# Development Approvals
# 3D Digital Models

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

## Development Application 3D Models

The City of Perth has developed a digital 3D City Model of its local government area. This model encourages a higher level of discussion and assessment for ongoing design excellence and planning 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 within the City Model system as part of the assessment process during all State and Local Government development assessment committee meetings.

## 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 submitted models. Test models can be submitted prior to formal DA submissions to ensure conformance by contacting the 3D team below.

## Access to the Digital 3D City Model

The City of Perth Level 1 grey 3D digital model is available to professional consultants under a standard data license agreement to assist with design concept development analysis and digital graphic visualizations, provided these form part of a completed Development Application to be submitted with the City. It is not to be used other promotional or commercial purposes outside of the Development Application process or for the creation of a physical model.

Please make all enquires to the email below.

## Contact details

Enquiries can be made to:

City of Perth, 27 - 29 St Georges Terrace Perth 6001

3dcitymodel@cityofperth.wa.gov.au

(08) 9461 3159  or  (08) 9461 3331

# Modelling Specification

All 3D Models are to be supplied in either of the following preferred formats:

DWG, FBX; MAX; 3DS; SKP or 3DM.

**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/scale must be in meters.
- Only standard/basic materials types will be accepted. Physically based materials specialised for professional rendering such as Vray and Mentalray will not be accepted.
- If no textures are supplied, then appropriate colours MUST be applied.
- ALL textures MUST be supplied in JPG or PNG for alpha mapping.
- All redundant Lines, Splines, Helpers, Dummy's, Cameras, Trees, Shrubs, Vehicles, Casework, Furniture, and fittings/fixtures MUST be deleted.

## Additional specific software guidance:

### Autodesk 3DS Max

- Supply in native MAX format or export model in FBX format with 'Embed Media' option enabled.
- Material map to be Standard (Legacy Scanline) type not Physical Material
- Include all textures with the delivered model.
- Use diffuse colours or textures in JPG or PNG formats.
- Alpha maps to be of PNG format only.

### Autodesk Revit

- Ensure 3D view detail level is set 'Coarse'.
- Export model in FBX format.
- Include any textures with the delivered model.

### 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 approved only if correct colours have been assigned to objects.
- Include any textures with the delivered model.

### SketchUp

- Provide clean model in native SKP 2018 format.
- Use standard colours or materials in JPG or PNG formats.
- Only PNG Alpha maps to be used if required.
- Include any textures with the delivered model.

### Rhino

- Supply in native 3DM format
- Or export model as SKP format (2018 or older) with export settings to have 'Save textures' and 'Export planar regions as polygons' checked.
- Include any textures with the delivered model.

### Autocad / Microstation

- Ensure objects have appropriate colour assigned per object layer. (Material assignments will not export correctly)
- Provide model in DWG format.

Example of the 3D City Model System with several DA model submissions and building envelope in the foreground.

## Need more help?

If you have further questions, please contact the Development Approvals team on (08) 9461 3352 or planning@cityofperth.wa.gov.au

perth.wa.gov.au