3D model submissions for planning applications

Sevenoaks District Council are currently developing a 3D digital map of the District to improve how we review large scale and/or complex planning applications. We are encouraging applicants to provide a 3D model of the proposed development as part of the application. The submitted models will be accurately placed within the Council's district-wide 3D map. The provision of a 3D model can help the planning team more effectively and efficiently understand how the proposal will impact the local context.

Whilst providing a 3D model is not currently a formal requirement, eventually we intend to make this a requirement for all major planning applications. We encourage applicants to provide a digital model with their application / pre-application submissions as it can lead to a more transparent and effective planning process. At this stage, the model will be for officer use only, and not accessible to the wider public, although we are looking to develop this feature in the longer term.

The model should provide an accurate **representation of the external skin of the proposed built forms** and their relationship to ground and street level. The 3D model should not include any internal details, materials or textures. Further details on the format of the model are as follows.

File format

- Preferably, provide models as both IFC files (.ifc) and as SketchUp files (.skp).
- Other file formats can include .dwg and .dxf

Locational referencing

- All models must be accurately **geolocated to British National Grid (BNG) (OSGB)** and this information embedded in the file.
- To allow accurate location in elevation, a spot height for a known point on the building, (e.g. the highest point) is required. The height should be in metres AOD (Above Ordnance Datum). Please mark this on a plan drawing of the proposal and provide with your model file.
- If you are unable to Geolocate your model it should be zeroed to World Origin (0, 0). If your model is zeroed, please provide British National Grid Coordinates of a point on your model with your submission.

Units

- The model units must be in **metres** and at a scale of **1:1.**

Accuracy

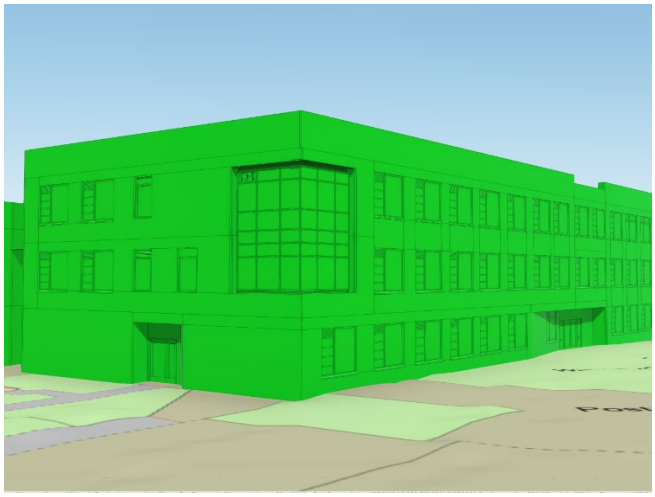
- Submitted models should be an accurate and true representation of the proposed development.
- The model should be draw to Level of Detail 3 (LOD3). Level of Detail 2 (LOD2) would be considered acceptable for pre-application information.
- Models should aim to meet the current minimum terrain and building heights accuracy standard which is within ± 15cm vertical and horizontal.

File size

- File size should be kept as low as possible. It is recommended to keep files well below 128MB for optimum performance.

Level of detail examples

Level of Detail 3 (LOD3) model examples.



Composition of the model

Models should display the external envelope of the building with proposed roof shape and all staggered/stepped elevations, overhangs and defining architectural elements. The purpose of the model is to give a reasonable impression of the external form of the proposed building.

- Textures or materials are not required
- Interior detail is not required and should not form part of submitted models.
- If the proposal involves significant alterations to the ground plane, please include a separate model file of the proposed ground plane only.
- Façade detail, including windows and doors can be included, however they should be represented as simplistically as possible without losing necessary information.
- All redundant lines, detail, vegetation, vehicles, and minor elements etc. should be removed prior to submission
- All unnecessary components and blocks should be deleted/purged.
- Layering of the model should be at an absolute minimum, preferably limited to one layer.
- All relevant data should be bound within the submitted model. The model must not include any references or cross-reference pointers or external files.
- Provide all the proposed built form as a single group/component. Do not provide the model with multiple nested groups or components.