “ANIMAL SPACE - AGRICULTURE COVERED AREA” room usage code for High and Central Schools.

Figure 16: Typical example of Animal Space / Agriculture Covered Area.

Architectural Diagrammatic Symbols

Figure 17: Typical floorplan showing use of Architectural symbols.



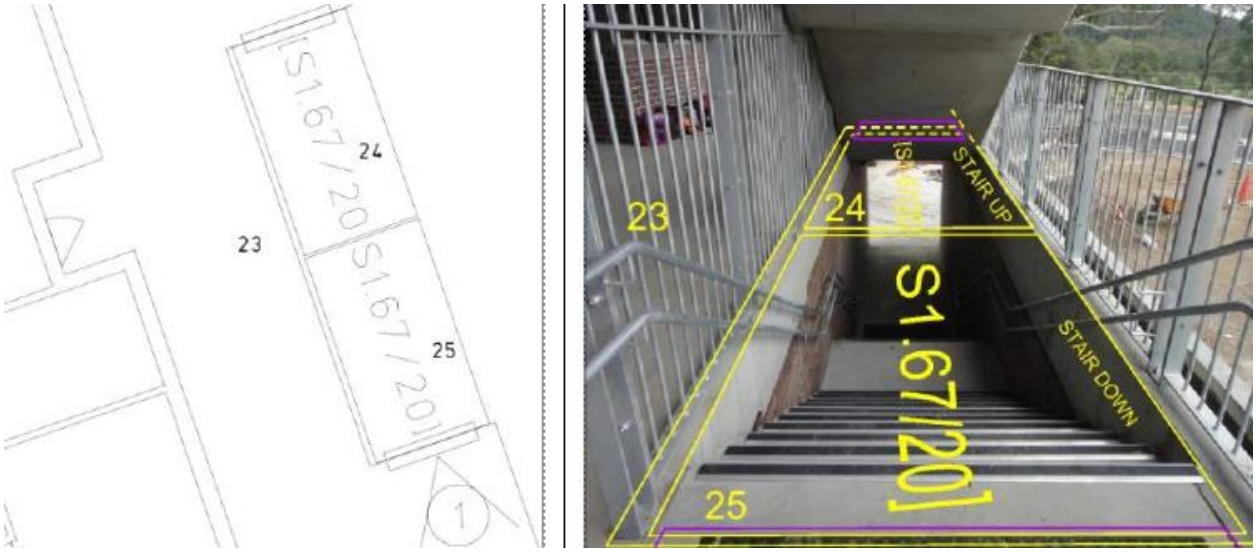
09 Internal Stairs and Ramps

Stairs / Ramps to the Next Floor Level

Stairs and Ramps between floors are to be shown as a polygon. The size of the stair polygon is the area the stair takes up on that floor level.

Stair / Ramp polygons do not overlap other polygons on the same Floor Level.

Figure 18: Representing stair polygons at a floor level for multi-level stairs.



The stair TAG, is made up of the width between hand rails and the number of risers to the next floor.

The ramp TAG is made up of the width between hand rails and the ramp length.

The character ‘S’ and ‘R’ are used to separate stair tags from ramp tags.

The square bracket ‘[‘ or ‘]’ indicate the bottom or top of a stair. Ie this tag [S2.6/20 is used to indicate that the stair is going UP from this floor level, this tag S2.6/20] is used to indicate that the stair is going down from this floor level.

The tag for a stair looks like this “[S2.6/14” or “S2.6/14]”.

The tag for a ramp looks like this “[R2.5/8.34” or “R2.5/8.34]”.

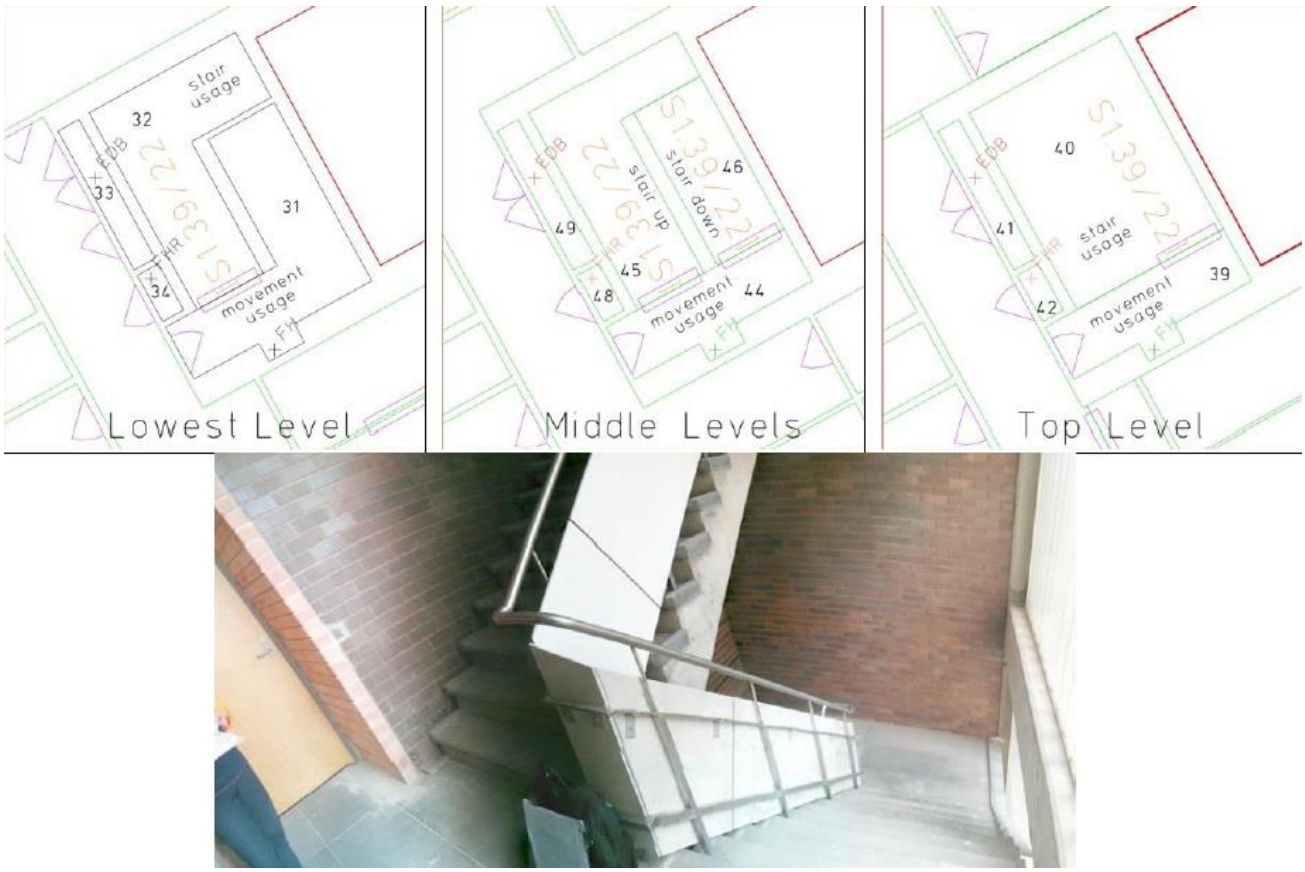
Bottom of stair tag = [S2.6/20.

Top of stair tag = S2.6/20].

The placement of the tag is in the middle of the top, or bottom, of the stair / ramp.

GUIDE NOTE: Capture the easy spaces first, like movement, storage rooms. Then capture the stairs. Fill in the spaces; make the level whole, no voids.

Figure 19: Stairwells showing stair polygons for UP and DOWN.

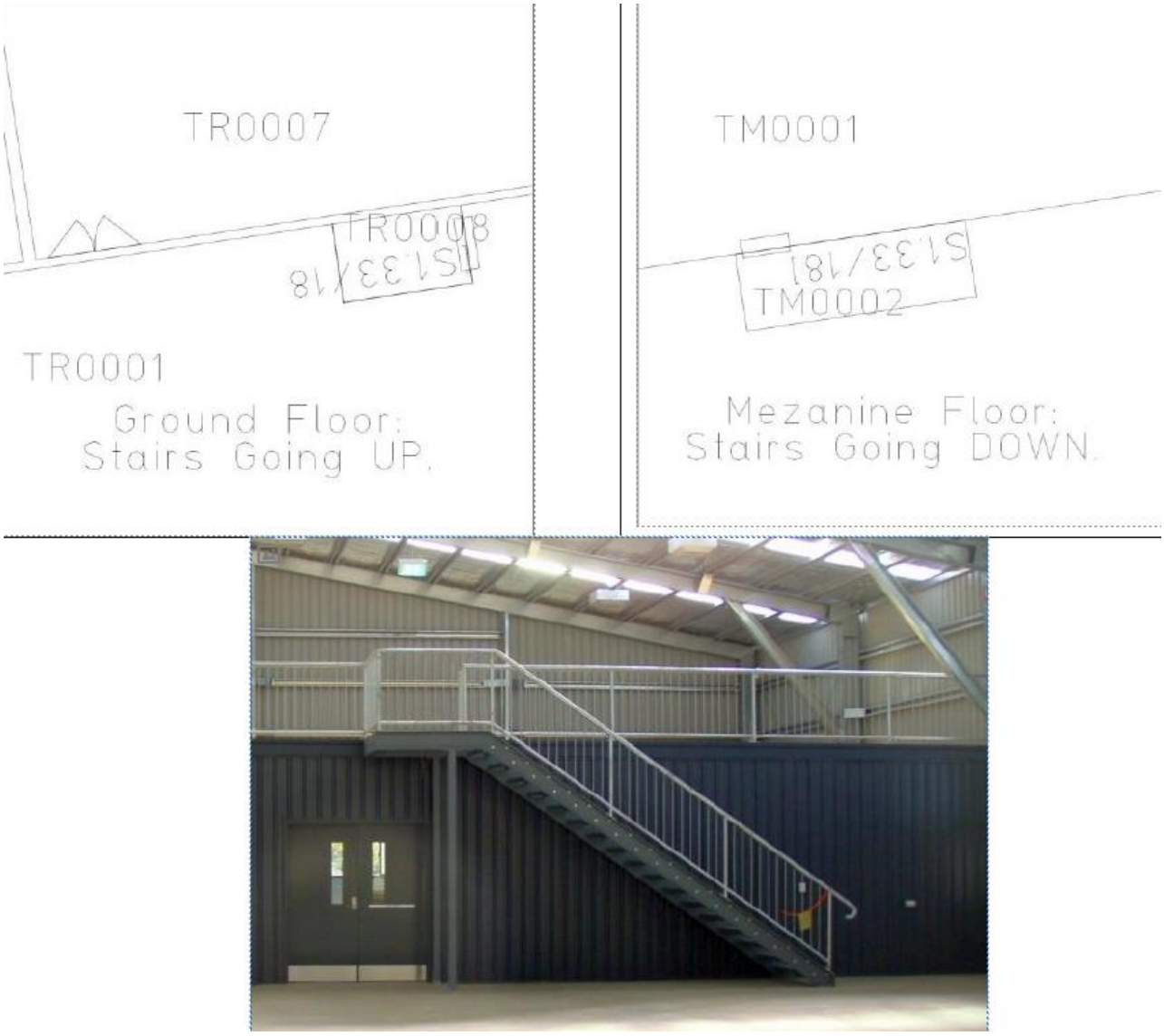


Also see “Stair Reference Guide” SUM0422.pdf.

Stairs to a Mezzanine

The stair polygons are shown with two small polygons at the foot of the stair, about 2m long. Then a larger polygon for the rest of the stair.

Figure 20: Representing stairs to a mezzanine



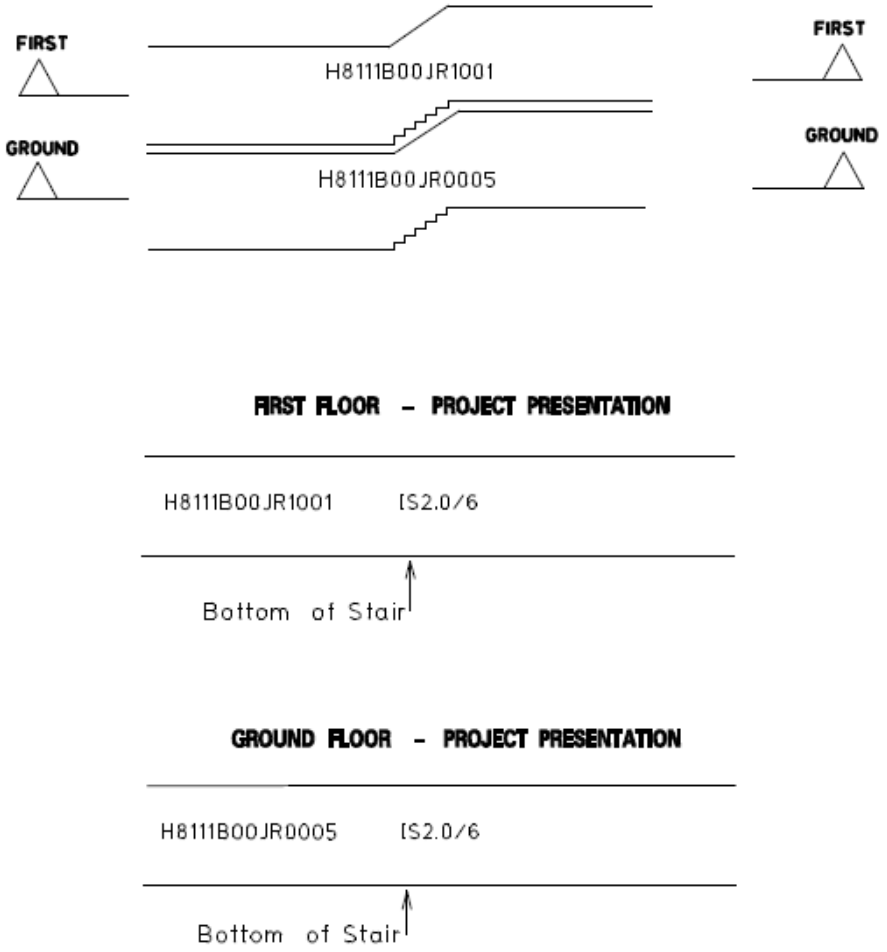
Stairs / Ramps on a Split-Level Floor

Stairs and Ramps that provide access between changes in levels on the same floor, are to be shown as stair / ramp tag only. The symbol '[' depicting the centre bottom of the stair or ramp and the tag indicating the rising direction (going up).

'S' for stair and 'R' for ramp.

The stair symbol will show the minimum width and the number of risers ([S2.0/6). The ramp symbol will show the minimum width and the length of the ramp being symbolised ([R1.2/5.0).

Figure 21: Representing and tagging split level stairs/ramps

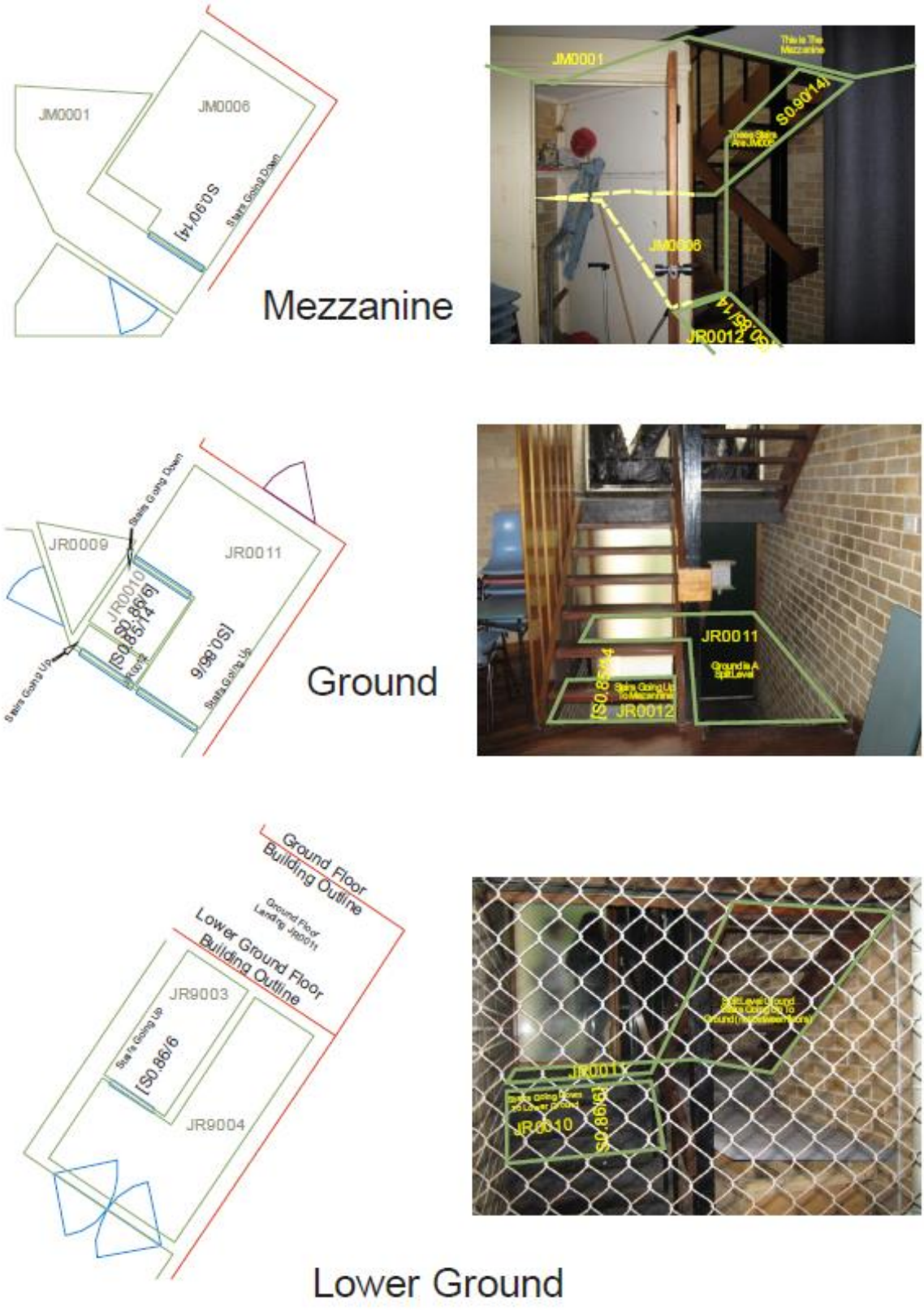


Ladders

Ladders are only captured when they have handrails.

The two stair polygons are shown about the same size. Much like a mezzanine.

Figure 22: Representing and tagging stairwells



10.0 External Stairs and Ramps (Schools)

The only truly external stairs and ramps are uncovered. Covered stairs and ramps would be within an external room.

Covered Definition

A covered structure will have a purpose-built roof over it, to keep off the environmental elements.

Figure 23: Example of definition of covered stairwells

Uncovered

Covered

Uncovered Stairs and Ramps

Uncovered stairs and ramps are captured with a top stair / ramp symbol "S1.8/6]".

Covered Stairs and Ramps not between floors

Covered stairs and ramps are captured with a bottom stair / ramp symbol within an external room, i.e. a movement area, [S1.8/6".

Covered Stairs and Ramps between floors

Stairs and Ramps between floors are to be shown as a polygon, at the bottom and top, representing the space occupied by the stairs at each level.

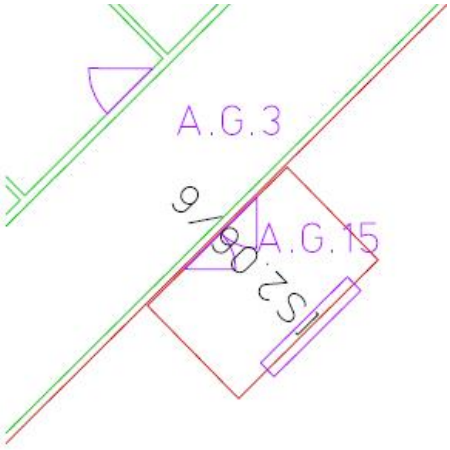
11.0 External Stairs and Ramps (TAFE)

The format for collection of stairs and ramps that abut buildings is set out below.

Covered Stairs / Ramp – Not Between Floors

Where stairs / ramps are covered and the stairs do not provide access from one floor to another, the stairs / ramp can be regarded as one polygon with a stair symbol shown at the bottom. Attribute data is to be collected.

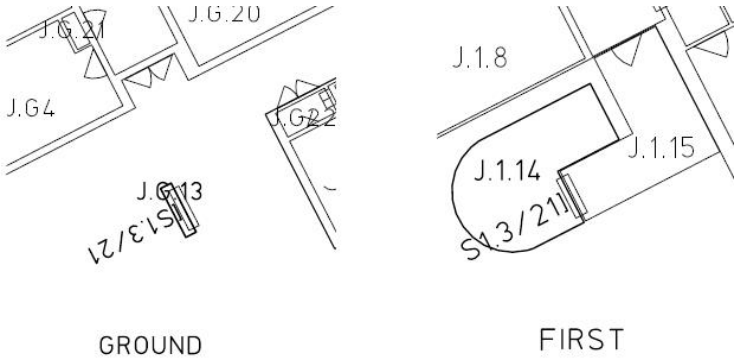
Figure 24: Representing covered stairs not between floors



Covered Stairs / Ramp – Between Floors

Where stairs/ramps **do** provide access from one floor to another they are to be shown as polygons, at the bottom and top, representing the space occupied by the stairs / ramp at each level. Attribute data is to be collected.

Figure 25: Representing covered stairs between floors



Uncovered Stair / Ramp - Not Between Floors

Where the stairs/ramps are **uncovered**, the stairs/ramps do **not** provide access from one floor to another, the stairs / ramp are shown, with a top of stair or ramp symbol, shown at the floor level that the stairs or ramp access.

Uncovered Stair / Ramp – Between Floors

Where the stairs/ramps are **uncovered**, the stairs / ramp **do** provide access from one floor to another and the stairs / ramp should be regarded as separate rooms with a stair / ramp symbol shown as with internal rooms, at the floor at which they occur. Attribute data is to be collected with the ceiling material shown as "**OP**"

Care should be taken to represent the true area occupied by the external stairs / ramp. As polygons are shown at each level, duplication of the same area should be avoided.

12.0 Lifts

Lifts (Schools)

Lift rooms are to be shown at Ground Floor only and room attribute data is to be collected. The lift is then to be depicted at each other level it accesses by **TEXT** only (LIFT). The doors accessing the lift at all other levels are to be shown in the adjoining room.

Accuracy: ≥95% positional, ≥99% dimensional, category B.

Lifts (TAFE)

Lift rooms are shown at Every Floor and attribute data is to be collected. The doors accessing the lift at that level are to be shown in the adjoining room.

Accuracy: ≥95% positional, ≥99% dimensional, category B.

13.0 Water Filtration Units

Filtration units for the external water tanks are to be shown. These may not necessarily be co-located with the water tank and may be internal. A cross with the text "WFU" is to be shown.

Accuracy: ≥90% positional, category E.

14.0 Building – Attribute Data Definitions

Definitions apply to TAFE Colleges and Schools except where otherwise defined or described.

Building Identifier

The Building Identifier is the unique identifier for each building within the **School Site** or the **TAFE Campus**.

The Building Identifier should reflect the building numbering system used locally by the TAFE Institute/SCHOOL (discuss with the nominated Institute/School Officer if necessary).

Where this will cause duplication with an existing Building or a building that has been deleted from the site being updated, the Building Identifier should be suffixed by the next available numeric value.

e.g. A or 5 Or where building A or 5 already exists: A1 or 51

Note: TAFE data is collected on a site basis. It will not be possible for the Data Capture Consultant to determine that a new building entity on a site is not in use on another site within the Campus. The building identifier selected by the Data Capture Consultant may be altered by NSW Public Works prior to the sign off where conflict within the Campus occurs.

Local Building Name (TAFE only)

Record the name of the building as it is known locally. Eg. FRED SMITH BUILDING

Building Ground Floor Naming

All Buildings have at least a Ground Floor.

The Ground Floor is the main walk-in level from a natural surface level. If there is more than one, main walk-in entrance, choose the larger one.

Building Category / Style

TAFE

The TAFE Building Category is defined by a Code as set out below.

Table 01: TAFE Building Category Codes

CODE	CATEGORY
CF	Concrete Framed
DE	Demountable

CODE	CATEGORY
LB	Load Bearing Brick
LF	Lightweight framed and clad
NC	Non-Classified
SF	Steel frame
ST	Sandstone & Timber
TF	Timber Framed
ZZ	Deleted

Schools

Currently there is just a list of three predefined styles CDR, MDR and BDR (smaller version of MDR) designs.

Figure 26: Image of CDR Building

Placehold images

Figure 27: Image of MDR Building

Placehold images

Figure 28: Image of BDR Building

Placehold images

Table 02: DoE SCHOOL Building Styles defined

Building Style	High School	Public School	Building Style	High School	Public School
14 CORE CANTEEN	N	Y	**K PLAN**	N	Y
14 CORE HALL	N	Y	**KIT LIBRARY**	H	Y
14 CORE LIN LIB MDR	N	Y	**LETHBRIDGE**	H	Y
14 CORE LIN LIBRARY	N	Y	**LIB LAB**	Y	N
14 CORE SQ CANTEEN	N	Y	**LIBRARY**	Y	N
14 CORE SQ HALL	N	Y	**MDR APB**	N	Y
14 CORE SQ LIB	N	Y	**MDR BENDIGO**	Y	Y
21 CORE LIN LIBRARY	N	Y	**MDR GROVE**	N	Y
21 CORE LINEAR HALL	N	Y	**MDR NOMAD**	Y	Y

Building Style	High School	Public School	Building Style	High School	Public School
	N	Y			

Major Building Function (High Schools only)

This is the main current usage for the building. This should be obtained during discussions with the Principal. A maximum of two major building functions is allowable e.g. if Music and Art are the major functions then MUSIC/ART should be shown.

High Schools

- Administration
- Agricultural Science
- Art

- Building Services
- Computer Learning
- Electrical Services
- General Learning
- Intensive English Centre
- Library
- Mechanical Services
- Multi-Purpose Facilities
- Music
- Other
- Other – After School Care
- Other – Commercia
- Other – Community Use
- Other – DSE Admin
- Other – Museum
- Other – TAFE
- Other – Vacant
- Performing Arts
- Physical Education
- Pupil Facilities
- Residential Facilities
- Science
- Senior Learning
- Staff facilities
- Support Unit (IS)
- Technological & Applied Studies
- Tiered Learning

GUIDE NOTE: Data shown in brackets is for information purposes only and does not form part of the usage code.

* Exceptions must be noted in the Consultant Report

** Technological & Applied Studies (TAS) replaces Home Economics and Industrial Arts

Major Building Function (Public Schools only)

This is the main current usage for the building. This should be obtained during discussions with the Principal. A maximum of two major building functions is allowable e.g. if Music and General Learning are the major functions then MUSIC/GENERAL LEARNING should be shown.

Public Schools

- Administration
- Building Services
- Communal Facilities
- Electrical Services
- General Learning
- Intensive English Centre
- Library
- Mechanical Services
- Music
- Other
- Other – After School Care
- Other – Commercia
- Other – Community Use
- Other – DSE Admin
- Other – Museum
- Other – Non-Govt Pre-School
- Other - TAFE
- Other – Vacant
- Pre-School Facilities
- Pupil Facilities
- Residential Facilities
- Special Purpose (Craft, Art, Science, TAS etc)
- Staff Facilities
- Support Unit (IS)
- Tiered Learning

GUIDE NOTE: Major building functions for Central Schools must be taken from the appropriate High School or Public School and is to be placed in the appropriate field.

When a building has been partly destroyed by fire or the internals have been totally refurbished it will be necessary to collect a new Building functionality.

Number of Storeys (Schools only)

Record the total number of floors within the building including basements.

Main External Material

Record the main external material from the Table of Materials Codes below and note whether it is painted or unpainted.

Secondary External Material

Record a secondary external material where appropriate from the Table of Materials Codes and note whether it is painted or unpainted. See Table of Material Codes.

Main Roof Material

Record the predominant roof material from the Table of Materials Codes below.

Secondary Roof Material

Record a secondary roof material where appropriate from the Table of Materials Codes below.

Main Window Frame Material

Record the dominant window frame material for the building from the Table of Materials Codes below.

Secondary Window Frame Material

Record the secondary window frame material where appropriate from the Table of Materials Codes below.

15.0 Material Codes

The codes listed are to be used in the - **EXTERNAL FABRIC, ROOF, WINDOW FRAME, FLOOR COVERING, INTERNAL FABRIC AND CEILING FINISH**

Fields in the ASCII files and the **ROAD AND PAVED SURFACE DESCRIPTIONS** used in the relevant site element tags.

Table 03: List of Material Codes

FABRIC	CODE		FABRIC	CODE
Acoustic Tile	AT		Oil	OL
Aluminium	AL		Open	OP

External Window Area (TAFE only)

Record an estimate of the total window area for a building.

Ceiling Height (School only)

Is best estimated as the internal height of the ground floor room of the building and is compulsory.

Disabled Access (TAFE only)

Record a “Y” where at least one entrance to the building has a clearance of more than 760mm does not have stairs. Where a ramp provides access to the building it must have a grade of less than 1:12 to record a “Y”.

Record an “N” where the entrance is less than 760 mm or access is only provided by stairs.

Sprinklers (TAFE only)

Record a “Y” where the building has a sprinkler system. If none, record an “N”.

Exit Signage (TAFE only)

Record a “Y” where the building generally has exit signage. If none, record an “N”.

Note: Once identified there is no requirement to check rooms within the building.

Emergency Lighting (TAFE only)

Record a “Y” where the building has emergency lighting. If none, record an “N”.

Note: Once identified there is no requirement to check rooms within the building.

Electronic Surveillance (Schools only)

Record a “Y” where the building has any form of electronic surveillance. If none, record an “N”.

Note: Once identified there is no requirement to check rooms within the building.

Year of Construction (Schools only)

Record the year of construction of the building.

Note: If no year of construction can be found the field is to be left blank. An estimate is not appropriate.

Building Identifier

This is what the building is known as locally e.g. A, BA,1 etc.

16.0 Room – Attribute Data Definitions

Definitions apply to TAFE Colleges and Schools except where otherwise defined or described.

Room / Polygon Identifier

The Room Identifier is the unique identifier for each Room. The identifier comprises:

- Building Letter/Number
- Floor Number
- Room Number

TAFE – Floor Number

Table 04: Floor Number Identifier - TAFE

Floor Level	Floor Number
Third Floor Mezzanine	M3
Third Floor	3
Second Floor Mezzanine	M2
Second Floor	2
First Floor Mezzanine	M1
First Floor	1
Ground Floor Mezzanine	M
Ground Floor	G
Lower Ground Floor 1 Mezzanine	LM1
Lower Ground Floor 1	LG1
Lower Ground Floor 2 Mezzanine	LM2
Lower Ground Floor 2	LG2
Lower Ground Floor 3 Mezzanine	LM3
Lower Ground Floor 3	LG3

Schools – Floor Number

Table 05: Floor Number Identifier -Schools

Floor Level	Floor Number
Lower Ground Floor 2	R8###
Lower Ground Floor 2 Mezzanine	M8###
Lower Ground Floor 1	R9###
Lower Ground Floor 1 Mezzanine	M9###
Ground Floor	R0###
Ground Floor Mezzanine	M0###
First Floor	R1###
First Floor Mezzanine	M1###
Second Floor	R2###
Second Floor Mezzanine	M2###
Third Floor	R3###
Third Floor Mezzanine	M3###

Note: ### represents the room number

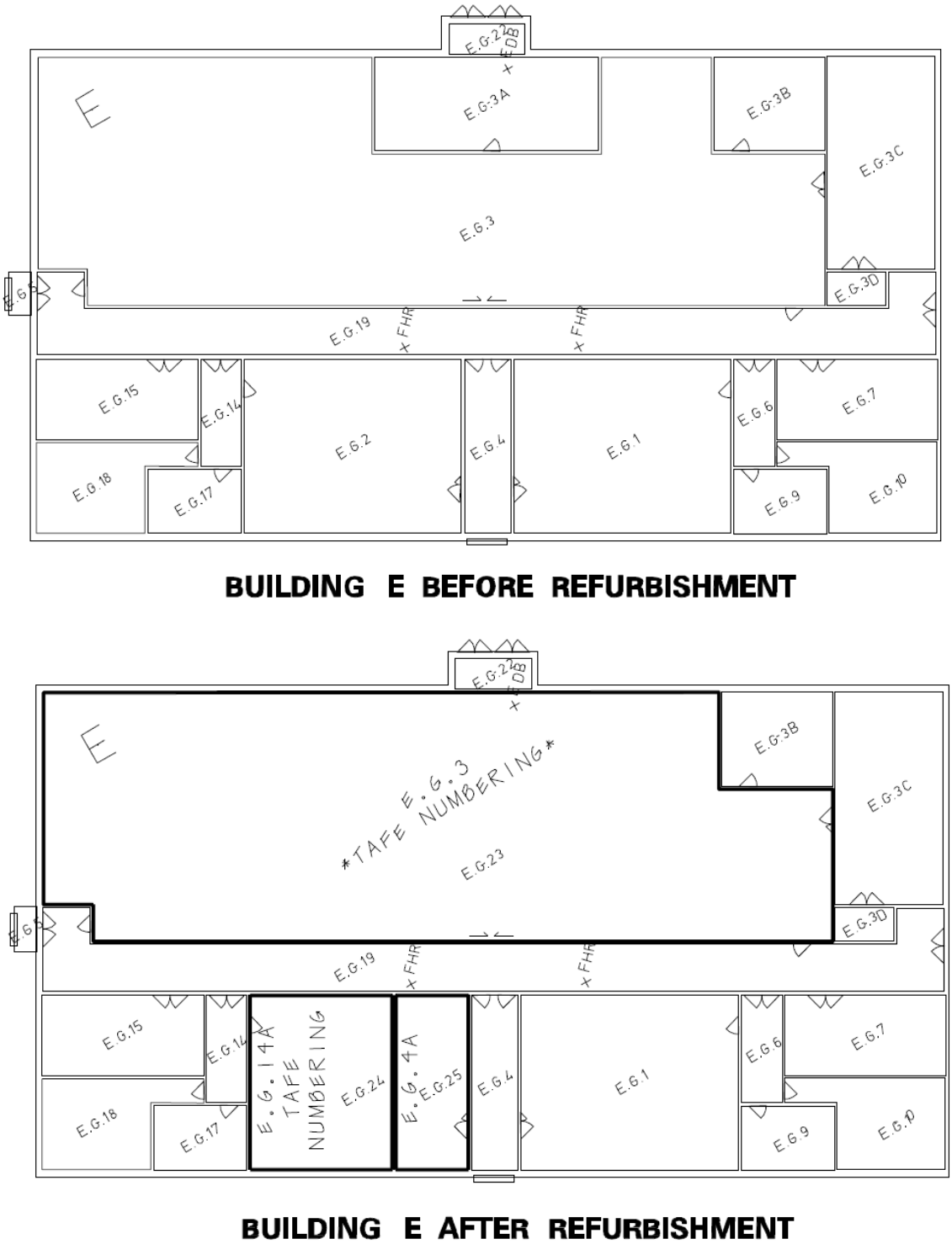
Local Room Name/Number

This is what is shown on the door. If no name or number exists then the field is to be left blank.

17.0 Data Capture Standards (TAFE/Schools)

Removal and Addition of Room Records

Figure 26: Before and after refurbishment – room number recording



ROOMS 3 AND 3A HAVE BEEN RECORDED AS DELETED AS PARTITIONING HAS BEEN REMOVED AND ROOM 23 CREATED.ASCII WOULD SHOW FOR IDENTIFICATION
H8147.E.G.23,E.G.3,,,,,,,,,,,,,,,,,,E,G,3

ROOM 2 HAS BEEN DELETED HAVING BEEN DIVIDED INTO ROOMS 24 AND 25.
ASCII WOULD SHOW FOR IDENTIFICATION
H8147.E.G.24,E.G.14A,,,,,,,,,,,,,,,,,,E,G,14A
H8147.E.G.25,E.G.4A,,,,,,,,,,,,,,,,,,E,G,4A

Room Usage (High Schools only)

This is the current usage at the time of field inspection. If the Consultant encounters a room that has a usage not on the list supplied, then it should be noted as “OTHER’.A brief explanation of its use should be made in the Consultant Report. This will generate an error message for the ATTRIBUTE data. NSW Public Works will investigate the room usage.

A photograph is required for any room classified as “OTHER”.

Use the major Building Function as a guide. Discussion with the School representative may resolve any problem rooms where usage is unclear.

Room Usage (TAFE only)

Determine the room usage using the schedule provided.

Room Usage (Public Schools only)

This is the current usage at the time of field inspection. If the Consultant encounters a room that has a usage not on the list supplied, then it should be noted as “OTHER’. A brief explanation of its use should be made in the Consultant Report. This will generate an error message for the ATTRIBUTE data. NSW Public Works will investigate the room usage.

A photograph is required for any room classified as “OTHER”.

Use the major Building Function as a guide. Discussion with the School representative may resolve any problem rooms where usage is unclear.

Major Internal Material

Select the correct material from the supplied Table of Materials Codes and also note whether it is painted or unpainted e.g., GY/P. The ‘OP’, open material code is almost useless code; only use it when there is nothing. For example, a stage in a hall, the back wall is plywood and the stage is surrounded by a steel rail, so the major and minor material codes would be PW/P & ST/U.

Secondary Internal Material

If there is a significant secondary internal material it should be collected and also note whether it is painted or unpainted e.g. GL/U.

Ceiling Material

Note the predominant type of material and select the correct code from the supplied Table of Material Codes.

Ceiling Height

Measure between the normal finished floor and prevailing ceiling height of the room. Where there is no full ceiling, measure to the underside of the prevailing lighting or service grid level. If there is a raked floor or ceiling measure from the lowest floor level to the highest ceiling level.

Required in building report for schools e.g. ground floor to first floor ceiling. Required in every room for TAFE's.

Floor Covering

Refer to the supplied Table of Material Codes to indicate the predominant floor covering for each room.

Window Area

An estimate of the total window area for each room is to be determined. If a door contains glass panelling then this is to be included.

Disabled Access (TAFE only)

The same rules apply as shown for Building ATTRIBUTE Data. If the building does not have disabled access to upper or lower floors, then each room on those levels will not have disabled access. A "Y" or "N" is required.

Electronic Surveillance (TAFE only)

Note if the room has any form of electronic surveillance. A "Y" or "N" is required.

Air Cooling

Note which category from the following is the appropriate air cooling for the room.

- D Ducted Air Conditioning
- E Ducted Evaporative Cooling
- SD Split System – Dept
- SS Split System – Sch
- W Window Unit
- None Leave Field Vacant

The Principal of the School should be consulted where a Split System is found to determine whether it was supplied by the Department or funded by the School.

Number of Workstations (TAFE only)

This is the total number of chairs/tables that are set up for teaching purposes within a room at the time of inspection. The Teacher workstation is to be included.

Dust Extraction (Schools only)

Note whether the room has DUCT, FAN or NONE (N). Examples of rooms where these may be found are Design Technology L.S., Materials Technology L.S. and Wood Technology areas.

Fume Extraction (Schools only)

There are 3 forms of fume extraction in school rooms:

1. Fume cupboards - usually found in Science preparation rooms and comprise enclosures which are mounted on benches and which contain gas, electricity and water services as well as ducted fume extraction. These are not to be measured or shown.
2. Exhaust cabinets - enclosures which are also bench-mounted, usually located in Science Learning Spaces and have fume extraction only. They do not contain the services and safety switching devices of fume cupboards.
3. Mechanical exhaust systems - simple fume extraction units comprising a fan and ducting, which can be located in dark rooms, chemical stores, hot metal areas and duplicating rooms.

Examples of rooms where these may be found are Clerical Office/Workrooms, Toilets, Darkrooms, Chemical Stores, Breeding areas, Plant spaces, Sick Bays, Laundries, Kiln

Spaces, Welding areas, Laboratories, Preparation rooms and Materials Technology L.S. areas.

For Kiln Spaces, “EXT” instead of “FAN” or “DUCT” should be noted if there is ducting to an external wall.

For Laboratories and Preparation Rooms the ATTRIBUTE data must include the following:

- S Services available (in a fume cupboard or cabinet)
- U No services available (in a fume cupboard or cabinet)
- O On/Off switch found for extraction system (in a fume cupboard or cabinet).
- N On/Off switch **not** found for extraction system (in a fume cupboard or cabinet).

GUIDE NOTE: MANY OF THESE ROOMS WILL BE SERVED BY A MECHANICAL EXHAUST ONLY.

Examples:

(1) A fume cabinet in a laboratory with a ducted system, services and power to an extraction unit would be shown as:

,DUCT/SO,

(2) A Laboratory with a mechanical exhaust fan in a window would be shown as:

,FAN,

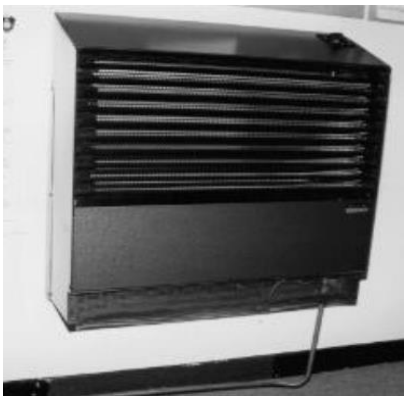
Heater Types (Schools only)

In every room the Consultant should search for permanent heaters.

The entry should be the type of heater that exists in the room e.g. GS for GAS, OL for OIL etc.

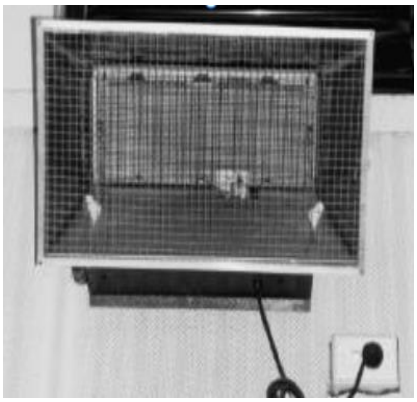
Figure 27: Examples of Room Heaters

Old Style Gas Heaters



Modern Low Nox Gas Convection Heater

Thermacon Offpeak Electric Heater



Gas Radiant Heater with Electric Start

Thermolator Gas Convection Heater

Electric Fan Convection Heater

High-mounted Electric Fan Convection Heater

Table 06: Heating systems codes

Abbreviation	Description
CH	Central heating
EO	Electric Off Peak
ER	Electric Radiant

Abbreviation	Description
GS	Gas
OL	Oil
SC	Slow Combustion

Shower Cubicles

The number of shower cubicles must be counted in every room they occur.

Toilet Bowls

The number of bowls must be counted in all toilets.

Urinals

The number of urinals per room must be counted. The total length of the urinals must also be measured to the nearest 0.1m and recorded. If there are three urinals each of 1.5 then the entry will be 3/ 4.5. Where the urinals are wall mounted the count will be for each individual unit and the individual widths totalled.

Category 5 Cabling (Schools only)

Note whether the room has RJ45 Computer Cabling sockets. A “Y” or “N” is required.

Building Identifier

This is what the building is known as locally.

Floor Identifier

This is the floor level as it is known locally.

Room Identifier

This is the local room number or the number allocated by the FDCC.

18 Room Usages – Permanent Buildings

Table 07: Identified Room Usages in Permanent Buildings for School types

Usage	Public	Infants	Special	Central	High	TAFE
Aboriginal Resource Centre	✓	✓	✓	✓	✓	✓
Access Shower/Toilet	✓	✓	✓	✓	X	X

19 Room Definitions – High Schools

This list is to assist in the classification of rooms. Some facilities may vary from the description provided below.

Note: Technological & Applied Studies has replaced Home Science and Industrial Arts

Table 08: Classification of High School room descriptions

Classification	Description
Administration Facilities	
Public Entry	Access clearly designed for visitors.
Pupil Entry	Student access routes separate from public access.
Secure Storeroom (General Learning)	A secure storeroom must have a door with a minimum of two locking points. If this is not the case and a deadlock, for example, is installed on the door; this space is considered a GENERAL STOREROOM only and should be identified as such.
(Uni-sex) Clinic	If clinic is not nominated as boys or girls - use boys. (Obviously use girls in an all girl school).
Staff Facilities	
Cleaning Staff (Room)	This space is provided for tea and meal breaks for cleaning staff.
Library	
Librarian	Used for the professional work of the librarian. Generally glazed area. Should contain a VDU/Monitor and phone.
Workroom	For clerical work, microfiche reading, covering new books etc.
Seminar	Student Group Discussion Rooms
Tiered Learning	
Tiered Learning Area	Similar to stepped theatrette.

Classification	Description
Multi-Purpose Facilities	
Kitchen	This classification is NOT to be used in T.A.S. areas.
Multi-Purpose space	Assembly Halls are now known as multi-purpose spaces. Other examples include where the movement area in front of a canteen is also used as a sport court such as a basketball court. The seating area for a multi-purpose space is considered part of that space.
Gymnasium	This is where specific gymnasium equipment such as parallel bars is erected for use.
Performing Arts Facilities	
Performance Workshop	Drama rooms etc. Also in this category are schools, newspapers and radios - an expanded local room number to be used to indicate the usage.
General Learning Facilities	
General Learning Space	Most learning activities occur within the General Learning Spaces. Furniture is used to create degrees of formality and informality: • Tables and chairs in rows facing a screen, chalkboard and/or teacher • Groups of tables arranged in conference or cafe patterns.
Serviced Learning Space	This is a General Learning Space that provides facilities for Science classes that cannot be timetabled into a Laboratory. Lessons other than Science will also take place in this space. Provision is required for demonstration, appropriate practical work and viewing audio-visual material. Storage is required for equipment.
Special Learning Space	A learning space specifically designed for pupils with intellectual disabilities.
Secure Storeroom	A secure storeroom must have a door with a minimum of two (General Learning) locking points. If this is not the case and a deadlock, for example, is installed on the door; this space is considered a GENERAL STOREROOM only and should be identified as such.

Classification	Description
Senior Learning Facilities	
Senior study	It will be necessary to enquire as to who uses this space to confirm that it is a senior study rather than a “STUDY SPACE”.
Computer Learning Facilities	
Computer Resource	Will probably contain equipment such as printers and plotters.
Communication Space	This is the control room for schools at which “Category 5 Cabling” has been installed. The room may be double locked.
Communication Cupboard	These may be found throughout schools at which “Category 5 Cabling” has been installed. They may be similar to electrical distribution cupboards and should not be confused.
Category 5 Cabling	Communication cabling for phone, data and video. These use RJ45 outlets.
Science	
Breeding	Room for breeding - care of small animals.
Growing/Breeding	Where there are no Agricultural Science facilities there may be a growing/breeding space instead of a breeding space. This may house plants and/or animals.
Technological & Applied Studies	

Classification	Description
Food Technology L.S.	This is like the old home science learning spaces and can include a kitchen or small dining room (12-15 m²)
Food/Research Space	This is a small learning space usually attached to a Food Technology Learning Space.
Design L.S.-Textiles	Design work using materials etc - separate from sewing.
Design L.S.-Tech Drawing	Old industrial arts learning space, includes Technical Drawing and Graphic Arts etc.
Design L.S.-Testing	For soil testing, materials testing etc.
Design/Technology	This is a type of room more so than a particular usage. There are usually extra power points hanging down from the ceiling and the windows are often double-glazed. Usually set up like a normal learning space with normal desks. When this type of room is used for an identified purpose e.g. Computer L.S. or General L.S. then that code should be used. Design/Technology should only be used for Robotics or Electronics or if there is not a specific use e.g. the room is vacant.
Materials Technology L.S.	Learning space for metal and plastics technologies. This is different to a “METAL TECHNOLOGY BAY” in that there should be a blackboard for formal lessons whereas the latter is designed to hold a number of machines only.
Workshop	Formerly the Major Projects area, e.g. cars, canoe making etc. These will be rare and unlikely to occur more than once in a school.
Agricultural Sciences	
Agriculture Covered Area	An area for agricultural demonstrations - may be a closed in room or open sided.
Building Service	
Cleaning Distributed Store	These are provided throughout the School to facilitate daily ready use of supplies and equipment by minimising carrying distances. Changing lockers may be found in these spaces.
Other	

Classification	Description
Movement Area	An area within the building outline used for the purpose of movement between other rooms within that particular building. These will include all hallways and corridors running around and through the building. Movement areas also include foyers and entry areas under the main roof outline. The line of delineation between a movement area and a covered way occurs where the structure becomes free standing providing movement between buildings. *See Covered Ways description.* When measuring the corridors of some older style buildings lockers line the walls. At the base of these lockers is a low brick or timber wall that the lockers rest upon. This is the point that the dimensions of the movement area should be determined from.
Handwashing	A room exclusively for students to wash. If attached to toilet shower etc - it is part of toilet, shower etc.

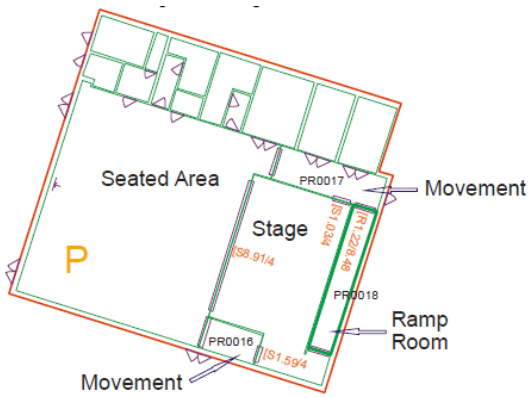
21 Exceptions

Ramp Room

Where there is a stage with a ramp between it and the back wall it is used for access from the seated area to the stage level.

A ramp would normally be a ramp symbol within a movement area polygon. The client requested the ramp be within its own polygon and attribute data collected as a ramp.

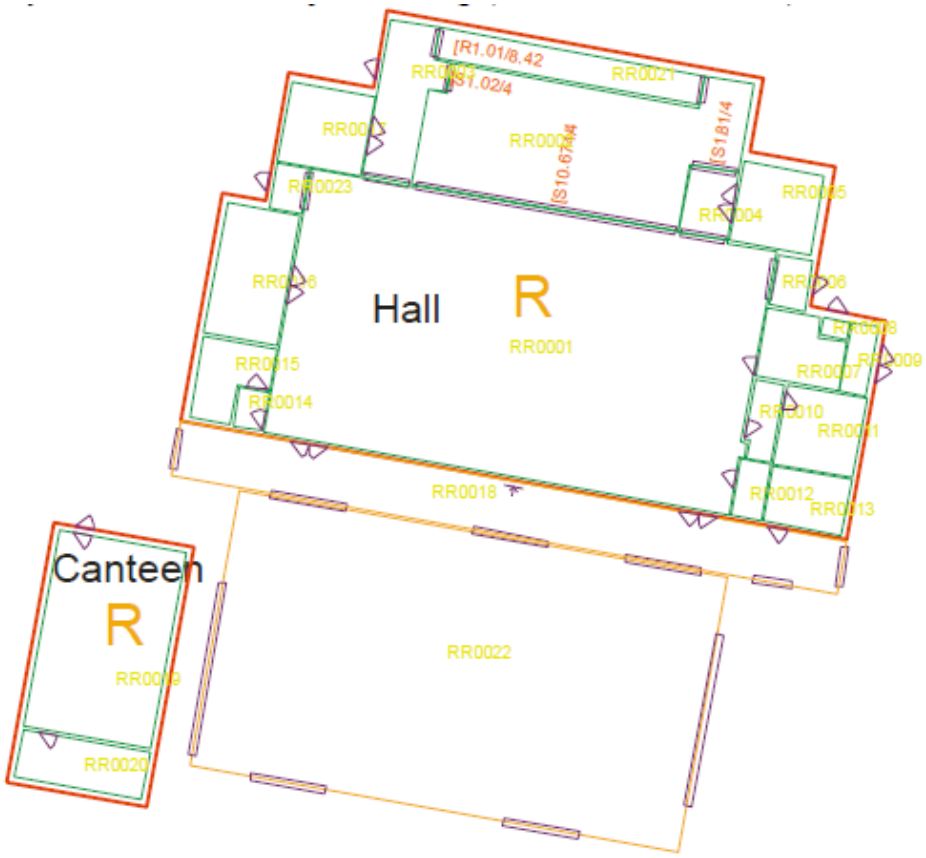
Figure 28: Attributing ramps in relation to a stage.



Hall and Canteen

When there is, say a 14 Core Square Hall and Canteen built together. These two buildings would have had different building numbers. The client has requested that these two buildings have the same number and the building style be set for the major building (i.e. 14 SQ HALL etc) and not CANTEEN.

Figure 29: Attributing two buildings under the same reference.



22 School/TAFE Representative Sign Off Checklist

Placeholder for checklist

23 Field Data Capture Project Completion Checklist

PWA Surveying & Spatial

Field Data Capture Project

FIELD DATA CAPTURE OFFICER CHECKLIST

SCHOOL DETAILS			
School Name		School No.	

SITE ELEMENTS:		
1	Project Safety Plan completed and attached	☐
2	Discussion with School/TAFE Representative – Sign Off Checklist signed	☐
3	North Point shown	☐
4	**Vista** and **New Building** photographs taken, numbered & positioned on field notes or reference sheet	☐
5	All new site elements captured as per Field Data Specifications (SUM0413)	☐

BUILDING ELEMENTS:		
1	North Point shown	☐
2	Building Dimensions **Close**	☐
	Building Dimensions **Does Not Close.** Will require an explanation and this Job may be rejected	☐
3	Number of Building Details Sheets attached (SLIS Plots, Diagrams & Architecturals etc)	
4	All new/modified building elements captured as per Field Data Specifications	☐

ROOM ELEMENTS:		
1	All room elements captured as per Field Data Specifications	☐
2	All rooms dimensioned. (Including movement area near stairs)	☐
3	Room Dimensions **Close**	☐
4	All rooms have architectural features such as doors, operable walls etc	☐
5	All rooms are numbered	☐
6	The internal rooms fit inside the Building Envelope	☐

FDCC OFFICE WORK:		
1	All photographs have been numbered	☐
2	Building Details Sheets should be numbered 1 of __, 2 of __ etc)	☐
3	Number of Building Detail Sheets and DocDEC sheets attached for the site:	
4	DocDEC completed	☐
6	Surveyor comments (DocDEC), entered & printed	☐
7	QA Summary printed & signed	☐

Signed	Choose an item.	Date	Click here to enter a date.

Document Control Number SUCSU28 (30/08/2017)

24 APPENDIXES

Co-ordinate System

Lambert - NSW Mapping Agencies (pre GDA) note, not present Lambert co-ordinate used by people like RTA (2010).

This Lambert projection was used by many NSW mapping agencies (primarily CMA) for state-wide hard copy maps based on the Australian Geodetic Datum 1966 see www.ga.gov.au/geodesy/datums/agd.jsp

- Projection: Conformal Conic
- Standard Parallels: -29º 30' 00" and -35º 30' 00"
- Latitude of Origin: -32º 30' 00"
- Central Meridian: 147º 00' 00"
- False Easting: n/a
- False Northing: n/a
- Units: Metre
- Ellipsoid: ANS

Data Accuracy Requirements

Each data element to be captured has positional and dimensional accuracy requirements depending on the DEC user requirements for the element. The accuracy requirement categories are set out below.

Category A

Positional

Locate on the coordinate base of the data provided by NSW Public Works or where data is not available on an arbitrary coordinate base.

Dimensional

Plot to the accuracy of the source data.

Category B

Positional

≥ 95% of the element's true location with respect to surrounding elements and the site boundary.

Dimensional

≥ 99% of the element's true dimension for distances less than 5 metres and +/- 0.05 for distances greater than 5 metres.

Category C

Positional

≥ 90% of the element's true location with respect to surrounding elements and the site boundary.

Dimensional

≥ 90% of the element's true area.

Category D

Positional

≥ 90% of the element's true location with respect to the surrounding elements and the site boundary.

Dimensional

≥ 95% of the element's true dimension.

Category E

Positional

≥ 90% of the element's true location with respect to the surrounding elements and the site boundary.

Terms and Definitions for this project

Geographic Information System (G.I.S.)

A system of capturing, storing, checking, integrating, analysing and displaying data about the earth that is spatially referenced. It is normally taken to include a spatially referenced database and appropriate application software.

Line Feature

A set of ordered co-ordinates that represents the shape of a geographic feature that is too narrow to be displayed as an area eg. centreline of transmission lines, contours.

Polygon Feature

A closed shape that defines a feature. It must contain a tag.

Tag

A unique descriptive identifier found in the graphic and/or textual database; and can be used to link the two together.

QA

Abbreviation for Quality Assurance.

Code of Conduct – Child Protection

This code applies to all contractors and their subcontractors, suppliers and consultants.

All persons must read and certify that they have read and understood this Code before commencing work and/or entering School /TAFE premises.

Any breach of the Code is a serious offence and will lead to disciplinary and/or contractual action.

All persons must gain permission to enter the School/TAFE or other facility before commencing work and they may only enter approved areas.

Generally, the following arrangements will apply, unless the senior person at the School/TAFE or other facility gives written authority to use alternative arrangements.

All persons must comply with the following rules:

- The contractor's or subcontractor's (when working unsupervised) representative attending the site must report their presence to the School/TAFE Principal immediately on arrival each day and record their details and all employees and/or subcontractors' staff on School/TAFE premises in the Site visit log, located at the Administration Office.
- No talking with, touching or interacting with any children or residents except in a serious emergency or safety situation.
- No use of toilets or amenities – toilets, bubblers, bike racks, showers, canteens or other facilities at the School/TAFE. Only approved separate toilets and other

facilities are to be used and these must be kept separate from any area used by children.

- The work area must not be able to be used/accessed by children. Clear signs and barricades (wherever possible) must be used to prevent any inadvertent and/or unauthorised access.
- Where maintenance and/or cleaning of toilets and similar facilities are necessary, two persons must always be present. Wherever possible, at least one male should be present when male toilets are being maintained/repainted/cleaned and at least one female should be present when similar work is being done to female toilets.
- Any concerns about children's behaviour must be immediately reported to a senior client representative, such as School/TAFE Principal or similar person at DOCS and Juvenile Justice and other facilities.
- An identity card must be worn or carried at all times when on or near the School/TAFE site.
- Tidy clothing must be worn at all times, including shirt, shorts or trousers, and must be in good condition.

…….

Signature

…….

Name

…….

Company

…….

Date

[Index removed intentionally]