



BEST PRACTICES COURSE – WEEK 24 Detail Drawings - Part 3 - Reusing Detail Drawings

Welcome everyone to the Best Practices Course ArchiCAD training lesson. This is part of Week 24, Detail Drawings. We've been covering the basics of placing and referencing them. We've also looked at how you can put in placeholders for details you are going to be putting in later, how you can reference them from other locations. So you can say this is a place where a particular existing detail should be seen. We have looked at replacing and relinking sometimes. [0:00:34]

Now we are going to shift focus to look at how you can reuse details, how you can set up detail libraries and organize details on a larger scale. I want to thank Ken Andrews, who is one of our veteran course members as well as being a veteran architect and ArchiCAD user. Ken is unfortunately traveling today, so he won't be able to join us, but he was kind enough to share three files with me, two of which are project files and one which is a library of details. So we will be looking at his projects. [0:01:18]

I have only taken a quick glance at them, so I don't know these projects well, but we will see how he uses [ArchiCAD] and we'll be talking about what he does in setting up detail libraries. Also, what are some of the variations beyond what Ken has set up that you might find useful. So this particular project, as I said, I don't know. We spent a few minutes on the phone and he told me a few things. So let's take a look here at some renderings and we'll get a sense of this. [0:01:55]

So here is the building. You can see he's rendered these in Artlantis, but they are from the ArchiCAD model. In ArchiCAD 18, you might get similar quality, nice images directly in ArchiCAD using the new CineRender technology. But basically, this is what the model looks like. You can see the standard set of sheets here. And you will see here are some typical details. Let me back up. So here are some miscellaneous details on here. So these are detail drawings in the current project based on what's being designed. [0:02:39]

And now you will notice down here there are some structural sheets, notes, and typical details. You may notice that this looks slightly different in terms of format. It does have Ken Andrews name on it. But if I click on it, you will see that this entire thing is a drawing. And what is it? It's a PDF file. So he has brought in the structural details and sheets from the structural consultant for two reasons. One is that he can open the title sheet here, list all the structural sheets, mechanical, etc. Even if he didn't create them, he has them listed in there. [0:03:32]

The other is that he can look at them, they are already in here. So here is a foundation plan drawing from the structural consultant. So he can reference them. And if he wants to he can



print them as part of his set. So this is a nice method to take the PDF. You can see here is the boundary of the PDF and here is the sheet. And he's positioned it to fit on the sheet as he needs. It's slightly offset. I am not quite sure why. I might move this to the corner to have it fit the exact same way it did, but perhaps he's moved it somewhere off to have it match better. [0:04:22]

So that is a little trick there in terms of bringing in some details in this case but also other drawings from consultants. We looked at the miscellaneous details here. We have a few of these. If I click on this, you can see that it is a drawing that I can right click and open the source view. We will see here is a view, so this is a label pointing at things. What is this? This is a fill here. The brick work is a fill. This is all 2D information. It couldn't possibly be a wall. You can see the Wall tool is gray, because the detail drawing environment is all 2D. Even if it started being a wall, it becomes lines and fills. [0:05:17]

Now let's see if this has a reference to the actual project. If I open up the trace and reference dialog here, we will see that it is an independent detail. And here is a section that it refers to. So let's reference the section. There we can see that this detail is taken from the model and it has a different scale. This is set up - let me move it around so we can see it better on my screen here. I will open up the source view again to expand it. This is at one inch to a foot, whereas if I swap it with the source view, you can see this is at half inch to a foot. [0:06:22]

So he has this particular section is at half inch scale. Now at this point if I select this, this is a fill. This is an independent section. So this might be something that he has drawn up. I know he does this in 3D, but let's see if this is – this is a section, but it does not appear to be...you know what? This says “section” through here. But what is it that we have open? It's another detail. So in other words, we had a detail and now we are looking at the source of it being another detail. [0:07:09]

We can see that it's placed onto a certain sheet. We don't actually have this section that this came from. So that's a little bit of a surprise, a section through the second story here. Let's look at the actual sections that we have on this here. This one certainly looks similar here as a 3D. But this is still a fill. Do we have it – I'm in – this is a mystery here. CD. It's independent. So I am not sure what is going on here. I apologize. This is taking us down a little rabbit hole, because you can see the sections here are independent. They are not actually linked to the model. [0:08:05]

The elevations are linked to the model. So if we go to the elevation here, we can see what we have. I am going to have to ask Ken why these sections are drawings and are not linked to the model. But the main point I want to show in terms of this is how he has set up a library of details. Let's go to another file that would be more useful. We are going to open up this



Gainesville one here and launch it as a new instance. So what Ken was kind enough to share is this set of library files that are used for his details. [0:09:06]

So when he creates a detail drawing that he wants to be able to reuse, he feels it's relevant for other projects either directly as-in or as a starting point for a certain detail, then he takes that detail and puts it into a separate file. And he has one for foundations, roofs, deck details, etc. I don't know how many different ones. He's been around for a while, I think he's in his 60s and has 3,400 detail drawings in AutoCAD. And he's been converting them as he needs them or as he has time to be in ArchiCAD. [0:09:48]

Clearly a lot of the detail stuff that he's working on or puts into projects he's able to draw from the library and bring in. Now he didn't actually give me a DWG file to bring in, so that would have been an interesting thing to demonstrate. Perhaps I can get a copy when he's back from his travels. I think he's going off to a job site in another state right now. So let's see. Here is a bank building. He does a lot of banks. We can see here are some renderings. He has a difficult place that he puts in these renderings. This gives us a quick sense of what's going on there. [0:10:40]

He says he puts schedules often in context. So it says "Finished Plan and Schedules". Window schedule and details. So here we have the window schedule and the window detail. So instead of having one sheet with a bunch of schedules and details separately, in this case, he has the window details right on the sheet with the window schedule. And of course similarly with the door schedules here. And we have architectural details. So this is a sheet with all the details. He's not using a grid in terms of what I had discussed earlier in the layout book section of the course, where we would have the details neatly arranged in a common grid. [0:11:40]

He is creating his own grid to suit the size of the drawings and of course adapting it to suit his needs. One thing I would do here is maybe select this drawing here and make this title not go as long. To do that, I might open the settings up, go to the Title and have the width, instead of linking it to the Title text, which for some reason it was thinking that it needs to be longer – maybe on his system it actually shows up differently. Maybe the text or font is different. I believe he is on Windows. [0:12:20]

But let's just say I would make it length parameter. Now it can manually be typed in or adjusted right on the fly. You can see the handle. Then I can stretch this hotspot and make it fit in nicely. So again, it might not be an issue on his screen when he's printing it and things like that, but this can certainly be adjusted here. There may also be a minimum, or it looks like it's taking the length of the text plus a certain amount. Of course, in this case, it's starting to overlap in a way that maybe one might choose differently. [0:13:00]



Alright, so he has a bunch of details, and I'm sure it's nothing revolutionary here. You may notice that there are some dashed lines. These lines are in the View menu, Onscreen View Options, and it's called Drawing Frames. So this helps you to select drawings, because there will be a hotspot in this point. You can see that hotspot is a little harder to see, but when you have a frame with a dashed line on it, it makes it a little easier. But generally, I haven't found that necessary in my work because you can always go just into the drawing and you will see sensitivity to the hotspots in drawing that you can click on. [0:13:40]

So unless you are having a problem adjusting that frame, I generally have the frame turned off so it looks like more what it's going to print out. Now let's take a look at his detail library file. I will open up that one. This is "Deck Details", and we will open that up. The idea here is that details that you might want to reuse, you can collect in a standard location. You can then bring them into a relevant project where they would apply or use them with some modifications. [0:14:34]

We will be talking about the workflow that would allow you modify it, as well as the one where it would just be referenced individually. Ken sent it to me as a .pla or an archive file, which does include libraries within it. This generally would mean that what I see will look similar to him, but he does have some additional tools that he has purchased. Objective is a great modeling tool; it was made by a separate company in the U.K. called Encina. Encina was bought by CADImage and the guy who created Encina is a senior employee at CADImage, running Objective as well as some of their other developments. [0:15:21]

So these are CADImage add-ons, so I am going to leave them alone. In general, it shouldn't affect what we are doing in the training. Let me get this to fit nicely in this window. What we are seeing here is of course a detail drawing. This particular file, if I go to the floor plan here, there isn't really a floor plan. It just has a tiny bit of stuff drawn on it. It's because this file is specifically for deck details. So if I go through the project map – well, there may be some elevations just sitting there because they were in the template file, and a dummy zone. [0:16:20]

But really, this is made up of fifteen different details. If I double click on one, you can see here is what we were looking at, here is another one. So these are all details. When we are in the project map, it's staying at same scale when I go from one to another, which may not be appropriate. When I go to the view map, we have a clone folder for the architectural details and if I use those views, then they are set up at the right scale. For example, this is at half inch to a foot, and so are these. But I know there was something that was at a different scale. [0:17:00]

Let me look through this. I guess these are all at half inch to a foot. Or maybe he doesn't bother with setting up the scale right here and does it at the destination. These are all at half inch. Here is one inch to a foot. I knew I had seen one. So for whatever reason he decided that would



be at the right scale for this one. If I click on the 100% here, this is a preview of what it would look like on paper. If I go to one of the other ones, like this, and I go to the 100%, here is what it would look like. So here is the text here and here. I guess the scaling is still – let me set this up to ignore zoom when we do it. [0:17:57]

Now if I go back and forth and set this one to ignore zoom, now when I go back and forth, it should stay at that 100% scale. So you can see the text is common, even though this is at the one inch versus the other one at half inch. It looks small on my screen right now, but I assume he has something that looks good on paper. Now the concept here is that this is a file that is not a project, it's a file for collecting the details. In this case, all of them are related to decks. And when he has a project that has a deck, he certainly knows these details well and can flip through them and pick out ones that might be relevant that are going to save him time and work. [0:18:47]

One thing he has done is created a sheet here that is all of these details compiled, or at least a number of them here. It looks like there are only six of them. Maybe he just hasn't gone through it and put all fifteen onto the sheet for quick reference. He does have one that is a wall sections. I am not quite sure how this applies to this file. Maybe this is in his template and he decided to leave that in there; I am not quite sure. But the main idea is that here are some details that may apply to any project. Let's see how we would bring a detail from this project into another project, how we would use it as-is, and how we would potentially modify it to suit that project. Maybe there are some small differences. [0:19:51]

Then the other side is how would we take a detail in a current project that has been started from scratch from the model or was brought in as a typical detail then modified. How would we take that fresh detail that was not in the standard set and add it in? So I think that's a really good back-and-forth workflow to understand. Once you get that, you will be able to take all the details from any of your projects, put them into a reference library, and bring them in when needed. I don't want you to think that when you are working on a project you should always bring in standard details. [0:20:44]

I think it would be foolish to say that standard details apply in every design. But clearly, there are many cases where you are calling out a detail that is going to be identical or similar to ones you have previously done. If it is close enough that it makes sense to do that, then it will save you time to bring in that standard details. You can even have a sheet full of standard details. In some cases, you are doing repetitive projects. Maybe it's even like a town home or subdivision where you are doing repeated projects. And really, the details are very similar from one project to the next. There are some site-specific ones, but most of them are going to be the same. [0:21:37]



Maybe you have to submit to the city or the contractor coherent sets of drawings that have those details, and you don't want to have to redo all of them, so it's important to understand this. I am going to take a sip here and see if there are any questions before we move on. Let me ask, how many of you have a standard library of details that you have in ArchiCAD that you have set up similar to this? Just curious, because if you do I would like to see whether what Ken is doing is similar, or if you are doing something different. [0:22:22]

Tom says, "Not yet." Okay, so maybe you will in the near future.

Ted says, "Yes, we have a standard detail file." Okay, excellent. Is this a single detail file Ted, or do you have multiple files for different details?

Ted said, "I do it in 3D though." Okay, so you actually have 3D details, or details that come from the 3D.

Steve says, "Not yet, but got the concept." Alright. So let's just see, as I proceed, if you have questions and also just if you have suggestions or ideas that I do something differently. [0:23:09]

So let's go back to one of the files that I have here. Here is the real project, the actual – I can't remember which project this is, I think it's a bank. The bank one. Let's say that we are going to architectural details. I am not going to mess up his sheet, even though this is my copy of the file. Let's just create a new layout sheet here. We will call this "More Details". "Do not include layout in sequence." What that will do is it will add it in here, but it won't remember them. Just for the heck of it, we still have nineteen being the original one and twenty, etc. [0:24:01]

This is an interesting thing. You can slip something in and not include it in the automatic numbering. I will do a custom ID of A-18B there. So you can see this is – let me make it stand out there by putting it all in caps. It has his standard title block, etc. Now if I want to bring something in from the other detail project, I have two main choices. I can either bring it in as a drawing, or I can bring it in creating a new detail viewpoint. So let's say it's a standard detail that is not going to change. It's perfectly relevant, it's typical, and it makes perfect sense as-is. [0:24:57]

So how do we do that? I will go to the navigator and the button in the upper left is Project Chooser, and I will open up the Organizer. Now I have gone through this previously in the section on layouts and the layout book. Here we are going to use it specifically to bring in a detail sheet. So I am going to switch to the layout book on the right side, go to the sheet that I am on (you can see it's highlighted). On the left side here, I am going to use the option to browse the information from one of the other running files. I can also browse for a project, I



don't have to have it running separately, I can select it and tell it to show me the contents.
[0:25:45]

Now let's choose the "Deck Detail". This is a detail that works. Obviously, none of this applies to this project, but we'll get the idea. I can either drag this onto this layout here, and in a few seconds, it will appear. It will actually open up another instance of ArchiCAD I believe to import it. I don't quite know why, even though it's currently running, why it does that, but it does. And it asks me if I want to show and unlock related layers. So I will say yes, show me things. It's merging this in and taking a few seconds to do that. And you can see it's now on this sheet.
[0:26:31]

It did turn on a layer here. This particular layer is on the master. If we go to the masters here, this is the layout we have. This is a layout using MT Standard or MasterTemplate standard 24x36. If I go in here, we will see on the master, there are some elements that are information on a layer called "Y Special Layout Sheet and Explanatory Notes 2D". So that's typically hidden, that layer, but when I brought in the detail, for some reason it had some stuff on that. I am not quite sure why. [0:27:20]

So it asks me if I want to unlock and show the layer. So I am going to go back to the layer thing and go down to this layer and hide it. It will disappear from the master temporarily and it will disappear when we are looking at the layout. We won't have those guides here. Now this drawing, I notice it had an update here. This drawing right now is set, because the default of drawings is set, to do automatic updating. Now I probably for referencing an outside file, I just want to do it as manual. Basically, I will say, "Once it's in, just leave it there." If I need to, I will double check to see where it has changed. But I don't want to have to open up that external file every time. [0:28:13]

This is an important thing if you are referencing a lot of details from another file. You don't want ArchiCAD to necessarily go and check on it. It does require manual coordination if there was an update, but if it is a standard detail; in general, once you start using it in other projects, you shouldn't modify it. You should not modify it unless you want it to change in every other instance. Just add new versions if you need to, if there is something that is a variation. But in general, don't modify it because every object that references it will then update, and you might have inconsistencies. [0:28:53]

So I am going to say "Manual Update". When I put this to the sheet, it won't try to update, it will just show the last version. It now has been brought in, and as expected, it looks very clean. This really is the same digital data that we had. Now I can also go and take one of these and drag it directly onto the sheet. Instead of dragging it onto the layout sheet, it will go and do this. Again, let me say add elements to ArchiCAD layer. Let me see what that is. It's bringing it in. I guess it put it over here. [0:29:35]



Okay, so now it's here. And again, I would want in this case to say Manual Update so it doesn't check on whether the source has been changed. At this point, I have two of these detail drawings that are brought in from my library details. What Ken has is other libraries for roofs, or foundation, or for other purposes. So he can quickly go and bring in the ones that are useful. This is going to save time. Now how would you reference this? Let's go into – this is certainly a drawing that would be from a sections. So I am going to go to one of the sections of this live project here. Here are the sections, and I am going to open something that – remember again, this is for training, and it doesn't relate, but assuming that it did relate, I might go to the Detail tool and say I'd like to place a marker that's linked. [0:30:48]

I would say I would like to link it to the drawing on the sheet. And the drawing on the sheet, in this case, is on my new sheet "18-B" here. I will say it's this one right here. So basically, I'm going to call out a detail in this view that points at that drawing. I say OK, then I draw the box and have the callout here. And this you can see is referencing drawing 1 on 18-B. If I right click on it and say "Go to Drawing," it will take me directly to that sheet and highlight the drawing. So it's all linked up. The reference is good. If I were to renumber the set or drawings, of course the reference would be good. [0:31:37]

Now let's say that this one is something that is useful, but it really needs some modifications. Maybe there is some additional material you want to add notes on or there are some dimensions that have changed. It's a good starting point, but it's not perfect. So what would you do? Well, there are different ways to do this, but I think the most efficient way is to copy this drawing - and by the way, let's see. This is set at one inch to a foot. Let's go back. I need to make sure that I have the right scale, because that's going to be critical. [0:32:18]

I will go to "Deck Details" and here it says one inch to a foot. Okay. So that is the scale for this particular one that is placed on the sheet. I will assume that is the correct scale there. We'll go back to the file that I am working on. So I have copied the drawing. I am going to go to the project map and go to the detail section. Right click and say "New Independent Detail". We will give it a name, "Deck Column Revised". So obviously, name it whatever would be best. So I might want to actually say "Deck Column to Pier connection detail," but right now I just want it to be very obvious that this is a revised one that we can see in the list easily. [0:33:12]

I will create this, and change the number to be 29 or something like that. What you will see is it shows up. Oh - here is another 29 that I actually have hidden. He has that many details in here. So let's just say it's going to be 33. Notice that this prefix here is generally used for sorting. So if I change it to 33, then it will drop down in the list. So changing the prefix from D to something else or the number in here will sort it. You can have details numbered in sequence like this, one through thirty three, or you can have them in groups. So your door, roof and foundation details could each have different prefixes and be grouped in the detail folder of the project map. [0:34:02]



Now I have just created this independent detail, and the window has nothing in it. It's not linked to anything; it's just a 2D drafting area. Let me go and get this - there we go. I wanted to have this window down here and visible. So you can see it says quarter inch to a foot, that's clearly not what we want. I am going to change my scale to be one inch to a foot. Now here is a question. I am not quite sure in terms of the drawing when we paste it in which it should be. I am going to try the intended scale of the drawing, one inch to a foot; I think that is what is going to work best. [0:34:48]

Now that I have it set there, I can Say "Edit, Paste". Remember, I copied the drawing that I had imported. I am going to paste it into the center of the current view here. Well, what happened? This drawing here - update. I am not quite sure what is going on with the drawing. Certainly we had more data before. Let's see if we go to the drawing selection settings and properties, edit layers, drawings own layers, there is....here. Why is this - this is not quite working the way I expected here. [0:35:51]

The magnification is 200%. Okay. So of course I am working with Ken's stuff and I am a little puzzled with what is going on here. This drawing, I can't open the source view because it's not linked directly. Let's see - deck columns and pier connection detail. If I go back to the layout book, we have this data there. If I right click here we could open the external source view. We have it open in the other file. It would probably open it up in another session of ArchiCAD. So this is not quite working. I will tell you what. Here is a way that I know will work rather than doing it from the drawing here. [0:36:42]

Let's proceed on to the other way. So I will go to the detail - this is the revised one. Let's check the layers just by any chance - if I select all, and I say "Show and Unlock", that didn't affect the visibility of what is inside here. It's just for whatever reason it's not showing. Let's try one other thing. Let's explode this into current view, which is what I was going to do anyway. Don't keep the original drawing, just give me the contents. There is still nothing there. I am not quite sure why - okay. So let's get rid of this, and let's do what I know definitely works. [0:37:37]

Here is the drawing here, I know I am going to make some changes to it, so I am going to open it in the source view. This is in my detail collection. I go and select all the stuff, copy it, go to the other file here. I am in my new independent detail, and I paste here. Now it's fully editable, right? So I could go and say that I am going to do something a little odd. Let's say if we take these elements and join them. That's interesting, what happened there? Let's undo that. This one, and this one, we will join them. And this one and this one we will join here. And I am going to do a fill. [0:38:37]

Let's just say "Fill with this". That's maybe too much. Let's say that it's going to be rounded. This is a different detail. Alright, so we now have something that is noticeably different but based on the same information here. So I am in the new detail that I created here. I pasted in stuff, and it



now has what I need. I can put in labels, and do anything else I want. Now I can do and I want to make sure that in the view map that I have a view. If you have a clone folder, then the architectural details column folder in this case will automatically have this in here, but we need to make sure that it has the right scale. It looks like one inch to a foot is there. [0:39:42]

It looks like for some reason the layer combination is not properly in this file. So we will make sure we have this layer combination set. I guess it's the name changed slightly. So you can see details, worksheets, schedule, ArchiCAD Layer is the name of the layer combination here. The earlier one didn't have quite the same name. I am going to say OK, and now you can see it's correctly set or matching. So now I have a view at the right scale and it has an active layer combination. I go back to the sheet, and let's get rid of this particular drawing, which you can see has the more square edges. [0:40:30]

We will drag in the revised drawing. This is now an internal drawing within the project. And of course, I might want to eyedrop this, this is actually eyedropping the settings for the drawing, and then inject it into here. The other thing that I apparently didn't do, or when I eyedropped it, I changed the scale. We would want to make sure that the scale is in its original scale at 100%. Now, with the eyedrop, I picked up the setting for the title and maybe the pen set and other information like that. But I restored the setting for the scale. It's at its natural scale. [0:41:32]

Alright, so we now have demonstrated how we can bring in from a library of details here, just copying this. Actually we did it through the organizer. We just dragged in the view here of this from this project into the active project. And in the cases where we want to modify, definitely a good way to deal with it is to go back to the library, open up the detail, copy the linework and text, and go create a new independent detail and paste it in and rework it. [0:42:24]

Now if it's something that you already have a 3D model and you just want to add stuff to it, how would you do that? So let's go and open something, a different one. So open the source view here. We are in the library of details, and let's say that this is something that relates to the other project. What I am going to do is copy this linework, and let's go back to the other file here. We will go to one of the sections that is open. Do we have another section? I don't want it quite so jammed up here. [0:43:15]

Let's go to another section here. So what I am going to do is say that we are going to have a callout for this. I am going to create a new detail viewpoint. So it's actually going to copy it. We will call it "Example Hybrid Detail" here and give it number 34 here. I will do something like this. So this has now created a new detail viewpoint. Initially, this detail viewpoint will be at half inch scale. Right now we are at quarter inch, but when I open it up, it will just have it set at double that scale here at half inch. So maybe that's fine, maybe it's not. Let's switch it to three quarter inch, so it will be a little bit larger. [0:44:15]



Now this is the detail from the real model. So I could have the trace and reference turned on where the reference is the source. This is the detail drawing, browse for this, why is it - here is the section. I don't know why I wasn't seeing it. So you can see this is the reference that it came from. Now I am going to go - remember I had copied this information from the other file. I am going to go back to this and paste it in. [0:45:01]

Now of course, this is totally the wrong context. But let's imagine that when I paste it in that it's pretty similar here. Or there is a lot relevant. The simplest thing, in this case, is let's say that this is a similar structure but the 2D information is different, but the notes apply. So the idea here is that I would take this and delete the stuff that's not relevant, and whatever isn't relevant, and then I might bring these and put them into position here. I may take this note and go in here. There we go. [0:46:00]

So I might go realign it. So I am taking some notes that came from the other one there. Maybe there are some 2D things. I am not sure; it looks like Ken is doing his lumber as lines as opposed to some of the objects that are built into the ArchiCAD library there. But let's say that we had whole configurations here. I will drag this over, deselect this and drag this into position. I am not making a mess of this drawing of course. The idea is that we can bring in, from our standard library, stuff that will save time. [0:46:43]

So if I take all of these labels and drag them over into rough position and then start moving this around, if it's the right type of detail, then that may save time. You don't have to type it, if you remember all the things that are important, etc. if there are some 2D things - it looks like Ken is not using 2D elements. Let's just see if groups are active what happens. Okay, that's a group. So we can select at least these groups of lines here and drag stuff in. I will put things into something to give you the idea. So that would be a way that you could bring in stuff from a detail and save time. [0:47:43]

You may also find that there are things that you bring in from a manufacturer from a DWG. So you can bring in a DWG file off to the side, and then either place it entirely into position, like a track or header detail or something that adds additional linework. Or you may explode that DWG reference, bring in the linework, then move it around into position. This is another way that you can have a workflow with standard details and speed up your work on something that is custom, but related. [0:48:26]

Let's assume that this detail that I created - we are in this hybrid detail here. These are the worksheets. Oh, here is the details. So here is the "Deck Column Revised". So this "Deck Column Revised", let's say in this context is perfect. Maybe there is more work that needed to be done. Let's just say that it's significantly different, and it is something that I want to have access to. I don't want to have to redo this, because it took me five or twenty minutes. I just want to have it in my standard library. [0:49:13]



So again, how would you do that? The simplest thing is just to copy this, go to the standard library, and in this standard library in the project map we are going to right click on the detail folder and say "New Independent Detail". We will call it "Revised Deck Detail", whatever it should be. We set it for the right scale, not eighth inch. Let's set it to half inch. We'll paste it. Here I might want to do "Original location"; that would sort of match it if we were to copy back and forth between the two locations. That would allow it to coordinate here as opposed to just putting it somewhere arbitrarily in the space. [0:50:03]

Now "Revised Deck Detail" you can see is in my library. Here are all the details that we have collected. There are now sixteen. So this is the way that we could easily bring in detail from an existing project, anytime that you have something that is reusable, and add it to your standard library. I am going to take a sip and see if there are any questions.

I think that this probably is a good enough explanation for Ken's style. I am going to talk about a few other ways that you can approach collecting your details. This is a .pln file called "Deck Details". He did not send it to me, but he has foundation details, roof details, etc. Each of them in a separate folder. I asked him why he had each of them in a separate folder, and he said in many of the folders he just has that one item, the detail library for that category. [0:51:33]

But in some folders, he will have .dwg files or other supporting materials in there. So then, let's say the Roof Details folder will have his standard roof detail library as a .pln, and he will also have maybe some other .dwg, .pdf, or other supporting things in it. That is one way to do it, and it's certainly very convenient. When you are thinking about your roof, you can look at the standard details, which you are probably familiar with and bring in the ones that are helpful. After you do some work on that, switch to the foundation or some other category and open up the other file or simply reference it in that organizer. [0:52:21]

Another possibility is that within the same file, you might have more details. Right now, there are sixteen details. And you might create a collection of details for the roof in that file. How would you keep them organized? Notice how each one of these has an identifier. So this is a deck, right? So let's just change this to "DK" here. And I will change these to "DK" and these are now sorting into the deck details. Suppose that this was a roof detail. I could change it to "RF" or just "R". Now it's grouping there. And I will go quickly through a couple of them here. [0:53:20]

Now let's just take another one here and say that it's a foundation. So we have "FDN" or something like that. Here is a couple of foundation, roof and deck details. They group with the prefix and the number then is also useful. So you could very well in a single file, have details of many different categories. The file will get larger, and if you have hundreds of details, this list will get longer. So that is a potential drawback. [0:54:08]



One thing that you can do is in the view map, instead of using a clone folder in this case - and you can see how the clone folder names automatically updated with the new identifiers. But you could create a folder for just certain details. This you would have to set up manually and maintain if you add details to it. But let's say I create a new folder, and we will call this "Roof Details". Now here is the roof details. Now I can go and grab one of these roof details and drag it into it. [0:54:48]

Now you will notice this plus sign. When you take something out of a clone folder, it actually can't remove it, because it's really a shortcut pointing to the original one in the detail folder of the project map. So if I do grab it and try to put it into a folder here, it's going to copy. So these two are two independent views, but this one is a copy of the one that I dragged. So let's put this one in here. Now I have these two. So what would I do here? I am going to create a new folder and we will call this "Deck Details". And right now it's part of the roof details. I just moved it slightly so it's at the top level here. [0:55:30]

And I will go and grab these two deck details and put them in here. So now, imagine that you have lots and lots of details, but they are now in folders. If you want some deck details, you would open that up and here are the different deck details. So this would be a way in a single file to have many details and organize the new groups. First of all you would do some prefixes so that the project map in the long list here, they group. And secondly, if you don't want to have to look through one hundred or more details, and you have them grouped in folders, then you would open up the right folder here. [0:56:15]

When you are in the organizer and you are looking to import a standard detail, you don't have access to these same folders here. You can see that you need standard roof details number 7, 12, and 13. And then you drag them in. that would be a way to organize it. Now another way that you can combine multiple details in a project file, separate from whether it has different categories like roof versus foundation versus deck. But sometimes it's useful when you are working on details to be able to drag information, copy information from one detail to another. I am sure you have cases where there are multiple details that are pretty similar, just with different variations, where it would just be convenient to copy and paste information if it was right side-by-side. [0:57:11]

There is a strategy that I don't quite know whether it's worth doing. In other words, I won't say it's a best practice, but some people have told me they do it and that it's very efficient. So I want to bring it to your attention. And that is, all of these details, if I open up this detail, is 2D linework. It's set at half inch to a foot, and this cable railing detail is also half inch to a foot. So these two could be put side by side for reference or for certain types of work. How would we do that and what benefit would it give us? Well, in the old days, meaning before ArchiCAD 12, before we had worksheets, we could use the Detail tool and put these two details into one detail window. [0:58:12]



I also know people who would create different stories. So they go into the project map and they create potentially ten or twenty or more stories, each one being a storage location for a bunch of details. So what does that mean? They would create an area for putting in multiple details that all were at the same scale. Now I wouldn't use stories anymore, because this is all 2D stuff and there's just no point in using the story structure. But we can get a very similar effect by using worksheets. So let's just create a worksheet. I will create a new independent worksheet, and we'll call this "Half inch details". [0:58:58]

I am deliberately naming it based on the scale and just making a very obvious from writing it out here, but what is this? This is just a blank drafting area that has a name and lives in the project here. Maybe we'll call "1-2" for half or something like that. There's nothing in it. I do want to make sure that it's set up for half inch if that's what I'm doing it for. So I will set it up for half scale, 1 to 24 here. And maybe since it is going to be live or be accessed occasionally in the worksheet clone folder, I will make sure that this is set, instead of for quarter inch I will set this particular view to the half inch. [0:59:52]

So if I ever reference it by double clicking it here, it will be at the half inch. So now I have a blank drafting area, and let me just go to a couple of these details. So I will go to "Deck Column Beam Detail" here. I will take this at half inch and literally select this, copy it, I'll go back to the half inch detail here and paste it. "Are hidden in the current renovation filter". Interesting. So let's go back to that - what is this? This is a worksheet. Right now it's set for "Existing plan". And let's say "Show all". Views in the view map of course have a scale, and they usually have layer combinations and model view options. They also have a renovation filter, so if you're in ArchiCAD 15 or later, you have the option of saying this particular view is set to show only the existing stuff. [1:00:58]

Or it can be set to show the new stuff in various ways. I'll just say "Show all". That means that this particular renovation filter shows existing, demo and new. So basically it shows them all. Now having changed that setting here, now when I do a paste, it just asks me what I want to put it. I can say "Original location" here, that's fine. Let me go to the other one. Let's go to "Edge detail with deck". Alright, so I am going to do Command+A with the Arrow tool, which will copy. And then go back to the half inch detail and paste. I don't really want to be on top of it, so I'm just going to click inside and drag it off somewhere. [1:01:42]

So now I have two details side by side. Let's just go through a few of these here. I'll do Command+A, copy, go back to the half inch details and paste here. I will put it somewhere convenient. We will do one more here. And here is the half inch details and we'll paste it in there. Okay so what do I have right now? I have several drawings with just enough space between them so it's clear that this text relates to that. I can move them anywhere I want. Now why would you want to do that? If you are doing multiple drawings that are similar or



reworking things, then you might want to say that this note here about the 2x6 PT wood decking, I might eyedrop this and then go and - I guess it's go this way here. [1:02:48]

If you eyedrop a label, it will set it to the Label tool and it will already load that text. Let me eyedrop this one here. I am messing this up. Obviously it doesn't relate to here. But the idea is that if you're working on these details, in the actual project itself or in your detail library, that having access to these side by side, you can select things, drag copies, eyedrop, there are different things that you can do that would relate. I will just get rid of those two extra ones that I did. [1:03:36]

Frankly, I'm not sure in the workflow how much this would be useful to you, but it is something I wanted to make sure that you saw, because some of you may go "Oh, that would be helpful, because I need to be able to work with multiple things that are closely related, and this would save time." Now of course when I eyedropped I could have just as well had this window open here. Let's switch my work environment to say that I would like to - under "More Options" here - open a new window when I'm opening this. So what this allows me do is have a detail and this is a worksheet here. [1:04:32]

And I can go and get another detail. And this one and now available. And I could go and - whether I have two details or a worksheet in a detail or whatever - I can literally go and if I zoom in on this, eyedrop this, and then go back in here and do that. You'll see that this is the same text. Or I can go in here and select this item, copy it, go in here and paste in the center of the current view and bring this in, and then drag it into position. These are things that I can do even if they are side by side. So obviously, it means picking which one you want and having it open and moving the window around. But that certainly gives you a similar effect to having these things side by side and being able to eyedrop and drag copies. [1:05:45]

Let's see. I think if I take this I can literally drag. So I am dragging this over, and I can take it beyond the boundary. No, it's not letting me do that. Let's see if I go to the Arrow tool and drag this over, if you do it in one single action, relatively quickly, you can literally drag things from one window to the other. It won't remove it from this window, but it will just make a copy of it there. That is an interesting thing that you may not know you can do. So I will just take this and drag and let go. It didn't come in exactly where my cursor was, but it definitely came in. So it's a little bit faster than possibly copying and pasting there. [1:06:36]

You may actually select a few things. I'll take these two things. You can select a bunch of things potentially and do drag command, drag this over, and as long as you do it all in one quick step you can see how these guys were the elements that I just had selected over here. So you can drag them in. these are a couple of variations where you would have potentially multiple details within the same window. Worksheets are good. If we think about the file structure, right now we're looking at a reference file; library of deck details is what it was. And the stories really are



not relevant, because this is not a 3D model nor are the elevations, sections, etc. All we really care about is the details. [0:07:36]

But, we could certainly use the worksheet area to create other reference materials. My general suggestion is, if you call it a detail drawing, use the Detail tool and a detail viewpoint to work on it and manage it. If you call it some other 2D information, then use the Worksheet tool in general to create that view. It might be a wall section, it might be a demo plan, and it might be some reference notes or the survey or the DWG, the site, things like that. These would all be good uses for worksheets. They are pretty interchangeable, worksheets and details, but I like using the detail folder for things you call details. You are going to typically have quite a few of them. [1:08:31]

The worksheets may or may not be a similar number, but it's a nice separation. Details go here, other stuff goes here. In this case, if we in multiple details, yes they could go into the detail section. But if I say its multiple details, maybe I am going to call it a worksheet that has many details in it. In any event, this is a way that you can work with it. A variation of this and this is where you potentially could have some issues, but I know some people have done it. Think about the fact that this 2D information could be placed on a sheet. Remember I have the worksheet here, so this is the worksheet. Let's take a quick look at the sheet. [1:09:16]

I am going to create a new layout. We'll call this "Worksheet Test". Now I have this sheet here that has nothing on it. I am going to go to this half inch detail and drag it on. Now it has all of those. Guess what? I could crop this using the standard cropping controls to show only one of them. And I could drag a copy of this to there and then change the cropping. I can go in this copy, change it, and maybe get it so that it's showing a different section of that. I can change its name. So we're going to say that the view is going to be "Custom" and it's going to be called "Circle detail". [1:10:25]

So basically what these are, both of these little drawings here are cropped versions of the larger worksheet. The potential issue is let's say you have that worksheet with ten or twenty or fifty detail drawings with quite a bit of detail, and you put this on five or ten times onto the sheet, each one with a different cropped area. It will look perfect, but each one of these, in theory, is containing all of the other stuff that you are hiding, right? That means that ArchiCAD potentially is keeping track, with all of these five or ten or twenty details, a lot more information than it needs to. It's not just what you see, it's this other stuff. [1:11:17]

So the file can balloon up in size; potentially even the redraw time on the layout could slow down. I don't have any current data or tests where I can point to that, but I have heard a long time ago that if you do this cropping thing a lot, that you may run into some issues. So here and there is not a problem. It's again that case where maybe you have 25 detail drawings and you put it on 20 different times and each one essentially has all 25. It's as if you had 500 details all



being saved onto the sheet instead of 20 details. So that would be potentially an issue.
[1:12:05]

Alright, let's see some questions here. So Sherry asks, "I exploded a DWG detail that I brought into a drawing. I removed some hatch fills that I didn't want and then I tried to select everything and group it. I tried to use the marquee to select and group everything, but it didn't work. I selected each separate piece and tried to group but it didn't work. How do you do it?"

Let's see. If I open up the source view here and go back to that, so how do you group things? First of all, if you go to the Marquee tool, group will not be available. It's gray because group has to have things selected to be able to do it. If I use the marquee and then go to the Arrow tool here and say "Select all", this would be all things within the marquee, you can use the marquee to do that. You'll notice that these are all normal black handles but there are few of them that are red. There are a few that are blue. So this section here is one group. This is another group, the blue things, and these green ones are another one. [1:13:21]

The ones that are black are not grouped here. In fact, I am not quite sure if you can group labels. Labels are sort of an oddball there. But I have these selected and go to the Edit menu. I go to "Grouping" and group them. And now you can see they all have red handles. And now if I select one of them, you see how they all get selected. so basically the group elements, you select them either with the Arrow tool or draw the marquee and do select all with Ctrl+A or Command+A. make sure you have handles, and then go to the Edit menu, Grouping, Group. Or just do Command+G or Ctrl+G. [1:14:03]

They are now grouped. Of course, remember to suspend groups, which is available here or through this little icon that allows you to then select individual items. I'll just drag this, because it really should be up here. I selected this. I can move it around and edit it individually as part of the group. As soon as I turn groups back on, it now is going to select all of them and I won't be able to move this individually. I can only move the entire group if that is what I want. [1:14:33]

Alright so hopefully that answers Sherry's question. Tom Downer asked, "What is the advantage of creating a clone folder for the view map?" Oh Tom. The clone folders are a very fundamental organizational tool that I would like you to learn how to use. I do have some extensive training in the Best Practices course, I think it's week eight. The short answer is I created a new worksheet. Remember I went to the worksheet folder, right clicked, and said "Create a new worksheet". If I didn't have a clone folder I would have to go back to the project map and create a new view before placing it on a layout or before I could have it available for that organizer to import in. instead, because this is a clone folder, this view just appeared.
[1:15:25]



As soon as I add another worksheet it will be there. So it automatically will give you a view for every single one of this category. Now, the use of views is so phenomenal if you have a multi-story building. For example, let's say you have a ten story building. The floor plans, as you create new stories, they will show up in the floor plans. They will also show up in the ceiling plans. So you'll have ten stories all with the right settings for the ceiling plan. And maybe you're only doing residential, and you only have one or two story buildings. Then it may not be as important to have clone folders for floor plans, but think about sections. [1:16:09]

Right now there's no sections in this. As soon as I go back to something on the floor plan, even though there's nothing much to see - there's nothing in here. Let's just turn layers on here and get rid of this thing here. Why is this not letting me do this? The layer is probably locked. I will unlock the layer here, and now I will delete it. Okay, so let's just imagine that this was a real building and that we've created a section here. I will cut a section through this here, and another section through this here. And another section through there. [1:17:06]

I have created three sections; they're in my project map. If I want to put them onto sheets or if I want to work with them, basically I have to have views in the view map so that there's something ready to work on. This clone folder, which was empty before, now has all three of the new ones in there. They start out with the settings of the clone folder, which means they have the right layers, the right scale, and the other settings that you might expect or need here. So basically, the clone folder gives you new views every time an item is added to that particular section of the project map. In this case, sections, in other cases it could be interior elevations. [1:17:54]

So think about if you are doing interior elevations, you probably have a bunch of rooms. Every time you create an interior elevation for a room it shows up in the interior elevations clone folder. Right now, there's only this one because this is not a real project, but it will just add to it. So that's a reason why clone folders are so useful. They give you an automatic view based on a certain style. This means certain layers, certain scales and other settings that are appropriate. And you can immediately place these views onto sheets or adjust them; perhaps you have a slightly different layer combination. Or in terms of details, each detail in a clone folder can have a different scale. Some might be at half inch scale; some might be at three inches to a foot. [1:18:43]

So that is the short description. I encourage you Tom to watch the section of the course I think it's around week eight that talks about the clone folders and the view map. So let's see if there are any other questions before we finish up here. I would love to get your feedback in terms of how - was this useful? Did you learn some things in terms of the idea of having libraries of reusable details in separate file? Of course you can always reference a detail from another project. If you are working on project B and project A has a detail that is very relevant. You could copy and paste the stuff from A to B, or you could drag a detail from A into B and place it



on the sheet. Just be careful. If in A you change that detail it will also change in B. so that is something you have to be careful about. So let's see if there are any final comments. I see Steve says, "Sure, got the idea." So when you say "Sure, got it" meaning I went over it more than you needed, but I am glad you have the idea. [1:20:13]

You said, "Need to practice". That is definitely true.

Rick Skorick says, "Go clone folders!" Definitely they can be a little confusing, and I know Tom, you're not alone in terms of saying I don't really understand why it should use it or what benefit in is. But overall it's a great time saver, and we build it into MasterTemplate for exactly this reason and I recommend you get familiar with it. Rick says, "Thanks for the reminder." Okay. So I think it's time to finish up. Please add any comments or follow-up questions to the page down below the recorded video. This has been Eric Bobrow. Thanks for watching.

[END OF AUDIO 1:21:05]