The Best Practices Course - Week #3 - Mind-Mapping the Template Concept

Now we're going to talk about the ArchiCAD project file and the relationship between a project and a template. I think one way that's really useful to look at this is to understand -- I'll blow this up a little bit more -- that a project file is made up of four different concept areas that all interrelate to each other, of course, and help you to define the building and communicate it in terms of drawings and images.

The building design is one part of it -- and we think about that -- that really focuses on the geometry, the actual shapes and forms of the building.

We have the annotation, or description, that pins down that building in terms of text and labels and dimensions, etc., and all of this is related to a specific building that you're working on.

Now, this is supported by the attributes, or definitions, in your file. Attributes, such as layers or materials, wall types, etc., are used to describe the building geometry and to represent it on paper or on screen.

Now, the file structure and relationships, basically, these are the ways that parts of the program relate to each other. When you place a section marker down on the plan, it creates a viewpoint of that section. So that's a relationship between that marker and the viewpoint.

These parts of the project, while they certainly relate very specifically in a project file to the building, they can be included in a template.

Let me expand this a little bit further. The building geometry here, primarily, we can say, at least on a simple description, is made up of 3-D elements: walls, floors, roofs, columns, etc. This is where you put your focus in terms of design creativity.

Most likely, this is very closely connected to the reason why you got involved in design is that you wanted to create buildings that served a certain purpose, that met the program requirements, the desires, dreams, and functional requirements of your client.

This is the building itself. Now, when you want to communicate this building, you're using primarily 2-D elements to annotate it to make sure that the building is constructible so that the information can be communicated more precisely, get approval, at first from the client for the concept, and later from municipal authorities, and get bids, etc. So again, all of this is dealing with the specific building that you're working on.

Now, the ArchiCAD project file has all of these attributes or definitions, such as layers and layer combinations, composites for the wall types, roof types, slab types, different materials, fills, and line types, which would be subcomponents; in other words, they're

applied. Materials are applied to one side of a wall, or a fill is one way of representing the information in a particular view.

Pensets and Model View Options are other definitions that affect how things are drawn or seen on screen. We could just say, conceptually, that a schedule for, let's say, a door or a window schedule or appliance or electrical schedule, these have settings that define how these elements are going to be represented in the schedule format.

Now, the file structure and relationships -- as we look at this, we'll see that, obviously, ArchiCAD has a structure, the project map, where all the viewpoints are created, all the stories, and then, eventually, sections and elevations, details, worksheets, etc.

The view map defines ways and styles of viewing the viewpoints in the project map; so that we have the stories with often more than one view, like a floor plan and a ceiling plan, etc. But others with just a specific view, such an elevation drawing, might only be seen in one way in certain layers and certain scale, etc.

The layout book, another part of the relationship, and all of these things, of course, connect to each other. I mentioned source markers, such as section markers, elevation markers, callouts for details and worksheets, etc., which, if they're a source marker, they create viewpoints.

Of course, if they're not a source marker, then they have a different relationship. They're linked to either a drawing on a sheet or to a viewpoint that was created by another source marker. These are relationships between these elements that are markers and other parts of the project file.

Views, as is obvious, are ways of seeing viewpoints of the project map. They're, of course, frequently used to create the definition of a drawing that's going to be placed on the layout. The relationship here between these then, is a way of representing the building in preferred methods.

Favorites and interactive legends potentially could be put in the attributes and definitions. But, I'm going to put it in the file structure and relationships because; these are ways of getting some of the relationships and some of the settings that you would use in the project.

So you obviously can save some of your favorite settings in the favorite's palette. You can also save them in the form of interactive legends where you use the eyedropper.

Now conceptually, the building is on one side and the general definitions and structure of the file are on the other side. This is what a template can be about.

Basically, if we were to take a project file and get rid of the design of the building, get rid of the annotation and description that is specific to that building then, we would have potentially a very useable template file.

Conceptually, the template file can have all of these things. All of the attributes and definitions, as well as all of the structure and relationships.

When you think of it this way, then you can understand that it's important when you create a template, to actually keep the markers, the source markers. In other words, the section markers that are drawn that will later create views that are placed as drawings on layouts.

Keeping all of this intact, when you delete the building, will allow you to essentially recreate or reconstitute it once there's a new building in place. Favorites and interactive legends are a way of saving some of the work of just defining your preferred component types as you're working.

The layout book itself having a structure for the layouts, even though when you start a new project, there won't be a building on the sheets. You can have your structure of the layout book.

The attributes and definitions here having a well thought through layer setting. Layer structure with the layer combinations will give you the ability not only to create your drawings as you need to, but also to quickly set up certain context for working on design or presentation. Turn on specific layers that are helpful for that particular task.

Whether it's working on the site and building relationship, the way the roof and the structure of the building relates to the exterior shell, the landscaping, or anything or the interior fit out. All of these potentially could be layer combinations that would be useful for certain phases of your project development.

Obviously, as you define complex things like composites or profiles or the materials, these are things that are nice to be able to retain in a template. Then, we're going to be spending a little bit of time looking at how you can save them separate from a template so you can bring them in on the fly to any project as you need them.

The pensets and model view options are also something that I think get developed as you have more sophistication and your tastes and understanding develop. You will create certain things here that you will just use over and over again. Once you've developed them up to a certain point, you probably won't tweak them very much, you'll just use them.

Same thing with schedules, for the most part. I think you're going to create certain schedule types and reuse them over and over again. Make variations when you need to but, this is not something that you necessary have to, in every project, reinvent.

We're going to look in a separate presentation in the course just how you can systematize all of the things that go into a template. I think this will give you a visual idea of the relationship between the template and the building and how the project file becomes the template when you remove the specific building.