



## BEST PRACTICES COURSE – WEEK 23 Layout Book Drawing Options, Printing and Publishing - Part 3 - Drawing Titles

Welcome everyone to the ArchiCAD Best Practices training lesson. Today we'll be continuing Week 23, where we've been covering the basics of the Layout Book as well as the Drawing Settings. Where we left off at the last lesson, we had covered most of the drawing settings dialog. We hadn't come to the Title. So let's take a look at how that works. [0:00:32]

If I go to a sheet here and select this drawing, it has a title as you would expect in most cases. The title is controlled in the drawing settings in the bottom section of the panel called "Title". So I'm going to close up these other ones so we can focus on it. In the title section, we have a choice of different types of titles. So depending on where you are the world, you may have somewhat different choices. I'm in ArchiCAD 18, but there are similar choices. This hasn't particularly changed over the last few years. [0:01:14]

Now if I choose "No Title" here, you'll see the preview goes blank and there's no title. Why would you want to do that? There are some things you might place on a page that technically are called a drawing, but you don't want to call them out as a drawing. We have that in the case of this set of keynotes which are some notes from a worksheet. They technically are a drawing and they are set up with no title. Let me go back to the one that I had. And the other possibility that we might find happens from time to time is we might want to overlay two or more drawings on top of or next to each other and make them look like they're a single drawing. [0:01:59]

In this case we would want to have a title on one of them but not show a title on the others. From a visual or presentation standpoint it's only one drawing, even though technically it might be two different drawings. Why would you ever do that? Well, there are two cases I can think of right off the bat. One is if you are overlaying. Let's say you want to show some background like a trace and reference. So you put in a drawing that shows another story or shows some layers that you want to gray out. You can create a special drawing that has the information that you want. Maybe override the pen set for that drawing to make it a light gray or something. [0:02:43]

And you can place that down and then place another drawing on top of it, of course carefully aligning them to each other. And you may just want to indicate on the sheet that it's one drawing that you are presenting, even though it's technically two things that are overlaid. One with certain information that is maybe in a certain pen set to be used as a background, and another as a foreground or more common drawing. Another example would be when you occasionally might have a split level project where you want to show a combined floor plan, but part of the floor plan has one setting for the cut plane because it's lower down and the other part or possibly more than one part has different cut plane settings to show the doors and windows at other elevations in space. [0:03:35]



And they combine to create a symbolic floor plan, even though they are technically not the same cut plane. You're making it communicate basically that this is all one level of the building. So in that case you'll have two or more than two drawings that are side by side or part of or cutting next to each other like a jigsaw puzzle. You might have one of them with the drawing title and one without. [0:04:03]

Now I'm going to put the drawing title back on by undoing the change here. And let's talk a little bit about placement of the drawing title. So when I place the title, if it's turned on, it will show up in a certain location. However, we can move it around. So you'll see all of these magenta colored dots. If I press down on one of them, for example, this one and use the option in the pet palette that says "Move the sub element", you can see I'm moving the actual title around on the screen. [0:04:41]

I click on it, and you can see how it's moved and the drawing didn't change. If I press down here and I don't use the sub element, if I use the one that says "Move the whole element", now I'm moving the whole thing. So I'll just move it up and you can see how the whole thing repositions. I will undo it, and you can see how they kept their same relationship, they just moved around as a whole. Let me undo back one more step so we have it here. [0:05:04]

Now the title has a lot of different components in many cases. In other words, it has a number and a title. And if we zoom in here, you'll see that it has a scale. Those are settings that are controlled in the Drawing Settings under the Title. Once you choose a title, you'll see a preview and you'll have many controls over this. Let me extend this down. So for example, the circle diameter - the marker call out - that is the size on paper. So here in the U.S. it would be in inches, so 5/8 inch. In international usage that would be millimeters so 5/8" would be about 15mm. [0:05:54]

The position of the title says "Custom". That means that it's been moved around manually. I just showed you how I can move around, but in this case it was tweaked a little bit. If I change this, I can choose it based on the drawing or the layout. What does that mean? If I say "base it on the drawing", then you will see a bunch of choices now become available. I can say I want it to be at the bottom left of the drawing, the bottom center, or the bottom right. Let's just put it at the bottom right and say OK. And you can see how it's moved over. [0:06:28]

Now the right side of this line here is directly underneath the right corner of the drawing frame, that boundary of what ArchiCAD considers the drawing. If I move the frame here by cropping this in, you'll see how the drawing title moves. Or if I extend it out, it moves, because it's locked in in relationship to that. Now of course it is offset and down a little bit, and it has a certain length of line. let's look at those settings. So when we say bottom right, it's the offset - and I'll make this a little wider - on paper. So this is how much lower in this case than the bottom. [0:07:11]

In this case, it's offset from the left or right so it's basically zero meaning that it's lined up on the right hand side. so we can obviously change that around. Some people would prefer the bubble to be on the



right side. So there may be an option here "flip title". And you can see when I flip the title the preview changed and the bubble now is on the right side. So now the right side of the bubble is there. That would be a very simple change. And remember, anything that you set up in one drawing, if you eyedrop it, will be used for the next drawing. So that means it will be the default for future drawings you place. That will make it easy to play around and get a standard that you like and use it over and over. [0:08:01]

Let's look at some of the other settings here. So if we do choose to align it with the drawing, then we have some placement things here that we can use. We also have some other similar choices about rotating. "Rotate with Position" is on or off. What does that mean? Frankly, I would have to test it and I will test it right now. What is the rotation angle of this drawing? Now as you may expect, most drawings are placed in horizontally or just in their original orientation, but sometimes you might want to rotate a drawing 90° or an odd angle just to make something more legible or work better for your needs. [0:08:49]

Now if this "Rotate with Position" is on, then let's just put in the rotation. So I will put in a 10° rotation here, and you can see how that rotated the entire drawing plus the title, which sometimes might be good. But let's say that we go in here and say "don't rotate it". Rotate with position and Rotate with Drawing is off. So there are some choices here you can play around with. But let's say it's off. Then if I rotate the drawing here to that 10°, then you can see that the title stayed horizontal while the drawing changed. [0:09:40]

So obviously there are times when you do want to rotate the drawing for some purpose, but the title maybe you'll want to keep horizontal so that it doesn't stand out. So I will undo those changes there. There are some options there. The width, that is an interesting thing. What is this referring to? It's referring to the width of the line here. "Link width to title text." So the title here, the second floor lower floor plan, is a certain length and it's trying to make a guess as to the length of that. [0:10:18]

Now if I choose that I would like to make it the drawing, then you can see how that line goes all the way across. And basically the bubble, if you have one, because you can turn that on or off, then line goes across. If I made the drawing wider or if the drawing was wider, that would change. Now if I go in here and say instead of linking the width to the drawing, it's going to be the length of the parameter, then I can type in the length. Let's just say 6 inches, what does that do? This is the size on paper. You can see the preview of the line is now shorter than the text. [0:10:57]

You can see here it's making it 6". This would measure 6" probably from this point here to the end. But I can also, once I've done that and said it's going to be some length based on a length parameter, I can manually go and use the stretch option. So I can press down on the little magenta corner here and stretch this and pull this out until I get a nice visual effect. so that is sometimes is a very good thing to set a default to be a standard length, and then as necessary for longer or shorter titles just grab this and move it. Those are all options that you can do. [0:11:36]



Now the one that said it is going to match the length of the text, ideally it should sort of do something like this to begin with. But we saw that it wasn't quite right. It was a little longer. And not quite sure how ArchiCAD calculates the length of the text, but maybe we would want to tweak it manually a little bit here. Now let's look at some of the other settings that are available. If we stay in this "NCS Drawing Title 18", which is the National CAD Standard compatible title for ArchiCAD - 18 which could be the same as NCS Drawing Title 17 or 16, it probably hasn't really changed for many years, it has some options for showing the drawing name on or off along with the font. So you can make the font bigger or smaller. [0:12:26]

If I turn this off, then we are going to see obviously what we would expect here. Let me undo that. And if we show the drawing number on or off, again we have some settings for this. I will turn that off, and you can see how that number turns off. So sometimes you may want to do that, particularly if you're printing this on a small piece of paper and you don't want to deal with numbers, you just want to maybe fill in the numbers later. Something to indicate that the number is not quite set, that might be an option there. [0:13:03]

And if I go in here to the number here, there's also something about the size and the position. Occasionally, depending upon how the number is drawn, it may need to be adjusted in space. So with text position, if I say half inch here, we'll see how the text slid over a half inch from the end in this case. Let me undo that and you can see that there's actually a little magenta dot, and I can go and use the option to move that around if I need to. So occasionally, when you have numbers that are maybe "A-2" or "A-1", you may find that you need to tweak it, and ArchiCAD allows that to happen. [0:13:50]

Now let's see other options we have here. We have "Show a numeric scale". We can scale to quarter inch to a foot. And in metric format, scale 1:50. We can have text here, so if you're working in a different language you might type in something different here or you might sort of delete that and just have quarter inch to a foot and not have the word "scale". Here is the original scale. This is off or on. So what does that mean? It means the drawing has a certain setting. We're looking at the properties of the drawing. Originally it was set at 1/4". [0:14:29]

But if we were to put this in at say 50%, it's going to be half size. Then it says that it's going to be 1/8". Do you want it to say 1/8"? Let's just try this here. It moved around on the sheet because it got a lot smaller. And here it says it's 1/8" here, so that is the actual scale because we've made it 50% of its original size. In some rare cases, we may want to just say that we want to show the original scale. So it was in the quarter inch and now it has been reduced. So now you can see it says 1/4". [0:15:08]

Certainly I wouldn't use it in this context, but there are some cases where maybe you're just fitting it onto a letter sized sheet, or a small sheet of paper, and you just want to show the original scale information even though it's no longer at that scale. That is at least a possibility that ArchiCAD allows you to do.



"Show numeric scale", that's what we're on here. "Show scale, text and scale", "Show not to scale", or "Show nothing". [0:15:48]

If you say "Show nothing", of course what you would expect is this would disappear. And there are certainly some presentation drawings or some types of drawings that you place where they don't have a scale. If you place a picture or PDF file that's not a drawing, maybe it's some specifications or something like that, there's no need to put it on a scale. On the other hand, sometimes you may have drawings that you want to force not to scale. So if we say "Show not to scale", then it's going to put this text here. [0:16:24]

When would you do that? Obviously if you're placing a drawing on a sheet and reducing it just to fit on the sheet, you may want to have that type of information. Or if it's a 3D view, maybe there's something there. So these are all options that you can use. I'll just undo back to the original settings here. "Show back references" is gray, because we have not actually defined a back reference. We'll talk about that in a minute. Let me just move on to some of the other simple things and then we will look at back referencing and what that means. [0:16:59]

Here is "Additional data". "Text position", so you could put in some additional information. I know there used to be some - and this was maybe displayed differently in terms of parameters - but "Graphic scale" is an option that you can turn on. Graphic scale, you can see the preview just came up with some extra stuff here. It has certain unit types that you can do. I'm not quite sure why this has the word "Architectural" and you can't pick from a popup, but it has some sizing for that. If I say OK, you can see the graphic that has been added here. [0:17:47]

If I select the drawing - and by the way these are overlapping. Obviously I have moved this up. Let's actually drag the whole drawing up a little bit here. If I select a drawing, it also selects the title and vice versa. If I select by shift clicking or arrow clicking on the title, it selects the drawing. They are inextricably linked. A title lives with the drawing, it's attached to that drawing, and you can't select or eyedrop a title separate from the drawing. The title is an attribute of the drawing rather than being a separate thing. [0:18:36]

Now I did I believe in one of the lessons in week 21 talk about how to create a custom drawing title. I will double check that and make sure, but I know that is something that sometimes people want to do. They want to do something similar to what ArchiCAD does, but make it different, fitting their firm's standards. So that is something that you can do. And I've gone in here and mentioned that you can go to "No title" or you can pick a title. [0:19:06]

So let's finish up some of the things here and then we'll look at the other variations of titles that we have. So we have the "Graphic scale". If we say "Drawing description" here, what is the drawing description? "This is a description". I say OK, and here is the description. This is something that perhaps



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you can use. I'm not sure if you can have line breaks, multiple lines, but my guess is probably not. But you can certainly put in some extra information there if that would be useful. And if you're using the drawing description, then you have some choice of the size. Maybe we can take that down to a smaller size here, and now it looks perhaps a little bit better fitting. [0:20:00]

So that is additional data here. And "None", which was the default, would mean that we wouldn't have a graphic scale or the additional information there. So let's look at some of the manipulations that we have here visually and talk about that. We've already looked at this particular point, which we can pull out, and that changes the length of the line as you would expect. This little magenta dot here, if I use the "Move sub element", it moves the entire title. This "Stretch" moves just that one point. So it's a little bit confusing which one you're using. The "Stretch" indicates that one point. The sub item indicates the entire title which I can move around. [0:20:53]

So I will move the stretch here - and sometimes in the pet palette you have to go back and forth to two different points to make it take effect. That seems like a little bit of a bug in ArchiCAD. I was set up to do the stretch but it was actually doing the sub element. So just know that you might have to switch back and forth to get that to work. We have one other one point here which is the "Stretch". This would actually change the offset related to this text here. And it looks like I can move the text around as I wish. [0:21:35]

So this is the "Stretch" command affecting this one hot spot, which is affecting this. Obviously you would want to have some sort of standard here for that. Let's just look at where that is controlled. So "Show drawing name", here is the information that I was just playing around with visually. If I type in zeros, it will be back to a standard position like that. We also have some editable hot spots on the side of the bubble. If I press down on that and use the stretch, it changes the size of the circle. So we could manually change that to be bigger or smaller. [0:22:21]

You can see the preview is sort of odd. It looks like a hexagon or octagon, but it actually is the circle there. So let me undo that. That is something that you can do visually, but we can also change this in terms of...this is the size of the main text. Where would be the size of this bubble? Maybe that's not the main text; that may be the size of the marker. If I make this bigger, that actually didn't change anything. So this is not affecting the size of the text because the text is controlled in here. So where's the size of the bubble? "Show drawing number". That's interesting; we don't actually see a control for the size of that bubble here. [0:23:24]

So it looks like for some reason the only way to control that might be to use the stretch, the circle diameter. So we can type in "1/2 inch". That's a particular size there. Let's see what happens when we switch the drawing title to another title. You may have noticed this "Arial Cyrillic" that's a rather odd Arial. Of course is a very common font, and it would have some variations depending on what type of language you are using. Cyrillic, from my understanding, would relate to a Slavic language, Russian and



similar. And maybe there is a variation of the Arial font that handles some of their special characters.  
[0:24:18]

But normally we would have just Arial regular here, and this would show up. So I'm not quite sure why this was set in an odd way. I think it may have something to do with the fact that this sample project originally was done on a PC and now we're on a Mac. And the variation of the Arial font came across in an odd way. It probably didn't make the difference, it still made it Arial. But in any event, this does allow you to choose your font. If we were to pick something like Avonier medium, that didn't change anything. Let's try to pick something that is ornate. "Baskerville Old Face" here. It's not changing anything in this case. [0:25:12]

I guess because the drawing name has its own font choice. Let's change that just for fun to American Typewriter and see what that does. There we go. So each individual piece has a font style that you can do there. Now if we were to change this from "NCS Drawing Title 18" to this variation that says "NCS Drawing Title 218", you can see that there are some similar choices. I'm not quite sure what the differences are. You have to experiment with that. When I say OK you can see that it's putting the number over a sheet reference. [0:25:58]

So the drawing number and the sheet are shown both together. Now this is on a sheet. It is on A-06 so that makes sense. I guess in some cases that will help for clarity to see that we're looking - maybe you have an excerpt of a sheet and you're looking at this trying to see which sheet it's on more visually. So "Show layout number" is on. This is an option that wasn't available before but is available in this one. That is one difference here. I think the rest of it looks pretty similar. [0:26:39]

Here is a circle diameter. We'll go back to the original one - here is the circle diameter. I just wasn't seeing it. Okay. I see Ken Andrews pointed that out a few minutes ago, the circle diameter. Ken Brooks also pointed it out. So we have a few people giving me some help, but I wasn't looking. Todd says, "Shaded drawings on a sheet for a plan." I'm not quite sure what you are referring to there Todd about shaded drawings on a sheet. Okay, Dave Norman has a question, "In title settings, can you explain uniform symbol pens and uniform text format?" [0:27:28]

So let's just see. Here is uniform symbol pens and uniform text format. I'm guessing that if we click this it will use this font and make them all the same. Let's just pick something like the typewriter font here and say OK. Now you can see how everything became the typewriter font and everything is five point. Let's just make it eight and see what that does. So now everything is uniform. When you click that, then it uses this font and the size for everything. And if you uncheck it, it uses all the individual ones.  
[0:28:10]

Now "Uniform symbol pens" allows me to do a pen here. If I go to red, you'll see how everything is red. And if I have that unchecked then it's not red because each one of the items has its own pen. So these



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are just quick ways to get a title to all look maybe a medium charcoal gray, we want it to all be a certain font here. We could override that, and you can see what that is doing. So that's just a quick way to get certain type of control. Let me undo these changes here. [0:29:03]

Okay, now these are the two NCS drawing titles; you will notice there is a "Simple Title". Again in the international version there are going to be other titles. I think there's one called "Linear Title" there. It's probably a little bit more similar to the simple title. It has way fewer choices or controls here. But you get the basic idea is that it has a title and scale, and those controls here allow us to say do we want to show the scale text here or not. Do we want to show the drawing name or not, and what font is it. And then there is the position aligned to left, center or right. [0:29:46]

Let's say zero and bottom left here and turn off the flip title and say OK. And now you can see it's lined up directly with that. I think the half inch is probably good, because if we are putting it at the bottom of the drawing, we might want to have it a little bit offset from the drawing, but that's obviously something you can change whenever you need to. So that's the "Simple Title". There's also one called "Built-in Drawing Title". And when I do that, it has some different variations. So you have enough information here to pick and experiment and choose which ones are going to meet your needs. [0:30:35]

I'm going to do the "Built-in Drawing Title" here, and you can see that this is quite different. It has a line, and when I deselect it you'll see a line across. It's got the title in the middle, the scale on the side, and if I select it - let's see if I select this here and we look at the built in drawing title, the drawing name is very small here. Let's make this much bigger. And the font pen for the default here, this might be something based on the international version, because you never want to have a font this funny, yellow-green color. I will put it into black here. [0:31:24]

So the defaults may make more sense in terms of the international pens, whatever pen that was, but of course you can use it if you're in the U.S. if you want and get that result. But obviously we would want to play around with the colors, because that looks really odd to have it in this funny light green color. So let's undo back and put it back to the one I am most used to here for the U.S. version. Dave Norman says, "Thanks."

Todd says, "If I place a floor plan, it doesn't need to be numbered, but I do want to have a north arrow in the bubble." Okay, interesting. So yes, sometimes you just want to place maybe one floor plan on a sheet. And you have a title for the sheet here that says "First floor plan" or something like that and there's only one drawing on a sheet, so why should you put a number? Let's say it's number one. [0:32:28]

Of course we can select this here and say, "I don't want to have the drawing numbered," because maybe in some cases that isn't necessary. And in terms of the circle diameter, I don't know if there's a way to turn off the circle, but I believe we can change the diameter to zero here. Now it says it doesn't allow



the zero parameter here, that's an error. Let's just try 1/16" or something like that and say OK. And now I've turned off the number. We have a very small bubble. Let's make it even smaller, 1/64" here. Let's see if we can get it down to 1/28" here. [0:33:18]

So we can get it down so that by the time we have it in true line weight here, we're not seeing that. I guess it does look like we can still see it even at that very tiny scale here. So is there a way to show the layout? The layout number is on, let's turn that off. And it's interesting - let's just go to 1/1000", take that. Now we can see that this essentially disappears. It is still technically there, but we would never notice it. So that would be a way to do it. There may be some other drawing titles that actually have and on or off for the bubble, I'm just not seeing it on this one here for the circle diameter. [0:34:15]

There is an option for positioning the title relative to the layout. When you do that then the position is going to be based on the layout and even if you were to move the drawing around it would be locked into place. So let's just say OK. You'll see it disappeared from view because it's actually placed - where would it be? I'm trying to see where, if I have this selected - it's actually going across the bottom of the layout. Sometimes you may want to do that. And regardless of whether I move the drawing around, it's still locked in on the layout. The link to the layout here, we can again make the width of this something different, and its position, this is offset from the left or right paper size. [0:35:18]

So let's just do 3 inches and 3 inches. And this would be offset, it says to drawing, but it would be from the layout. Let's just say 1 inch. So I've just taken it in on both sides and increased the distance from what it's measuring, probably from the bottom of the sheet. And you can see how it moved up. So it moved up maybe an inch, I'm not quite sure what it did here, but it did reposition it. Sometimes you may want to have the drawing title in a standard place on the sheet. And if you set this up properly where you want it, then when you place new drawings on, it will all have the title and the same place on the sheet. [0:36:06]

So that is a very good choice, particularly when you only have one drawing per sheet in certain cases. Okay, I think we've looked at the variations of titles, except for one thing which has to do with the back reference. So back reference is something that I've looked that and I understand the principle of it, but I have rarely used it. I think it's not used by everyone, so if it doesn't apply to you, you can ignore the next couple of minutes of explanation. If it does apply to you, you'll be very interested to know that you can say where this drawing was referenced. Now it may be less relevant here for a floor plan than for something else. So let's look at a section drawing. [0:36:59]

If I select the section and we choose the button that says "Back reference", you can see "Enable back reference" is an option. And it says "Select one or more items as referred layout in the drawing title." So basically this is saying where this is called out. So let's say that this was called out on the first floor plan here. This is a section that was called out on the first level plan. Say OK, and having enabled it, then the back reference becomes available. Remember it was gray earlier. And I can choose to show it. If



you do have more than one layout that it was referenced on that you choose to indicate, then it will put a comma or whatever you want in between. [0:37:54]

And you can also potentially put in custom references. You can say I want to put in some references, I just don't want to have to select them, I just want to type in some stuff here. So let's just say "On", having chosen that, and say OK. And we'll see that now there's a reference. So A.501 was the - A.1301. Here is A.13 - I am a little confused. Here is "A.501 Building Sections". We are on a section. If we go to A.501, we're going to see the same section because this particular sample project has two sets of the building being referenced. So I'm not quite sure about that. Let's just see what we had here. [0:39:06]

The back reference - I guess there are a couple of things, building sections. Here's the A.501 and here's the A.1301. I was just picking incorrectly. So if we say A.06 and turn off these other ones here, this is what I was more expecting. So I will say OK and now you'll see it says A.06. It's basically saying that on the floor plan, this section is called out. If you want to see where the section line is, just go to A.06. So that's the idea here. Obviously in a detail drawing it would make sense to show a detail on a sheet and *say this detail was called out in this section or in multiple places that it's referenced.* [0:39:53]

So that gives you a back reference. You can choose it manually from whichever layouts are appropriate. When you do that, then it shows up. And I believe it's actually linked to the layout. So this one you can see it says A-06. If I were to put in another layout, let's just say create a new layout here, now A.06 is a blank layout and the floor plans are A-07. And when I go back to that building section, you'll notice that it says A.07. So it's referring to the actual layout, not just a number. That is good, because you take time to link it and then it will maintain that link even if things in the layout book change. [0:40:37]

Dave Norman says, "Can back reference be placed on the bottom of the title bubble? This is a common standard." So you're talking about this title bubble here, is that what you are referring to Dave? Let's just see, while you answer that, let's see if I have some options for the back reference. So the back reference, this chooses which ones here. And then there is back references here. There's an option for its position. So it looks like it's going to go on the other side there unless you either type in a value. What that means is we can literally go and use the stretch option and put it somewhere here. So wherever you want it. Does that give you some ideas here? Or did you want it to be C and then underneath A.07? [0:41:18]

If you wanted it to, let me know. If we told it if we use the "Drawing title 2", which has the option of a layout number, then we could say "Don't show the layout number" and the back reference is turned on. And let's just say OK. And here, we seem to have lost the back reference. We lost it when we switched the title, so let's put it back in here. The back reference is on. The layout number we will turn off here. Show drawing number - let's see. Here is A.301. So we are in the building. Here is the A.301. Why is that showing A.301? [0:42:59]



The layout number is off. Let me turn it on. It's interesting; it's showing two different numbers for this, A. 09 and A.301. So I think that back reference A.301 is now showing in there. That's the one that is the back reference. So that is what your standard was. And if I turn off "Show layout number", there we go. So that is what you wanted. We used that title that is version two, which gives you the option of having a reference underneath. And instead of showing the current layout number, you show the back reference and it then puts it in there. [0:43:57]

So if you're using this drawing title, it places at where you want it. And of course you could make it a little smaller, if the font size required to make it smaller so that it fits in a little better. Alright, so you wrote, "Complicated, but that that will work." In fact it's not so complicated. All you have to do set this up as the default or one of your favorites so that when it's appropriate, you use this drawing title, and it has all the settings there. And all you have to do is manually choose what the back reference is and it will pop it in there. Okay, so now we have back references explained. And I think that is a fairly efficient process. Please add your comments and questions to the page down below this recorded video. This has been Eric Bobrow. Thanks for watching.

[END OF AUDIO 0:44:57]