

CHECKLIST FOR DIGITAL MODEL SUBMISSIONS



Please ensure you have **read the below “Requirements for Submitting a Digital 3D Model”** and that the model adheres to the following criteria before submitting it to Council:

- 3DS Format;
- Units in metres;
- Enough detail for accurate shadow casting;
- Models of neighbouring dwellings if required (see ‘Level of detail’ below);
- All surfaces are facing outwards;
- Either textured or coloured surfaces - not just white;
- Simplified model;
- Correct file name;
- Correct orientation and centred at the origin (0, 0, 0); and
- Saved on a CD and submitted with the application.

REQUIREMENTS FOR SUBMITTING DIGITAL 3D MODELS

Do I need to submit a digital model?

You will need to submit a digital model for the following:

Any development that proposes to make amendments to a building's existing envelope within the B3 Commercial Core or B4 Mixed Use Zone in the Waverley LGA.

or

Any development that proposes to make amendments to a building's existing envelope within the Waverley LGA, which will result in a building height of 12 metres or more.

When do I need to submit a digital model?

You will need to submit a digital model for:

- Development Application lodgements or amendments
- Section 96 Application lodgements
- Occupation Certificate Applications - an as built model is to be submitted before an Occupation Certificate will be issued.

What is the digital model used for?

The 3D model will be inserted into the Waverley Digital Model for detailed development assessment. If the development is granted an Occupation Certificate, the 'as built' model will be permanently uploaded into the Waverley Digital Model. See Figure 1 below.



Figure 1: Screenshot of the Waverley Digital Model

Specifications

1. Format

All models should be supplied in 3DS format (not to be confused with 3D Max format). This file format can be exported from various modelling programs including SketchUp and Vectorworks.

2. Working units

Working units of measurement must be in metres and at a 1:1 scale. The model should be positioned relative to the site survey and relate to the correct RL for accurate analysis.

3. Level of detail

The building model must include the following:

- a building envelope which includes all elements affecting shadow analysis
- accurate placement of glazing, balconies, roof pitches, terraces, roof services and any other prominent external design features
- the ground level terrain showing accurate RLs extending to site boundaries
- the internal floor plate of each level showing accurate RLs.
- neighbouring dwellings impacted by the proposal (for sites outside the Bondi Junction B3 Commercial Core or B4 Mixed Use Zone)

The building model should **not** include the following:

- internal features including stairs, walls, furniture or people
- vegetation
- overly complex highly polygonised features
- redundant or duplicate polygons, lines or textures
- gaps or missing elements

4. Surfaces

All faces of the model need to be directed outwards, i.e. Outward facing normals. (Check this on SketchUp by turning on the monochrome face style.) Please refer to Figures 2 and 3 for more information.

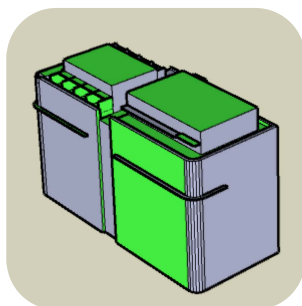


Figure 2: Not acceptable – Model with both inward and outward facing

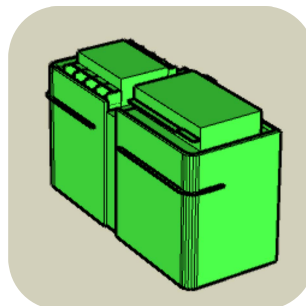


Figure 3: Acceptable – Model with outward facing normals only

5. Textured surfaces

Model surfaces should be made up of either all textured surfaces or all coloured surfaces, not both.

All faces of a textured model must have an appropriate image applied, named with a maximum length of 8 characters. Textures should not include any shadows.

All textures must be in JPEG, TIFF or TGA format with texture dimension to the power of 2. Wherever possible texture dimensions should be kept to a minimum with an ideal texture size being no larger than 512 x 512 pixels (see Figure 4).

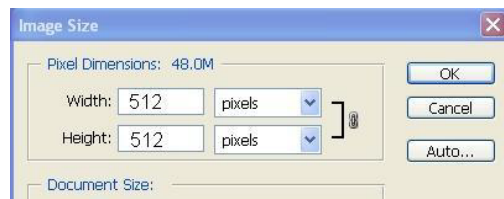


Figure 4: Ideal texture dimensions

6. File naming

Files are to be named according to their site address and stage of approval.

e.g. A model submission of 508 Oxford Street for the first amendment to Development Application would be named:

508OxfordStDAa.3ds

The model submission of 508 Oxford Street for an Occupation Certificate would be named:

508OxfordStOC.3ds

7. Model Orientation

The model should be accurately orientated and centred about the origin (0,0,0).

What is the purpose of the specifications?

The purpose of the specifications are to ensure that the Digital 3D Models which are submitted to Council are:

- visually and geometrically accurate to allow precise assessment by development assessment officers
- capable of being inserted into the correct location of the Waverley Digital Model by assessment offices, allowing them to accurately view the impacts of the development.

Submission

Please submit the digital model on a CD with your application through Waverley's Customer Service team.

More Information

If you have any further questions regarding submission of a Digital 3D Model please contact:

Francisco Mota
Digital Urban Designer
Waverley Council

francisco.mota@waverley.nsw.gov.au