## 3.4.2 Grid

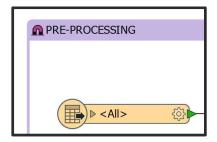
The Grid script is used to extract the grid lines and grid bubble from the AVM CAD Files for each building and level and attribute it with its grid annotation.

A. **Input** – The input for Grid script is multiple CAD Files where the AVM CAD Folder is located followed by \\*\*\\*ARCH.dwg:

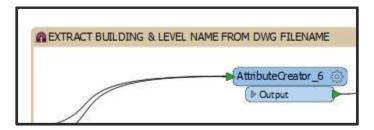
\\<FolderPath>\\*\*\\*ARCH.dwg



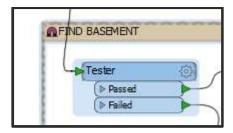
- B. **Transformers** (listed in processing order)
  - Pre-Processing Transformer performs selects only layers needed for the grid features, validates the geometry of those features and then simplifies and cleans the data for better display.



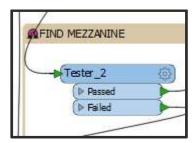
ii. <u>Extract Building & Level Name from DWG Filename</u> Transformer reads the filename that CAD Features are coming from and adds them as an attribute to the feature.



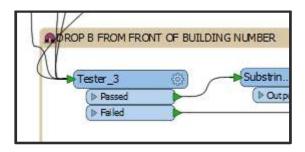
iii. <u>Find Basement</u> Transformer identifies basement level features in order to populate level name and ordinal value correctly (Other Levels have a number value).



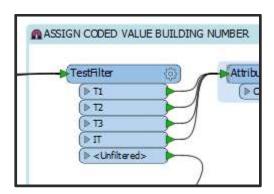
iv. <u>Find Mezzanine</u> Transformer identifies mezzanine level features in order to populate level name and ordinal value correctly (Other Levels have a number value).



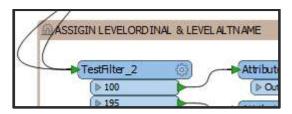
v. <u>Drop B From Front of Building Number</u> Transformer removes the leading B from the Building number populated earlier from the file name.



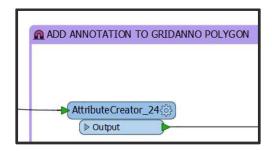
vi. <u>Assign Coded Value Building Number</u> Transformer converts Terminal Building Names there coded building number.



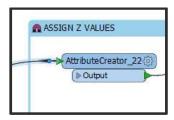
vii. <u>Assign LevelOrdinal & LevelALTName</u> Transformer populates the Level Ordinal and Level Alternate name based on pre-determined values.



viii. Add Annotation to GridAnno Polygon Transformer creates polygons from Bubbles with annotation and populates them with the annotation grid value.



ix. <u>Assign Z Values</u> Transformer converts the ordinal value as the geometry Z value.



D. **Output** - The output for the grid script is the SDE.Grid\_Bubble and SDE.Grid\_Line features in the PROD Geodatabase.

