



Development Application

3D Digital Models - Submission Guide

The purpose of this document is to provide technical guidance for submitting 3D Digital Models to the City of Perth Development Approvals Unit for Development Applications.

Development Application 3D Models

The City of Perth has developed a digital 3D virtual model of its local government area. This model encourages a higher level of discussion and assessment for ongoing design excellence of the city.

It is a requirement of the City of Perth approval process that a 3D digital model be submitted with all significant development applications. These models will be viewed in real time as part of the assessment process during all Development and Planning Committee meetings and possibly Council meetings if required.



Example of the 3D City Model with DA model submissions in the foreground.

Conformance

It is the consultant's responsibility that the model is complete and represents the proposed development accurately. Best practice modelling techniques, object naming and layering standards should also be applied.

Models **MUST** be submitted with the standard DA documentation. Late submissions of the 3D DA Model will result in the DA process being delayed to the next round of committee meetings.

The City reserves the right to reject the model if it does not conform to these modelling specifications. The City's 3D Model staff will make all efforts to incorporate the submitted model into the 3D City Model environment, but will **NOT** spend undue time cleaning up, retexturing or colouring of delivered models. Test models can be submitted prior to formal DA submissions to ensure conformance.

Access to the Digital 3D City

The City of Perth Level 1 grey 3D digital model is available to professional consultants for design concept development under a standard data license agreement.

Please make all enquires to the email below.

Digital Rights Management Policy

This document is to be read in conjunction with the City of Perth Policy No 14.12 'The Digital Rights Management Policy for 3D Models and Development Applications'. This can be found in the City of Perth Corporate Policy Manual.

Modelling Specification

All 3D Models are to be supplied in either of the following formats: Autodesk FBX; DWG; MAX; 3DS; DAE; OBJ or SKP.

All models MUST adhere to the following common requirements:

- Accurate and true representation of the proposed development.
- Entire development must be modelled up to the property boundary.
- Only the external elements (except floor slabs) are required.
- Model must include correct ground level fall across the site.
- Units must be in meters.
- Only standard materials types will be accepted (No materials which are specialised for professional rendering software, eg. Mental Ray, Vray).
- If no textures are supplied, then colours MUST be added.
- Textures to be in JPEG; TIFF and PNG formats.
- All redundant Lines, Splines, Helpers, Dummy's, Cameras, Trees, Shrubs, Vehicles, Casework, Furniture and minor fixings must be removed.

Additional specific software guidance:

Autodesk 3DS Max

- Use diffuse colours or textures in JPEG; TIFF or PNG formats.
- Opacity maps can be used, PNG format only.
- Export model in FBX format with 'Embed Media' option enabled.

Autodesk Revit

- Remove/delete ALL furniture, fixtures, entourage and other unrequired objects within the model. This includes stairs and handrails.
- Ensure 3D view detail level is set 'Coarse'.
- Export model in FBX format.

Autodesk Autocad

- Ensure objects have appropriate colour assigned per object layer. (Material assignments will not export correctly)
- Delete/purge all nonessential items and layers.
- Provide model in native DWG format.

Graphisoft Archicad

- Turn off or delete non-required objects within a 3D view and set scale to 1:1
- Export model in 3DS format.
- DWG is ok only if correct colours have been assigned to objects.
- Include any textures with the delivered model folder.

Google SketchUP

- Remove/delete ALL furniture, fixtures, entourage and other unrequired objects.
- Use standard colours or materials in JPEG or PNG formats.
- Opacity maps can be used (preferably PNG).
- Provide clean model in native SKP 8.0 format.

Contact Details

Enquiries can be made to:

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