



## **BEST PRACTICES COURSE – WEEK 23 Layout Book Drawing Options, Printing and Publishing - Part 5 - Master Layouts: Grids and Automatic Placement Options**

Welcome everyone to the Best Practices Course ArchiCAD training lesson. We'll be continuing week 23, where we are focusing on the layout book. Today we'll be looking at layout masters. We'll be looking at some of the settings that apparently are lesser known, because what I talked about this earlier, I found people really didn't understand or weren't taking advantage of some of the automatic placement options and grid options available. So let's take a look. [0:00:33]

Here we are in the sample project. If I open up the layout book and we look at a sheet of floor plans, these drawings were placed and individually moved around until they looked good. And that's what you're going to be doing for a lot of your drawings. But there certainly some drawing sheets where, like interior elevations, you have a number of drawings that should all be lined up and they should be in rows. Or in some cases, you may have a detail drawings that you want to put in a grid. And I know not everyone does that, but certainly it is a common way to do drawings for details. [0:01:20]

So when we have a situation like this with the interior elevations, we can take advantage of the automatic placement capability that is built into ArchiCAD that has been around for many years. At least I can think of it back through ArchiCAD 10. Apparently, a lot of people have been missing out on that. So let's take a look at some of the settings in the master layouts that determine how drawings are placed and some of the other controls that we need to really understand to use master layouts as effectively as possible. [0:01:56]

So the master of course is the information that we have in the background of this sheet. It is in red right now because of the preferences under the Options, Work Environment. I think it may be in Onscreen Options here. And you can see it says "Use uniform color for master items on layout". So the red here could be changed to any other color. You simply click on the red chip and change it. I will leave it alone here. We can also choose to potentially hide the master. So we could go to the View menu, Onscreen View Options, and say Hide the master items on the layout". [0:02:36]

So now we can just see the live elements. Everything that is in the master is hidden currently because I turned that off. Now while I am thinking of that, there's an option here. Sometimes it's useful to see drawing frames. The drawing frames here you can see are little dashed lines. So if you have a problem selecting a drawing or not quite knowing just how far its boundaries are, you turn that on. Of course then we can select the drawing by clicking on the corner more easily. So that is an option here that you may want to turn on or off. [0:03:21]

If I turn it off, then it's more like it's going to print. In other words, we don't see a frame visually unless we have an actual line set up. And I showed how that was done in one of the previous lessons, how you



can have a frame for certain drawings. Now when these were placed onto the sheet, they were done using a feature within the master layout that has to do with the automatic placement of multiple drawings. So let's take a look at the master for this sheet. So we are in the interior elevations sheet here. It is using a particular master here. This is "MT" for MasterTemplate Standard 24x36. For those of you outside the U.S. that would be I think an A-3 sheet or something like that; sort of a medium sized architectural sheet. [0:04:12]

We have our related ones here for notes and details. If I switch this to another here in the popup, you'll see how the sheet changed. The drawings stayed in the same position, but it's a different sheet in the background. On the other hand, I will put it back to where it was. If I switch it to the notes here, you can see how some additional information shows up or if I go to detail how a bunch of lines show up. So let's take a look at how all of those are handled by first of all looking at the settings for the master that corresponds to this. [0:04:52]

So here's the "Master MT Standard 24x36". You'll notice that it has a turned over corner icon indicating that this is the default for new layouts. Let me double click on it, and you can see that here is the actual master that I can edit. You'll notice that it's in color instead of being all red. If I select any of these items it will allow me to edit it as you would expect. Now in terms of the settings for the master, if I go under the settings dialog, we'll see that the master has a page size. And the page size can be set based on standard architectural or other types of drawing sizes here. Or it can be imported directly from the printer or plotter. [0:05:41]

So we have a page size here and we have certain margins. These margins are what determine the blue boundary here and determine what is principal, at least as far as ArchiCAD is concerned. Anything outside of the blue boundary it will not attempt to send out to the printer, plotter or when you save a PDF. So be aware of these boundaries. You can see on the left hand side there is a larger area reserved for the binding and on the right hand side is certain amount of reserved for the roller for this particular printing device. [0:06:21]

Now if we want to look at the other sizes - I can't remember if this was covered in a previous lesson, I've lost track a little bit. Let me just briefly say that if we are working with a particular printer in-house, we can say "Import settings from printer", and use the settings from that printer. You can see how we can choose whatever settings are installed in the current printer. So if I had a large-size printer, it would pick that up. And not only would it pick up the size here but it would pick up the margins which would indicate the minimum that are required for that particular printing device. So this is a way of actually picking up the settings from your current printer or plotter. [0:07:11]

If you go to the plotter choice then you can pick what plotter model you have and what type of paper it's working with here. And once you choose that, you can see it understands in this particular size paper that the available drawing area is a little bit less based on the margins. Also we can set up the way that



the page is being fed in, and this may be something that you'll need to test out initially when you set up ArchiCAD in your office with your plotter. So by clicking on different options here, you can change the way the image of the sheet will be arranged on the plotter. [0:07:56]

So let's move back from the size here. Let me cancel this and go back in, and we'll look at the settings related to the drawing placement, because I think that's where I have found a lot of people, in the last time I covered this material, didn't understand that this was available. So if I want to drop in a number of drawings of the same time such as interior elevations, ArchiCAD for this type of layout will automatically arrange the new drawings based on a setup that is specified within this separate sub dialog box. So it says that it's going to place drawings horizontally. Obviously you saw the interior elevations that I displayed earlier. [0:08:44]

Each room was one row. It inserted a break between sequences, so in other words, it didn't start the next room on the right side of the row, it started a new row. And it has an option to, if you were to drop and a whole bunch of interior elevations, to create new layouts whenever it runs out of space. You also can say where these drawings will be placed relative to the margin, that's the blue boundary here, and what the gap is between these drawings. So let's just see what happens with the current settings when I drop in a few drawings onto the sheet. I don't want to drop it on to the master; I want to drop it onto a sheet. So let me just go and create a new layout here, and we'll say this is "Test of automatic drawing placement." [0:09:42]

It's using the standard layout here. So it's just slipped in here. And let's go and place, instead of a single drawing, let's go to the interior elevations clone folder where I have four rooms. And I'm going to just grab - instead of having to go to each one of these drawings individually - I'll just grab the headings of them. So that means we have four rooms and each one in this case with four sides, because they're all rectangular rooms. Now when I drop this in here you will see that ArchiCAD starts to update each one of them and make sure it has the latest version of those elevations. [0:10:23]

And you can see each one is stacking up here, because there are four times four, which would be sixteen drawings. In the upper right, you can see the drawing update. This says we are on number eleven or twelve out of sixteen. Here it's almost done. It's dropping them in the center of the sheet and then in a separate step it will lay them out in a sequence. So you can see it's sort of like what we had on the previous sheet. If I jump to the previous sheet here - except that on this previous sheet, we had some drawing titles. And it looks like there was some extra space at the top. Let's go here and you can see that this one was set to drop it in right at the top margin. [0:11:07]

Perhaps that's good, but let's just see how we can arrange it more like what we had before or what would be a standard. So I'm going to undo the edit drawing, which is the previous step. That's the one that placed everything in position and undo back one more step, which would be the placement of all the drawings. So basically there are officially two steps that I just did. We'll go to the settings for the



master here. And let's say that in the auto arrange setup we'd like to have it start a little bit lower down on the page. So we'll give a half inch here. And let's also go and eyedrop the settings for the drawing. So if I go to the interior elevations and eyedrop one of these drawings, then it will have a title set up properly. [0:12:09]

Let's just double check when I eyedropped it that it's picking up drawing ID based on the layout or by the view ID perhaps. So we want to automatically have it pop in so that view ID will be used to do the title for each one. And then the name of it will be the name only, so that will be something like the name of the interior elevation. So I've now set it up so that it's going to be using this drawing title and having some automatic naming for the next time it does that. So now if I go in and go to the blank sheet and drop in these interior elevations again - and I can drop them anywhere on the sheet because it's going to arrange them based on the rules - it should start a little bit lower down, and it should have the titles lined up the way that we expect. [0:13:09]

I see a comment from Rick Skorick. "I need coffee...zzzzz..." Yes. I know it's like 5:00 AM for you Rick.

So here we have something a little bit closer, although we can see that the title for all of these says "# zone number". So what was that title or what should it be here? So if I select this and we look at the setting, it says "by view ID" which is the zone number. What if we were to say "by layout" here? Then it's going to be number one. Possibly what we want to do, let me just undo that and I will select all the drawings on a sheet. I will go to the drawing tool, select all the drawings, and let's change them all to having them numbered by layout. [0:14:06]

So this is an option that perhaps would make them -they are numbered by layout here, that's interesting. They all are the number one. That's not the way - and then I see these are set up with the number one. If I select them all, I can also go and - actually let's go to the layout and go to the settings. It says the drawing ID style starts at number one. 1, 2, 3, etc. So it should be numbering them in sequence. Why is this number one here? Include drawing in ID sequence is turned off, so that was something that perhaps happened when I eyedropped. [0:14:58]

Remember, this option here allows you to say whether drawings should be counted. So if I go in and select all of these and go to drawing settings and say I want to include them all, then they should all renumber. You can see now it says 1, 2, 3, 4, 5, 6, 7, 8. So obviously you would need to just figure out what's going to work best for your needs and work with that. Now if we wanted to have a little more space in between then these would actually create a new sheet. And in fact if we were to do five or ten or twenty interior elevation rooms, it would create several sheets and the sheets would automatically just go in the sequence. [0:15:43]

So if we had it numbered in sequence like this, it would be A.12, 13, 14, if that was done in one of the subsets - we had interior elevations like A.6 - it would be A.601, A.602, A.603 etc. So I think this is a very



powerful thing. Know that you can adjust things. So for example these for some reason are laid out a little funny. So I could go and drag them over. They are fully editable; it's just sort of giving you a starting point for this. Now notice that - let me just undo it back - this is not lined up here. That's sort of odd why that's the case. Other ones do seem lined up. [0:16:34]

This brings up the general question of how do you line drawings up a sheet? And one thing is that I can certainly drag this down and use the Shift key to lock my cursor. so then I can go snap on a corresponding point here. Or in a similar way, if I'm dragging it like this and I have the guideline, I can go to this point here and, depending on what version of ArchiCAD, you'll either automatically get a guideline horizontally and vertically from this point by hovering or if you're in ArchiCAD 15 or later drag to the side. And now let's see, if I drag to the side here enough, you can see that there's now a guideline being projected. [0:17:26]

So I pressed down and dragged without actually releasing. I held it down long enough that ArchiCAD said "This is a guideline". And then of course I can find the intersection point. So either use the Shift key or use the intersection of the guidelines to be able to line this up. Now I don't quite know why that one was out of sync. It doesn't necessarily look like it's any different in height there. But this is something obviously you would need to just check in order to have a nice clean drawing sheet. I'm just going to drag this over a little bit. So even though the general spacing is set up with a certain gap, you can certainly move these individually to suit your needs. [0:18:18]

So that general gap between one drawing and the next was set by the settings here in the auto arrange. And that is the gap between the drawings. so feel free to adjust that. And of course the spacing between top of one and the bottom of the next one, you would want to look at the size there. So overall that is the basics of how you would do auto arrange for the interior elevations or similar drawings. Sometimes you might prefer to do that for detail drawings, but probably a typical example would be where the detail drawings are set up in a grid. So let's look at how a grid is set up in this case. [0:19:11]

We'll go to the settings of this detail, 24x36. So if I double click on this detail for the master layout and go to the settings, we'll see the rest of this is all the same except for the name having the word "Detail". But we have a different check box for the drawing placement. So if I go to grid setup here, you'll see that for this style of drawing, it allows us to set up a sequence and a numbering style. So I'll click on each one of these and explain the difference. Matrix has two identifiers, a first one and a second one. They can be letters or numbers. Right now it's 1-E, 2-E, etc. [0:20:04]

We are numbering these with the row first and then the column. And the row is this number one and the column is the letters. So that is how it's being done as a matrix. If I were to change it to only numbers, then you would see how it has 1-5, 1-4, 1-3 as opposed to the 1-E, 1-D, 1-C. So this is 5, 4, 3, E, D, C has options here. Now if we do switch it to flat numbering, then you can see that it's going to be



numbering from some corner or another just in a sequence. So that's another choice you can make. [0:20:51]

Whether you do matrix or flat, you can say where the primary direction is. In other words, this is vertical going up here. And where it's starting from, which corner. If I were to switch this to bottom right corner, then you can see how it's starting the numbering here. Now in this little preview, it shows how the drawing would be numbered if it occupied more than one cell in the system. In this case it's going to get its numbering based on the bottom left position. So if you think 1, 2, 3, 4, 5, 6, 7. It picked up the number seven there. If I change it to bottom right, then this would be number three because of that system. [0:21:35]

So this is really up to you, and you probably already have a preferred way of doing it. If you haven't been working with detail sheets just know that you can change the number here. You can have different numbers of these by just clicking or typing in a different value for this. In a larger sheet obviously it's more likely that you would want to have more cells than on a smaller sheet. And you can feel free to change that numbering. So this is 1-E in the corner. If I change it here it's E-1 or row-column vs. column-row here. I think these are all pretty self-explanatory. You can also switch between left and right. [0:22:20]

If I click here then it's going to be starting from the left going towards the right. You can see A, B, C, whereas the original setting E, D, C because it was going from the right to the left here. Now the distance from the margin, you can see the squares here have a certain distance from the edge of the page. But what we are specifying is the edge of the margin. So basically that blue boundary that is the printable area. So right now it's saying that it's going right up to the top and bottom but that there is a little bit of extra space on the left in quite a bit of extra space on the right. [0:22:59]

The space on the right here typically is for a title block that we're allowing on the left side here. This might be for some explanatory information. Sometimes this is going to have a reference to the source or maybe it will have a copyright or some other little bit of text that's just to the side of the grid but has to be within the printable area. So just allowing a tiny bit of space there. The grid line display you can see these lines here generally are going to be solid. If you did make it dashed or something like that then we'll see that. Let me just cancel out of here and we'll just make this simple change of under the grid, what happens if we make it a dashed line here? [0:23:43]

And we make it say a red line like that. Then we'll see how this changes. If you're printing in black and white then red would be the same as black but dashed of course looks quite different. So feel free to adjust that if you want. Maybe there are only some special sheets that you might want to change that. There's an option now for hiding grid lines that intersect a drawing. So if you do have a drawing that takes up multiple cells, it's going to prevent any lines from passing through that. We can also say we'd



like to show all, and you can see how that's going to draw lines through that, or hide all, in which case there is a space defined for each numbering, but it's not going to draw the lines. [0:24:38]

So the most common is to show them in general but hide the ones which intersect a drawing. So let's just see how this works on an actual sheet here. You can see the numbering here was based on the settings that we had. So this is 1-A, 2-A, 3-A. These gray indicators are not going to print, but this gives you an idea of how the numbering is. If I were to take this drawing here and just drag it into a different cell, you can see how it automatically reformats or renumbers itself as I do that. Now this one you can see there are no lines going through it because this drawing, the boundaries of it passed through this line and that line. [0:25:27]

If I were to move it where it overlaps too many lines, like this, you can see it will clear out as much space as I define. But if I move this over a little bit, then it will fill in the lines. So it's really quite intuitive. Now notice as I move this around that the title stayed in a certain location. That's because the title is setup in this case to be looking at the grid settings. So unlike the titles that we have for drawings that are just placed loosely on a sheet, like a floor plan or an interior elevation where we have them in a row but there's no grid, these are tied into the grid itself. So how does that work? [0:26:17]

If I open up the drawing settings here and we look at the drawing title panel, you'll see it says "Position to cell". So that means that it's looking for what is the cell that it's part of. in this case it's a larger cell but still it's a cell rather than just freely on the sheet. And it's saying it's going to place it at the bottom left and it's going to be offset zero. Basically it will touch on the bottom left here. So if I were to change this to let's say a half inch or something like that, then you can see how it moved up that half inch. So you can certainly say if you want it to be off the line, you could do that. let me undo that here. [0:27:03]

If you wanted it to be inset a little bit then you could say "Link width to length parameter". So this is an interesting thing that I've seen people request. The length here, you can see this is a standard length. it's no different on this one. Sometimes people prefer to have its span the whole cell. So if that was the case, we would say the width would not be based on the length parameter, it would be based on the cell. That way, when I say OK, you can see how the line cuts across there. That I think would give you the opportunity to standardize the particular length for that. [0:27:57]

Let's just see if there are some other quick options related to that. So the width is related to the cell. "Text position" is the number of the drawing. I don't know if that affects the bubble. if I do 1/4 and 1/4 what happens there? so that actually just moved the number in relationship to the circle, which is not probably very useful. So just know that if you have a setting like that is a standard for the grids, it does allow you to have - even as you move this around, I've moved the drawing up - it still stays locked in. If I had a drawing that was going to take up more than one cell, it would still be placing the title in relationship to the grid boundaries there. [0:28:59]



So play around with that as you need to and have a favorite. Now remember favorites are a grid way to codify frequently used settings. so for example, this setting here, if I save it as a favorite and call it "Detail Drawing", then when I am going to drag in a new detail, I can easily go and activate that favorite. And if you haven't worked with favorites much, you can also get access to them under the Window, Palettes menu, Favorites. And then you can see here is the detail drawing that I just set up. let's look at the one for the interior elevations. [0:29:47]

And we'll take this one, and I'll go and save this current selection as a favorite. And we'll call this "Interior elevation drawing" here, like this. And let's see. If we're in the drawing tool, detail drawing, why didn't that get set up? So that's interesting, that is not actually saving that. let me just go here and go back to = that's really odd. let's go and see if we can get this in here. Go to favorites, here is this one, save current settings as favorite is grey. That's really odd. Why would that be the case? it's not locked, so I can't see why that would have an issue. okay a little puzzled by that. let's just eyedrop this and then let's see if in the default settings, favorites. No, "Save current settings as favorite" is grey. [0:31:15]

So I'm a little puzzled as to why that's all the sudden gone a little bonkers there, but in general you should be able to create favorites based on anything you need. so if we go to let's say the floor plan and we select this, can we save this as a favorite? No, it's grey there. I am not quite sure what's going on with that. I will have to look at that separately.

There is a question from a little while ago from Bob Stensland, "Can you make bottom right box number one if you only have a couple details on the sheet and don't want them in the top left corner? My opinion." Good question. if you only have a couple of details on a sheet, here we have only a couple of them, then we might actually not want to have a whole grid. That would be one option. So one thing would be to say this sheet, I would like to switch from the detail sheet to just a standard sheet. And now they can be placed anywhere they want. And you can choose the numbering for these drawings to be based on the layout. [0:32:29]

And the layout now you can see actually has 1, 2, 3. This is based on the order of them. So in other words if we changed this to a sheet that is not a grid, then the numbering in that layout is set up - let me just jump down here. The numbering of drawings on the layout is set in the master. if we have auto arrange new drawing, the drawings will have a number based on their navigator position or possibly based on some sorting order based on their name or their ID. So you can have that take precedence. But in general, I would work with the navigator position so we can simply change the order of the drawings here if we want. [0:33:29]

So in other words, if I move this one up to the top of the list, you can see how it changed to number one. if I move it down to the bottom, you can see how it changes to number three. So the numbering is based on the master. If we have the master for detail drawings, we have already gone through in the



grid set up how the numbering is based on either a matrix or flat. So I think for your case Bob, that would probably make more sense for what you're asking. [0:34:05]

Now can you do automatic layout to start in the bottom right? Absolutely. As I went over a little bit before, the grid setup can start in the bottom right. Actually were going to start in the matrix and start in the bottom right here. you can number these. So if we number them in the bottom right then we would want to start them from the bottom going up and we would want to start from the right going left. So now you can see here's 1-A, B, C, D, E and 2-A, B, C, D, E. Or if we wanted to do primary direction vertical or horizontal - what is the primary direction? All of a sudden I'm losing it here. [0:35:06]

If we do it in column row here, we're going to see the A-1, 2, 3. So this certainly gives us all the options that you would need for getting your results. I think Bob you should be able to get what you need.

Ken Brooks asks, "Can you have most of the sheets set up with the grid and have the same setup work for your interior elevations like you demonstrated, or would you choose from the beginning one or the other?"

I think interior elevations tend to have different widths. Each room as different size, so they don't fit into a grid system quite as much. if you think about details, maybe you'll have a lot of details that will line up. some of them may be double wide and things, but a lot of them will line up vertically. You certainly could put interior elevations in here and some would take two wide and some would fit within one. [0:36:12]

That would be an option if you prefer that. So there's nothing that says you can't use a grid with interior elevations. There is another variation here, and you'll see this on the general notes page, and that is in this general notes page we have a title here, "General notes and specifications" that is also seen in the bottom right of the drawing. So what has that done? This is using the MasterTemplate notes master. It's a different master layout. If we open this up here, we'll see that this master layout is set up with a grid that the grid is set up with five across and only one vertical column. So basically, it's intended for multiple columns of text. [0:37:09]

In this case what we might want to do, since this was placed in as a PDF and it covers the whole thing, is we might want to say "Show all of the lines". Let's just see if I change it to "Show all of the lines". You can see there's just beginning of a line here. here's where we might want to also use the option for displaying the master layout above the layout. Then things like the lines will be shown above the PDF file. So let's just say OK. Did I change that to above the layout here? That's interesting. It's not actually doing what I thought. let's just see if we have a setting in the PDF Properties. We don't have a transparent background. that's interesting. [0:38:13]

So if you were to place in pieces of notes as a single columns, then these lines of course would show up just like you would expect in it grid, except that they would just be from bottom to top. In this case -



and let's just double check if I were to go to a different sheet and see if it updates. No, it's still doing the same thing. You can see this is a different sheet but we're only seeing the lines top and bottom and not passing through. And this is "Notes 24x36" which is what I believe I had changed - display master layout above the layout. [0:38:57]

So this is not acting the way I would've expected. We have a couple little glitches here today. But in general what I would've expected is for this line to show up on top of the drawings there. And it's very possible in printing it might do that. It's also possible that PDFs are a special case. Let's also see one last thing. if I select this and say "Send to back", no, that still did not change the display there.

Okay question from Ken Brooks, "It seems like the favorites would apply to your question about the automatic layout, about having most of the sheets set up with a grid."

So just backing up then for Ken's question. in your template, it's good to set up, whether you typically do a sequence of drawings numbered just in one list or you do them in subsets, it's good to set up your typical drawings in your template. So you know that you're going to have plan drawings, elevations, sections and details. Just set them up in place, perhaps with nothing on them. or if you use an approach like MasterTemplate, you can say that I'm going to put the views of the floor plan - even though the drawing model doesn't have a floor plan - we'll put up the actual drawings onto the sheet. So as soon as we work with that template and draw a building and then update the sheet, we'll see the plan start to show up. [0:40:40]

In your layouts for detail drawings, it would make sense to set it up in your template for a grid, if that's how you prefer. And for interior elevations, actually if you prefer a grid, that's fine. Otherwise you could set it up as we have it in MasterTemplate with the auto arrange option available but no lines showing. not like a grid. So in general, the more you can set up ahead of time that meets your standards, the less you'll have to do in a project plus clerical work, and the less chance of differences. Things will look consistent from project to project. [0:41:26]

Ken says, "The drawing is entirely over the entire sheet of drawings, replaced as five separate columns of notes, then the lines would show." That is true. That is related to that PDF file. So in week five of the course, I go over how you can use Microsoft Word or Apple Pages or similar programs to create your general notes and set it up with a page image. Originally, when I was first teaching that, would set it up so that each page would become a column and you would place these columns onto a sheet as separate PDF pages. But then I worked out a system where we could have a sheet dimension like this one here that is a single PDF. It's done, in this case, in Microsoft Word, but it's saved as internal because this one we broke the link. But normally it would be a PDF that was set up and you would be placing it in. And maybe there's some difference because it's been embedded rather than linked, I'm not quite sure. [0:42:42]



Okay so let's see Bill Ellinger writes, "Eric, would you discuss the import process for placing a PDF notes file?"

Sure. We had gone through that in the previous lesson, but just as a quick recap. I create a new layout and we'll call this "More notes" here. I go to the File menu, External Content, Place External Drawing. in all versions of ArchiCAD since version maybe 11, with the exception of the Start edition - if you have the lower cost version of ArchiCAD that doesn't do PDF but standard ArchiCAD does. I can go in and go to the linked files here. Here is a specifications document that was saved out in MasterTemplate. It's actually a placeholder, so it doesn't have text; it just has some columns with a little bit of text on it. [0:43:47]

I'm going to go and take this full page PDF and open it. It says there are three sheets here and asks which one I want. So in any PDF you can choose which one. I will say "Place". Then I can click anywhere and you'll see that it's shown up on the sheet but it's not fitting the sheet properly. So there are two issues. one is we don't want to necessarily have a title underneath that. So I'll go in and take this drawing title and say "No title". And secondly I want this to fit the layout better. in this case the page size in Word is smaller than the page size of the eventual document, so I would need to go in and say that I'd like it to fit to layout. [0:44:36]

That would be a good starting point. That will take it up to a certain magnification, a little bit more than twice as large, and say OK. And you can see it now fits onto the layout. In MasterTemplate we have some information for how this works. I suggest that you review week five to see how this goes, because I explain it in detail. Basically you set up your Word or Pages document in the columns, and if there's a limitation like in Word that Word doesn't allow you to create documents larger than a certain page size and it's not able to go as large as your actual architectural sheet, then you might want to create something that is a reduced size, like 50% of the actual page size. [0:45:23]

If this measures 24x36, then you might create a sheet in Word that is 12x18. Then have the text be correspondingly smaller. if you liked 10 pt text, you would make the text in Word 5 pt. Then when you place it on, you would make it twice as large, and it will and then work just fine. Here we do have a little issue. it's a little bit too big because it's going over to the right side here. So we would just have to coordinate the sheet size of this or perhaps maybe just have this a little bit less of a magnification. And you can see that now might fit onto the sheet better. [00:46:08]

And one other thing that I had changed that I didn't mention is that on our standard note sheet here, when I open it up, you'll see that it has actually some text that is the same as the layout name. You can see here is layout name here and layout name there. So this is just another bit of auto text. Here are some lines. And actually, this is what gives us the information when we look at these notes in the sample project. It says "General notes and specifications". Whatever I type in here - let me just call it



"Special Notes" here. It updates to have whatever text I have put in the title. So if I change that again, you can see how it will update. [0:47:06]

So that same text goes in both places. The workaround for that line thing is we would simply use the Line tool. That's interesting that we can't snap to that. I will take that line; choose Display Order, Bring to Front. Maybe I have to tell the PDF to go to the back here. The PDF is floating in front of the other elements. This line here, let's make it black. There we go. Now it's showing. of course we can take this and drag copies over or multiply them and things like that. So that would be our work around which would work just fine, since we don't have that many pages, you could easily create these just copy them from one notes page to another. [0:48:19]

Okay, in terms of the options, I think we've gone through all of the master layouts and the master layout settings that we need to go through. I am going to talk about bringing in a whole set of details. I'm just looking at this. We talked about all of those and we talked about all of the grid setup options here. So if we were to go to a new blank project here, and we go to the detail sheet - alright so that's interesting. This is the detail sheet in the standard ArchiCAD template in the U.S., it has a few schedules placed on its. So it's details plus schedules I guess. [0:49:24]

Let's just create a new detail sheet and just see how this works. I will create a new layout and call it "Standard details". Let's say the standard detail sheet is something that we want to bring in from another project. This is an option that we might find very useful. if I go to the Project Chooser here in the Navigator and open up the Organizer by selecting "Show chooser" using this button here, then I can go and select in the project chooser from any other running project, because remember I had that sample project open. Or I can browse for a project to pull its details. [0:50:20]

If I go to the sample project here, you'll see all of these layouts. We also have access to the individual views. I will go to the layouts here, and let's say we had the architectural detail sheet that was all set up with standard details. I can literally go and grab this and drag it across, and it's going to bring in - it will take just a little bit of time to import and open up that file again. Drag this across, and it's finally opening the project and it's merging in that sheet. So you can see here is "Architectural details". Here is the "Architectural details sheet". And you can see that this is the detail sheet that was just brought in. Remember I changed that from a grid to just an open layouts. And now we have it set up just the way it is in the other project. [0:51:24]

The workflow here is - and I'll just close up the organizer for now - is that this sheet now lives in this project. It has a set of drawings possibly. It could be twenty or thirty drawings in a large detail grid. Each of these has a source. If I go get the drawing settings, the source is from the other project. So it's not internal. it's pointing to that other project that I had open. That means that it will attempt to update it or look to update it from the other file if I use the update button. So if you're bringing in a sheet of



details or possibly more than one, you could bring it in from another project file or you could bring it in from a file that was just made of details. [0:52:33]

So that project file could be your resource file for all of your standard office details. Whenever you create a detail in a project that you think is going to be reusable, then you might copy it over to that standard detail file. I'll be having a set of lessons on the Detail tool in a few weeks as we move up. I forget which week it is covered, but it is coming up soon. We'll be talking about how you can set up a catalog of standard details and bring them in. [0:53:00]

In this context I just wanted to mention that this drawing here is linked, as I said, to the external view. If we didn't want it to be linked, if we didn't want it to ever update because that source file maybe could change, then I can break the link. There are a few different ways we can do it. Go to the Drawing Selection Settings; there's nothing that allows us to break the link here. What we can do is go to the Drawing Manager here and find this drawing and use the "Break link" option. So if we were to open this Drawing Manager up here, you'll see that the items that are in bold are the ones on the current sheet. [0:54:03]

If I sort by sheet you can see that we are on sheet nine. I can go and take this and if I wish I can break the link. When I break the link it's now embedded, and it will never go and try to find an updated version from the source file. So that something you can do. if you want to say *I just brought these in, but now I want to work independently, I don't want to take any chances.* So one workflow would be if you're bringing it in from another project and it's not a standard detail, bring it in and then break the link so that way you don't run the risk of updating because the other file had a change. [0:54:46]

On the other hand, if it's a standard detail, then your workflow, I would recommend would be the standard detail file doesn't get changed. if there's a variation of a detail, you create a new copy so that anything that references from that standard detail file doesn't run the risk of updating without review. Now if we wanted to work on this particular drawing in terms of - let's say that this was very close to what we needed, but we need to make just some small changes that were specific to this project. Then what we want to do is take this and copy the drawing here and go create a new detail window. [0:55:37]

So I'm going to right click in the details here in the project map and say "New Independent Detail". And we'll call this "New foundation detail" since that's what it is. We now have this detail window available. I will set it to the appropriate scale which was 1 inch to a foot which would be about 1 to 12 here, and I will paste. I will paste in the center of the current view here. here is the drawing. So this is the drawing that I just had. it was originally linked to the other file. and it's a drawing, I can't edit it directly. But I can go to the Edit menu, Reshape, Explode into Current View. [0:56:28]

So this allows me to then break it up into the lines and text that are editable. If I really don't need the original drawing, then I can say "Don't keep the original drawing after exploding." And now we have only



the information here that we're seeing. I'm going to go and delete the title that was embedded in there, because we are going to put the title in separately. And let's say this text here is some "Special foundation" here. So I've just changed the word from "concrete" to "special" foundation. I am just going to put in a couple of lines. so this is now a slightly different version. of course I could do something more sensible, but just for demonstration purposes, it's noticeably different here. It has a different text, etc. [0:57:29]

So what I'll do now is make sure I have a view of this detail in my view map. here we have details, there's no view of this detail in this template, there's no clone folder for it. So I'm going to go and save the current view with the current scaling and with the current scale settings here. I will put it in there. now I can go to the sheet, and we'll go and drop in that new detail here. And you can see that it has a special foundation with the X. I basically had a copy of this - maybe crop it a little bit here. So this is my variation of it. if I want to do any further editing, I can go and if I select only this file, then I can open the source view. And now this is fully editable just like you would expect. [0:58:38]

These are a bunch of lines rather than a symbol. So if I wanted to extend that stuff there then I could go and select these and drag a copy, things like that. So this is all fully editable. if I go back to the sheet and open this up, you'll notice this has updated here. So that's the basics for bringing in a sheet of details and understanding some of the workflow for how they update from another file and how you can create your own copy of a detail in the project file to work on. Now this particular detail right now is sitting on a sheet. We might want to call it out. And so let's look at the basics of how that would work. [0:59:37]

I'm going to draw a little shape here and do sort of a basic roof. I'm not going to take the time to draw an actual foundation, but I do want to just say if this were an eave detail maybe this would make sense. I'll take a section through it and go to the Detail tool and say that instead of creating a new detail I would like to place a detail that is linked to a particular drawing on a sheet. And we'll go down here and say here is the new foundation detail. So that is the one that I want to refer to. Then if I put in this call out, when I say "Go to Drawing", it will go to this drawing here. Or if I right click on this and say "Open Detail Drawing", then it's going to open the actual editable drawing. My apologies for not having an eave detail callout go to a foundation one, but I think you get the point. [1:00:58]

Scott Newland asked, "What happens to an externally linked detail when you save a project as an archive?"

Okay so let's just talk a little bit about what an archive file means and what that does. If I'm working on a project - let me save this and put this into my course here in week 23. This is 23-5 I think. "Master Layout Settings". Alright, so this is the name of the project here. That is just a normal file. If you save it as an archive, what's the difference? if I go to Save As and I choose ArchiCAD Archive Project, what it's going to do is it's going to include parts of the libraries that are referenced. [1:02:09]



So in a standard solo project or teamwork project, there are the references to library parts that are in the standard library. and there may be an embedded library in ArchiCAD 13 and later that includes custom library parts that you're using. An archive is a way of saving it with parts from the loaded libraries, in other words, the standard ArchiCAD library for long-term access. So if you save an archive of your project today and then you open it up five years now, you may not need the ArchiCAD 17 or 18 library or whatever you are using, because it will have all of the library parts included. [1:02:55]

So this does make sure that you have those library parts available. It's used infrequently these days. One of the reasons we used to use it was when we had custom library parts, and we would include them in the file. Now we use the embedded library as opposed to an archive project. So the only reason that I would save as an archive is when I am putting the project "to bed" so to speak. The project has been submitted and you are finishing up work and you don't expect to do any more work on it; it's done. Then saving it as an archive as well as a normal solo project would make sense; it just increases your data safety for the long term. [1:03:44]

I wouldn't normally use it in the middle of a project. The only other time that I would use it would be to send it to a consultant. If you want to send it to me to look at, and you have some custom library parts maybe that you purchased that you load normally from a linked library, you can use the project archive option and then a consultant like myself would be able to see your project with all those parts. Other than that, the project file is the same. So in terms of your question, what happens to an externally linked detail when you save the project as an archive, if you are talking about the project having a link to an external file, it doesn't affect that. [1:04:30]

it's still linked, although as we talked about in previous things, if we go to any particular - here is the source detail. if I look at the settings, this source detail comes from an external file. It's not internal. It's embedded in here. I guess this says it's no longer linked. If I look at one of the other ones like this cutaway here and we say "Drawing Settings", it's stored in the project file. And unless you tell it to update, it will just use whatever is stored there. If you tell it to manually update then it will go look here if it can find it. Or if you set it to auto update then it will always update it whenever you bring up that page. [1:05:19]

So I guess I have danced around the question, but the bottom line is it doesn't really affect anything if you have saved the project as an archive other than make sure that the library parts are included that might be referenced, because whether it's embedded libraries or standard libraries, all the library parts will be included in the file.

Okay, Scott says, "Understood. Thank you for the explanation." You're welcome. Let's see if there are any other questions before we finish up. Thank you everyone for watching. Please add your comments and questions to the page down below this recorded video. This has been Eric Bobrow, thanks for watching.



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