

Media and Software Specifications for the City of Ames for Digital Computer Aided Design Drawings (CADD)

3.0 Data Formats

The City of Ames Public Works Engineering Department uses Bentley's Microstation computer-aided drafting software, Bentley's GEOPAK digital terrain modeling software, and ESRI geographic information systems software. In addition to the paper plan set of information currently being submitted as part of the submittal process, the surveyor or engineer must provide a digital file in one of the following formats (in order of preference):

- Microstation V8 or V8i SS2 or later ".dgn" format
- Autocad Release 2004 or later ".dwg" format
- Saved from Autocad as file type ".dxf" format

The City of Ames digital files have the working units set as US Survey Feet for master units and the custom Tenths "tn" for subunits (where 10 tn = 1 sf).

All file types must use the level/layer scheme as in Section 4.0.

Files may be saved using the following types of media (in order of preference):

- CD ROM disk
- Flash/thumb drive
- FTP site

** Files may be compressed using "Winzip" or "PK Zip" formats if necessary.

All files must be labeled on the CD disk or flash drive with the date of transfer and the filename of the digital file. The filename must reflect the name of the submittal. Any files received that are not in the above referenced format will be considered not useable and not in compliance with the City of Ames media and software specifications and therefore will delay further work on the subject project. If any submitted files have references attached, the reference files must also be included in the submittal.

4.0 Data Level/Layering Scheme

To sort and evaluate the accuracy of each digital submission, level/layering conventions have been standardized. To provide maximum flexibility, the surveyor or engineer can sort individual features by color or level/layer. The following files are available on the City of Ames Public Works webpage and from the City of Ames Public Works Engineering Department:

- COA_Seed.dgn (Public Works' Microstation seed file for the creation of new ".dgn" design files)
- COA_levels.dnglib (Public Works' Microstation level/layer library tied to the seed file)
- COA_Seed.csv (comma delimited file of level/layer names and attributes)
- COA_Cells.cel (Public Works' Microstation cell library)
- LStyleJP.rsc (Public Works' Microstation line style resource file)

The consultant can add levels/layers if a unique feature(s) does not fall into any of the City's level/layering scheme.