CADD DOCUMENTATION PROCEDURES MANUAL

For

Lodgement of Plans of

"LIQUOR LICENSED PREMISES"

in electronic format

To be read in conjunction with Regulation 11

CONTENTS.

1.
INTRODUCTION.

1. INTRODUCTION

1.1. GENERAL

This document sets out the conditions and requirements in relation to CADD procedures and the standards for electronic documentation produced for submission to the *Department of Racing Gaming & Liquor* (DRGL) in respect to plans of LIQUOR LICENSED PREMISES.

For uniformity of processing, plan storage, retrieval and the plotting of drawings it has been necessary to implement standard procedures in relation to the production of CADD drawings.

This document is an abridged version of the standards developed by *Department for Housing & Works* (formerly BMA/CAMS). The standard has been established for more than ten years across the multi-discipline environment of that organisation.

1.2. SCHEDULE OF DOCUMENTATION TO BE SUPPLIED

The Applicant shall supply the same documents as required by Regulation 11 of the *Liquor Licensing Regulations 1988* as amended, however in place of the prescribed number of copies of plans / drawings the following is substituted : -

- 1 copy of CADD drawings in .DWG format plus support documentation as required by this protocol
- 1 copy of each drawing printed to 'scale' on an appropriate paper size

1.3. PROVISION OF DATA TO DRGL

- "AutoCAD LT 2002" is the CADD platform used by DRGL.
- Applicants are to ensure that their CADD system can produce electronic copies of the drawings in a format compatible with the above mentioned version of AutoCAD.
- DRGL's requirement is for drawings to be supplied in AutoCAD .DWG format only. They must be drawn in '2D' with all 'Z' coordinates set to ZERO (0).
- AutoCAD LT 2002 will successfully read drawings produced by earlier versions of AutoCAD.
- Where another CADD system is used, it shall be the responsibility of the applicant to supply drawings to DRGL in an AutoCAD.DWG format only.
- No raster images shall be included in the data delivered to DRGL.
- CADD drawings shall be provided as above in electronic format, on Floppy diskettes of 3.5 inch - 1.44Mb DOS format or alternatively on CDROM. Plans may only be lodged via e-mail if prior arrangements have been made with an "*Inspector of Licensed Premises*".
- Applicants shall nominate on all disks the version and name of the CADD software used.
- The drawings shall comply with the standards referred to in this manual.
- Applicants shall complete and sign the CADD Drawing checklist, to signify that they have complied with the DRGL requirements. Refer to Section 5.
- Applicants shall provide copies of the Project and CADD Drawing information sheets, attached to the back of this manual, duly completed, with separate copies of the CADD drawing information sheet for each disk supplied, to DRGL. Refer to Section 5.
- No manual updating of CADD drawings is allowed.
- The supply of "as constructed / built" CADD drawings to DRGL remains the responsibility of the applicant.

PRIOR TO SUPPLY OF DRAWINGS TO DRGL, PLEASE REFER TO SECTION 5 FOR DETAILS ON COMPLETING THE PROJECT INFORMATION AND CADD DRAWING CHECKLIST REQUIREMENTS.

1.3.1. DRAWING COMPRESSION

CADD Drawings can be supplied to DRGL in a compressed AutoCAD ".DWG" format.

They must be compressed to a .ZIP format using the PKZIP or WINZIP compression program.

1.4. PROVISION OF DATA TO THE APPLICANT / CONSULTANT

IMPORTANT: PLEASE READ THIS SECTION CAREFULLY BEFORE PRODUCING ANY DRAWINGS FOR DRGL.

DRGL will provide the following files for the use of the Applicant /Consultant.

File Name	Description
LLD CADD MANUAL. DOC	A Copy of DRGL's 'CADD Manual' in *Word for Windows* format.
LLD CADD MANUAL. PDF	A Copy of DRGL's 'CADD Manual' in "PDF" format.

1.4.1. LINETYPES AND HATCH PATTERNS

Consultants shall use only the STANDARD linetypes and hatch patterns as supplied with the relevant CADD system.

1.4.2. BASE.DWG

NOT APPLICABLE AT THIS TIME !

1.4.3. TEXT IN DRAWINGS

All text in the drawings shall be ISO font type. (ISO3098B for R12 users, ISO9 for LT users and ISOCP2 for R13, R14 and R2000 users)
N.B. - All special fonts used in consultant logos are to be supplied by the consultant

3.
DRAFTING STANDARDS.

3. DRAFTING STANDARDS

3.1 DRAWING FILE NAMING CONVENTIONS

All drawing files must consist of 8 characters as follows.

1. **Characters - 1 to 3** identifies the job description. (must be 3 characters)

   Example. JPC – Joondalup Police Complex.

2. **Character 4** identifies the Practice or Discipline.

   A = Architectural.

   X=Xref Drawing (refer to note)

NOTE: Where drawings are used **unmodified** for external referencing, this is acceptable. However where the drawing is modified in any way prior to its use as an external reference the drawing must be named with the X prefix to distinguish it from the original drawing.

3. **Characters 5 & 6** identify the drawing number.

   Example. 01 through to 99

4. **Character 7** identifies the drawing description.

   A = Site Plan and or Details.
   P = Plan.

5. **Character 8** identifies the drawing scale.

   0 = 1:1
   1=1:5
   2=1:10
   3=1:20
   4 = 1:50
   5 = 1:100
   6=1:200
   7 = 1:500
   8=1:1000
   9=1:2000

6. **Typical Example**.

   JPCA01P5 or JPCA01A7

3.2 W BLOCK NAMING CONVENTIONS

All W BLOCKS created by computer for use in CADD drawings shall consist of 8 characters as follows: Consultants block naming convention for any other blocks that are bound into the drawing are acceptable. All W Blocks of standard details, supplied by a manufacturer, can keep their manufacturer assigned name.

1. **Character - 1** identifies the Practice or Discipline.

   A = Architectural.
   X = External Reference drawing

2. **Character 2**.

   Where the first character is an X signifying an external reference, the 2nd character shall identify the Practice or discipline. Otherwise use a Dash.

3. **Characters 3 - 5** identify the name type.

eg: SSS = Stainless Steel Sink or WC- = Water Closet, SHR = Shower, BTH = Bath etc

4. **Character 6** identifies the drawing type.

P = Plan.
F = Front Elevation.
S = Section or Side.

5. **Character 7** identifies the drawing orientation.

L = Left
R = Right
- = Where no orientation is required use a Dash.

6. **Character 8** is a free descriptor to identify particular types or sequence numbers.

Some examples are
A = Assisted, W = Wheelchair, C = Children, P = Patients.

All WBlocks created must use all 8 characters in their name. - The characters used are position sensitive as well. Use a DASH to fill any gaps in the 8 characters.

eg: A-WC-PLA, XPSHRS—

NOTE:
All blocks SHALL be drawn on LAYER 0 and inserted on relevant layer
OR
drawn on their relevant layer(s) BUT SHALL then be INSERTED on LAYER 0
AND
created using colour and linetype BYBLOCK .

3.3 AUSTRALIAN STANDARDS

Drawings shall meet the requirements of the relevant parts of the Australian Standard drafting codes.

AS 1100 Part 101-1984	Technical Drawing	General Principles.
AS 1100 Part 301-1984	Technical Drawing	Architectural Drawing.

3.4 GRAPHIC SYMBOLS

Graphic symbols shall be in accordance with the relevant Australian Standards Association publications.

3.5 LINEWORK

All linework shall be as follows .

PEN SIZE No (mm)	COLOUR	COLOUR or PEN No	LOW LIGHT COLOUR
0.18	RED	1	9
0.25	YELLOW	2	10
0.35	GREEN	3	11
0.50	CYAN	4	12
0.25	BLUE	5	13
0.70	MAGENTA	6	14
1.00	WHITE	7	15
0.25	GREY	8	

NOTE: On some graphic screens - particularly those using 256 colors the low light colours may differ from those listed above. For example low light red may be colour 10 not 9 and so on to low light white as colour 16. Other graphics cards may show different colours to those indicated for colours 10 to 16.

The colour number system as listed above is to be utilised regardless of displayed colour as the plotting routines set pen thicknesses by colour number not what is displayed on the screen.

Where 256 colour graphics are utilised the colour numbers are to be restricted to those listed above. As a general rule only 5 colours are required - colours 1,2,3,4,6, and occasionally 7.

Colour by layer or linetype is equally acceptable but discipline must be maintained to ensure that one method only is to be used in the production of drawings.

A minimum plotting thickness of 0.18mm is to be used on all drawings.

3.6 LINE SPACING

Parallel lines shall be drawn with a clear space between them of not less than 3 times that of the line thickness used, with a minimum spacing of 1mm.

Spacings of hatch lines shall be proportional to the area covered, but in no case less than 2mm

A single thick line shall be drawn to indicate metal thicknesses in section in lieu of 2 thin lines.

3.7 LETTERING

All lettering for standard drafting documentation shall be standard Font file ISO (ISO,ISO9, ISO3098B or ISOCP2) vertical plain, uncondensed with a minimum text height of 2mm with a 0.25mm thickness.

All text shall be uppercase only

For General Notation use a minimum text height of 2mm with a 0.25mm thickness.

For Main Headings, i.e. PLAN, ELEVATION etc use 5mm high with a 0.5mm thickness.

For notating General Areas use 5mm high with a 0.5mm thickness.

For notating Specific Areas use 3.5mm high with a 0.35mm thickness.

3.8 DIMENSIONING

For dimension text use 2mm height with a 0.25mm thickness.

Ticks used in associated dimensioning shall be in a 0.5mm thickness.

Arrow head used in dimensioning shall be in a 0.25mm thickness.

Arrow Size shall be 3mm

3.9 DRAWING SHEET SIZE

All drawings must be set-up to standard International sheet sizes Ie: A4, A3, A2, A1, A0 size sheets. Limits to be set appropriately. Eg: **297, 420**.

3.10 SCALE

ALL drawing shall be constructed at FULL SIZE. Under no circumstances is a drawing to be scaled

The scale of the final drawing which determines the initial insertion of the BASE drawing is to reflect the smallest scale drawing on the sheet. For example if the drawing is a 1:20 section with 1:5 details, the 1:20 section takes precedence for the plot scale.

The drawing measurement is to be set to millimetres for building works or metres for geographical drawings (survey drawings)

3.11 SHADING

Under **NO** circumstances is manually applied shading, applied toner or colour, pencil work material indication etc to be used on CADD drawing.
The system allows all these facilities, SO PLEASE USE THEM.

3.12 DRAWING LAYOUT

All views, dimensions, lines, characters and notes shall be kept well spaced out. Locate all notes clear of drawing details.

Avoid unnecessary embellishment and repetition.

If necessary show areas of fine detail suitably enlarged on additional sheets.

3.15 EXTERNAL REFERENCING

The methodology of producing drawings using the X-REF or X-CLIP command of AutoCAD is acceptable.

The "PATH" for the X-REF file shall be set to default to the current working directory.

The X-REF drawing file(s) may be bound into the main drawing file, providing the total file size does not exceed 1.5Mb and the X-REF drawing file(s) does NOT contain any frozen or turned off layers.
The Consultant shall supply ALL X-REF drawing file(s). Refer to drawing naming conventions regarding external referencing files.

All X REF's shall contain only the layers required. All layers not required, shall be deleted.

Linework shall comply with section 3.5 Linework.

Refer to the CADD Drawing Information sheet for further information.

All external reference files used in drawings shall be inserted on Layer 0

3.16 MODEL SPACE / PAPER SPACE

All drawings, unless otherwise discussed with DRGL, shall be produced as a 2D drawing file using only MODEL SPACE, with TILEMODE set to 1.

There will be NO tiled view ports used in model space.

PAPER SPACE SHALL NOT BE USED FOR THE PRODUCTION OF 2D CADD DRAWINGS.

3.18 PURGING

All unused layers, linetypes, text styles etc are to be purged from the drawing.

3.19 LIMITS

The limits are to be set to the correct sheet size, with the bottom left hand corner set to 0,0.

3.20 LAYERS

All layers are to be turned on.

In Autocad 2002 or Autocad LT 2002, in the layering dialogue box, no layers are to be turned off for plotting.

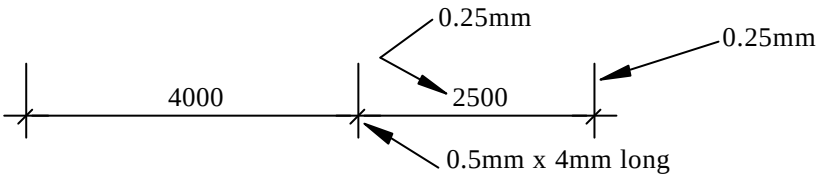
3.21 ENTITIES OUTSIDE DRAWING BORDERS

All entities outside the drawing borders are to be erased

3.22 TERMINATION OF DIMENSION LINES

Show termination of dimension lines as follows:

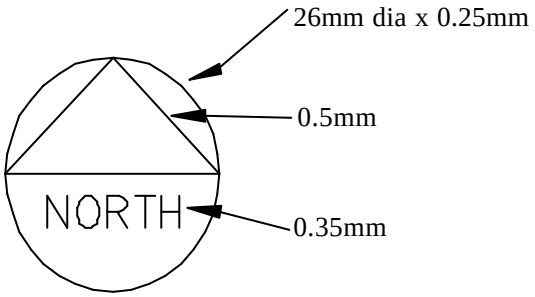
Use Dimblk1 and Dimblk2.dwg as supplied



3.23. NORTH POINT

Show north Point as Follows:

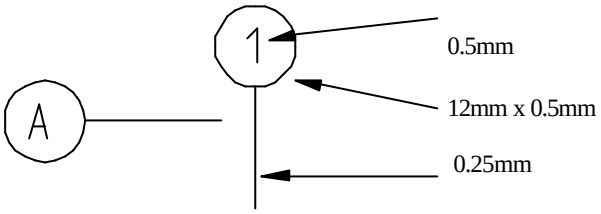
This north point block is installed into the A1base.dwg supplied.



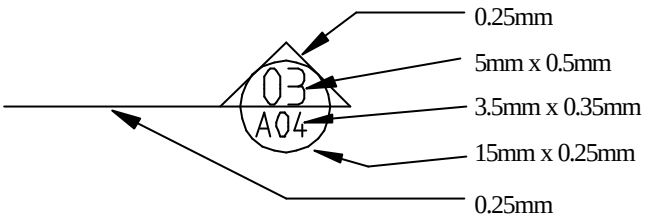
3.24.CROSS REFERENCE SYMBOLS

Cross reference drawings as follows:

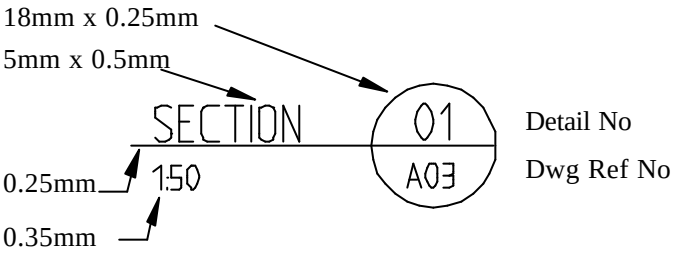
3.24.1 .GRID MARKS



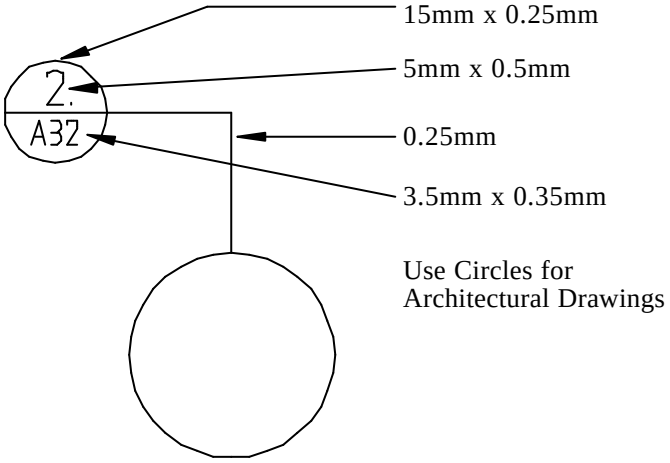
3.24.2. SECTION MARKS



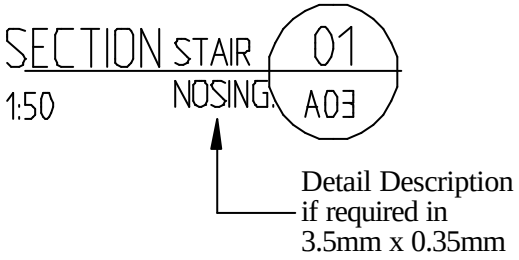
3.24.3. SECTION TITLE

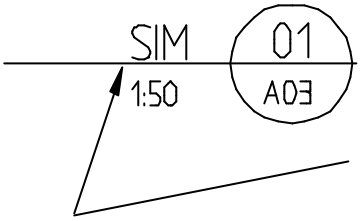


3.24.4. ELEVATION/SECTION DETAIL MARK



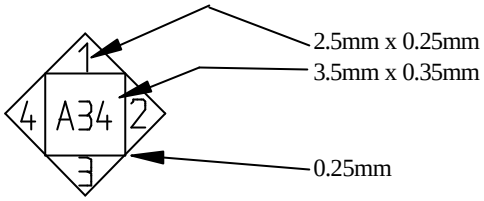
3.24.5. DETAIL TITLE





Use SIM where the same detail reference applies but it is handed, mirrored or has a grid reference variation

3.24.6 .ELEVATION DETAIL (ROOM)



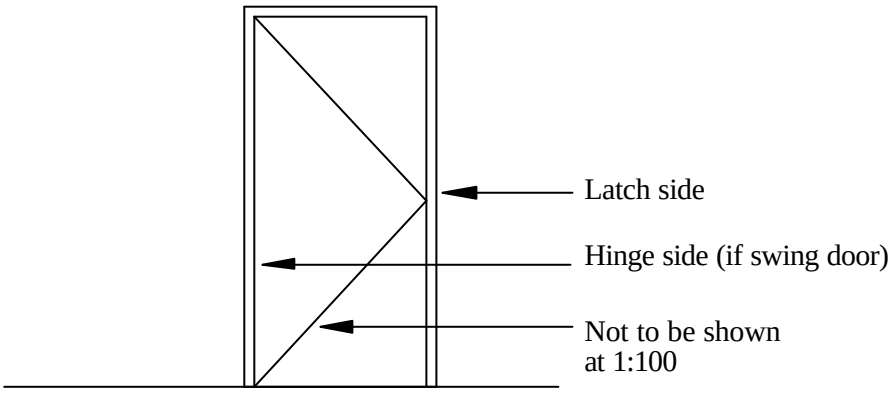
Cross reference on the Same sheet

Where a cross reference occurs on the same sheet substitute a dash (-) for the sheet number

3.25 DOORS, WINDOWS AND GRILLES

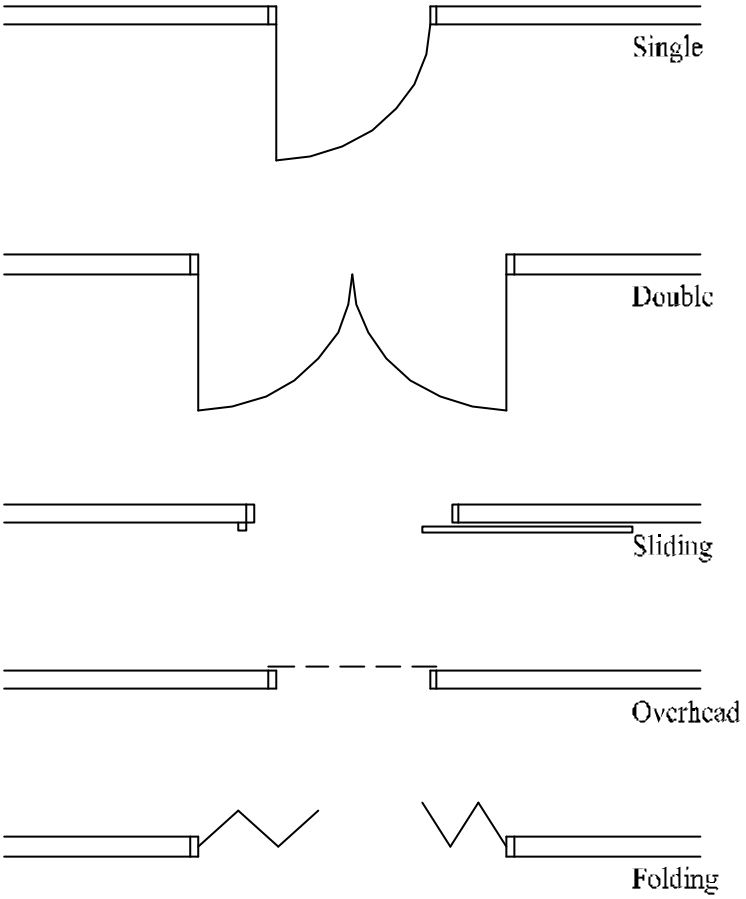
Show as follows:

3.25.1 DOORS - ELEVATIONS



Large scale only

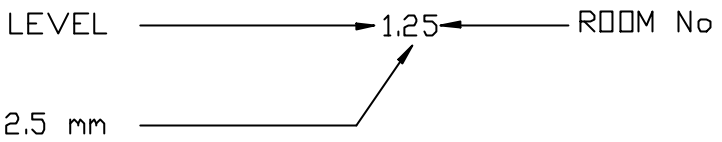
3.25.2 DOORS – PLANS


Single
Double
Sliding
Overhead
Folding

3.26 ROOM REFERENCES

Room names – refer to Section 3.7 Specific Areas

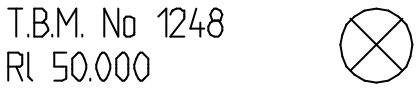
On larger projects, when the use of room names on the 1:100 floor plans is considered undesirable for clarity, room referencing shall be as follows:



3.27 LEVELS

Show all levels in metres to 3 decimal places and indicated as follows.

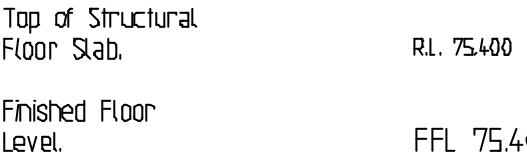
Job Datum



Area

Spot Levels

Controlling Plane



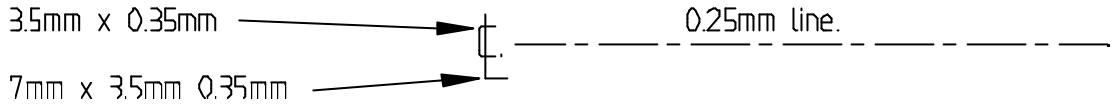
Contours

3.28 ORIENTATION

Orientate all plans and parts of plans so that NORTH is towards the top of the sheet where possible.

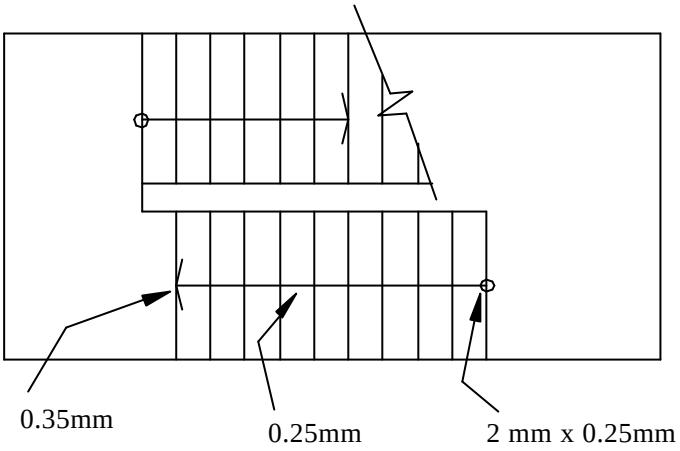
3.29 CENTRE LINE

Draw centre lines as 0.25mm thick (red) using the linetype center line and indicated as follows:



3.30 STAIRS

Point arrows in UPWARDS direction without rotation as follows



3.31 RAMPS

Show as follows

Arrows as for stairs

3.32 SYMBOLIC REPRESENTATION OF MATERIALS

Refer to AS 1100 - Part 301 - 1985

3.33 AMENDMENTS

Amendments to drawings shall be marked on drawings and noted in amendment block and in title block.

Letters shall be used for tender amendments and numerals shall be used for post tender amendments.

4.
LAYERING STANDARDS.

4 CADD LAYERING PROTOCOL

4.1 GENERAL

The numbering system shown in the following table is based on a 3 digit number protocol that is based on hundreds tens and units. The numbers shown in the table below are referred to as the PRIMARY numbers. e.g. 230 (In the TABLE below: 230 = MASONRY WALLS). However in describing the layer name the 'primary number' is followed with a description. Eg. 230 WALLS

Specific information associated with the 'primary number' can be placed on another layer by creating a SECONDARY definition.
e.g 230SINGLEWALL, 230BRICKWALLS.

Survey drawings are also to use the protocol to present their information.

e.g. 072 KERB, 072 KERB TXT, 072 KERB RL

140 TREE, 140 TREE TXT, 140 TREE RL

231 BUILDING, 231 BUILDING TXT, 231 BUILDING RL

Drawings produced by all Consultants must conform to the DRGL layering system as follows:

1. **All DRAWINGS** must be drawn utilising the layering protocol described on the next page.

2. **All LAYERS** must have the layer number as well as the layer definition
eg 050-NEW LEVELS.

NOTE: Layer definition can be abbreviated as long as the naming remains clear

4.2 LAYERING PROTOCOL

Layer Number	Layer Definition	Layer Number	Layer Definition
000	Hatch Boundary		
0	General Linework	420	Paving
021	A2 A1 Sheet		
		444	Partitions
030	All Dimensions	450	Roofing (gutters, flashings, insulation, cappings, rwp's, skylights etc)
032	Room Names	459	Suspended Ceilings (bulkheads)
033	Room Numbers	460	Curtain Walls
034	Floor Finishes (carpet, etc)	461	New Windows (window shutters)
		462	Existing Windows
		463	Existing Windows Removed
037	General Arch. Text	465	New Doors
		466	Existing Doors.
039	Amendments, As Const	467	Existing Doors removed.
040	Grids		
045	Existing Levels		
050	New Levels (RL, FFL)		
060	Symbols		
062	Hatch Patterns		
		600	Fixed Furniture
072	Site Features (kerbs, fences, manholes, road marking, key plan etc)	601	Existing FF
140	Vegetation (trees. gardens)	602	Existing FF removed
190	Demolition	610	Loose Furn
210	Groundworks (embankments, excavation etc)	615	Furniture Text
		651	Existing Plumb Fixt.
		652	Existing Plumb. Fixt. Removed
230	Masonry Walls	700	Hydraulics
231	Existing Walls (building outline on site plan)		
232	Existing Walls Removed	737	Plumbing Fixtures (taps, sinks, basins, toilets etc)
		800	Elecrical
		850	Mechanical
260	Metalwork (studwork etc)		
270	Woodwork (timber beams etc)	910	Exterior Spaces (ovals, tennis courts etc)
280	Glazing	922	Roadworks
		930	Semi Enclosed Spaces

5.
PROJECT AND DRAWING INFORMATION SHEETS.

5. PROJECT AND DRAWING INFORMATION SHEETS

The following '**CADD DRAWING CHECKLIST**' and '**CADD DRAWING INFORMATION**' sheets **shall be copied by the Applicant and supplied to DRGL with the CADD disks**.

5.1 CADD DRAWING CHECKLIST

Complete and sign the checklist to signify compliance with DRGL requirements.

All drawings shall be supplied on DOS formatted 3.5 inch floppy disks 1.44MB capacity or cdrom and in an AutoCAD.DWG format **only**.

Where drawings are too large to fit on a disk or there are a large number of drawings they shall be compressed to a .ZIP format utilizing the PKZIP compression utility. Refer to INTRODUCTION for more information.

Where a compressed drawing will not fit on a single disk then the PKZIP utility shall be used to span multiple disks. Refer to the PKZIP Manual for information.

All disks shall be scanned for virus infections prior to issue to DOGRL.

5.2 DRAWING INFORMATION SHEETS

Supply a separate 'CADD Drawing Information' Sheet for each disk supplied complete with all information.

CADD DRAWING CHECKLIST

PROJECT NAME:_____

(Name of proposed / existing Liquor Licensed premises)

Tick the box to indicate compliance with DRGL requirements.

- ☐ All disks have be scanned for virus infections.
- ☐ All file names comply with the DRGL drawing file naming convention.
- ☐ Drawings produced on standard drawing sheets**.**
- ☐ The current layer to all drawings is set to 0.
- ☐ All 'Z' coordinates are set to 0.
- ☐ The drawing units are full size and the drawing measurement is set to millimetres for building works or metres for geographical drawings (survey drawings)
- ☐ The limits are set to the correct sheet size with the bottom left hand corner set to 0,0. (model space limits equals what model space uses)
- ☐ The drawing is in model space i.e. Tilemode set to 1.
- ☐ All layers are turned on.
- ☐ All entities not required, to be deleted.
- ☐ The Entity colours conform to the DRGL CADD Documentation Procedures Manual.
- ☐ Text styles, linetypes & hatching are to conform to the DRGL CADD Documentation Procedures Manual.
- ☐ All entities are placed on their correct layer, using the DRGL layering protocol.
- ☐ All drawings have all unused layers, linetypes, blocks, text styles etc purged from the drawing(s) and all extraneous information erased.
- ☐ All X-ref drawing(s) files used in the production of the drawings are provided .
- ☐ The 'CADD DRAWING INFORMATION' sheet has been completed including indication of X-references.
- ☐ Each "As constructed" drawing is clearly labelled

APPLICANT / CONSULTANT NAME: _____

SIGNATURE _____

(Authorised Person)

DATE:_____

COMMENTS.....

.....

.....

.....

.....

.....

☐ ACCEPTED ☐ RETURNED

CADD DRAWING INFORMATION

Supply a separate sheet for each disk.

PROJECT NAME:_____

DRGL JOB FILE No_____

CADD File Name	Dwg No	Revsn No	Drawing Name	Drawing Scale	X refs (From)	X refs (To)
JPCA01P5	**A01**		**Site Plan**	**1:500**	**XPCA10P4 XPCA11P4**	

EXTRACT FROM THE LIQUOR LICENSING REGULATIONS 198

REGULATION 11 – PLANS AND SPECIFICATIONS

1. Unless the Director otherwise approves, plans submitted under section 66 are required to include:-

(a) Floor plans in triplicate, at least A2 in size, drawn to a scale of 1:100, of each level of each building the premises to which the application relates, showing fixtures, fittings and the uses of all rooms, e floor plan being drawn on a separate sheet of paper;

(b) a site plan in duplicate, drawn to a scale of 1:500 either on one of the floor plan sheets or o separate sheet of paper, showing-

- an outline of every building on the premises to which the application relates;
- the boundary of the land on which those premises are or are to be situated;
- the front entrance of every building on those premises;
- car parks and vehicular access to adjacent streets;
- the names of adjacent streets;
- features such as swimming pools and other outdoor areas on those premises;

(c) a map in duplicate of the relevant district, drawn on paper of at least A4 size, or, if space permits, c floor plan or site plan sheet, showing the land on which the proposed licensed premises are or ar be situated; and

(d) a plan in duplicate, drawn to a scale of 1:100 and showing elevations and sectional drawings of ev building on the premises to which the application relates, including the ceiling heights and the use all rooms,

and in the case of an application to alter premises, a distinguishing and contrasting colour shall used to indicate the proposed alterations.

2. A plan referred to in subregulation (1) shall be drawn-

(a) by a duly qualified architect, surveyor, town planner, engineer, builder or draftsman in ink opaque drafting bond paper of at least A1 or A2 size, or be xerographic photocopies which ar the same size as the original within a tolerance of 5%; and

(b) so as to comply with Australian Standard 1100, Technical Drawing Part 101-1984 Gene Principles and Part 301-1985 Architectural Drawing of the Standards Association of Australia, shall show the date of preparation, the scale, the direction of north and the name of the per who prepared the plan.

3. The specifications to be submitted under section 66(5) shall be in duplicate, typed on paper of at le A4 size, and include a detailed list of materials used or to be used in the construction of the premise which the application relates, together with a description of all wall and ceiling finishes, floor coveri and kitchen equipment.

4. Details of all fixtures, fittings, liquor services, food storage areas, food preparation areas and sanit conveniences shall be-

(a) included in any plan to which subregulation (1)(a) or (1)(d) refers; and

(b) provided in the specifications.

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