



## BEST PRACTICES COURSE – WEEK 15 – PART 4

### Using the Pet Palette with Editable Hotspots and Sub-Elements

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Hello, this is Eric Bobrow. And in this lesson, we'll continue with our study of the pet palette and focus on editable hotspots and movement of sub elements.

We're going to start with looking at markers such as the section marker here. Markers are a very special category of components in ArchiCAD that have a graphic representation, in this case, on the floor plan. And generally either create or refer to a viewpoint of model information. Now we're not going to focus on the viewpoint itself right now. In other words, the section drawing, right now we're going to look at the description of the section marker on the plan in this case. Now with it selected, if I go to the endpoint just before the marker itself, I get with the pet palette the ability to stretch or shorten it. So I can change its length. [0:00:56]

If I go to one of the points of the marker itself here, you'll see that I only have the ability to move the entire marker or rotate it or things like that. So that would be true for all of these points. Now if I go to the center point here, then I start getting a second row of options. One of them allows me to break the marker in two. So I can jog it. And right now, we're not seeing it move. Let's just switch. Here's something that you may find when you're working with the pet palette. Sometimes the option doesn't work right away, and you need to switch to another one and then switch back. And now you can see we can jog it for example. I might sometimes want to go through a different part of the building here. [0:01:38]

So I can see perhaps cutting through two different areas. Now this jog here is it available at any time. I can go to the center point of the section. And you see I can jog it more than once and create different types of effects to go work around columns or other things. I will just undo that. Now if I go to the point that was created by the jog here, then all I have is one option and that is just to adjust this. Perhaps I want to put into a different room or location. And if I do want to get rid of the jog entirely, I can drag it past the end and then the section will straighten out. [0:02:22]

Now if I have an elevation marker - and we'll just switch to the elevation tool - and I draw that, let's say I'll take it from far outside the building looking in this direction and I select it, the endpoints have a similar ability to be shortened or lengthened. And in the center, we have the unique ability to, in addition to breaking the section or the elevation or moving as a whole, we also have the ability to move the marker by itself. So for example, sometimes we may want to make that marker show up on a

drawing. Perhaps we need to cut it from way out here because of the way the prevailing grade is. But we want to have the marker close enough to be able to see it on a drawing. [0:03:07]

Now these markers will look differently depending upon what style of marker you've chosen. So for example, right now I'm in the U.S. version, and I'm using one called "Elevation Marker NCS" or National CAD Standard. But there they are a variety of different markers and they all will have somewhat similar capabilities. Now in terms of moving the marker, let's take a look at how this works with zone markers and interior elevations. I'm going to switch to the Room Finished Plan let's say, and zoom in on the kitchen. And what we will see is that in the kitchen area, when we have the Room Finished Plan turned on, we have a zone. I'm going to select the zone marker. [0:03:49]

So I've just selected the text that describes the kitchen by name and gives all of the finished codes, in other words the materials for each surface. And if you look carefully at the corners of the kitchen, you'll see some I guess magenta diamond shaped hot spots. These are the boundaries of the zones. So the zone is actually filling up the room. Now if I press down on any one of these points that are highlighted in the marker stamp, you'll see that one of the options I have is to move the sub element. And if I hover over this pet palette you will see that's what it says, "Move sub Element". [0:04:27]

So I could reposition the stamp without adjusting the outline of the zone itself. The outline of the zone itself would be set either manually as a polygon using standard polygon editing, or in this case its set up to automatically find the edge of the walls that are in that area. Now, the other marker that we have in the kitchen is the interior elevation marker. Now when I select it here, we should see - and we do see it was just a little faint, some dashed lines. These indicate where the interior elevations are being projected from. So each of these for dashed lines that surround the marker is essentially a line where we would be standing and would be looking towards the outer corner. [0:05:13]

If we zoom out a little bit you can see there's a hotspot in each of the corners of the kitchen. So basically this interior elevation is looking out towards all the walls of the kitchen from a vantage point that's inside a certain distance in front of the cabinets. Now all of that being said, if I press down on the marker itself, I have the option to move the sub element. So I can reposition this wherever it would be most convenient. In addition, at least in this version of ArchiCAD, version 15 that I'm in, we have the option of rotating the marker. If I rotate it a little bit, we'll see what it does here. It's still keeping the numbers intact. If I rotate this more, like this, you may see the numbers sort of flip around. [0:06:01]

So it depends upon what you need and whether you want to have the markers on a straight axis or not. I'm not going to go into all the different settings for interior elevations, but just know that there are different options depending on what your marker context is. Now let's take a look at the labels here. Labels are just simple elements, but they actually have some interesting complexity. One very nice shortcut that I found, if you wanted to adjust a bunch of labels all at once, you can go to the Label tool, do Command+A or CTRL+A. And you can see how that selects all of them at once. And then without having to select any additional times, I can simply go and reposition them. [0:06:46]

So I move this one, I can move that one, and I'm just clicking on them and very quickly repositioning them. And I can go and stretch. So basically the pet palette becomes - let's say I don't really have to

return to it all the time. I can just simply keep clicking and moving these things. so this will be a real time saver in many cases to be able to do that. And then just grabbing points along here. So it's remembering every time I press down here, the pet palette option is just to stretch, in this case. The current point. And it allows me to very quickly reconfigure the label. So you might find that a useful shortcut. [0:07:26]

Now the kitchen floor here is done with a slab, as is common. I'm going to select the slab here. And you'll notice actually when I hover over it that it's looking at a slab that's underneath the entire building. I use the tab key to select a different slab, which is only under the kitchen, and that actually has a tile. So this is a finished floor that I've got selected. Now the finished floor here has what is called a cover fill. So if I turn that off, you're going to see how the line work disappears. If I turn it back on it will show some line work. I can choose to use the fill of the material. In other words, it's got a certain type of a material there. [0:08:11]

Or I can choose to manually pick a fill of some sort. Now I'm choosing the fill of the material here. In other words, the material which was set in a separate material selection. It's giving me this grid pattern. Now the tiles in this case may not be so critical where they start, but certainly sometimes it's very important where the ceiling tiles or floor tiles start. So we may want to switch the cover fill orientation to have its own origin that we can control. So when I activate that you can see now there's a hot spot here that is the origin of the fill. And I can press down on this and move it using the edit or move sub element and change its position. [0:09:01]

So I could move it to a corner of the room, corner of a cabinet, and I can also now have access to a secondary fill origin, which would be the orientation. So these become available if we have link to fill origin rather than project origin. Distorting we won't use, but it is available for changing the proportions of a fill to make it look perhaps like it's in perspective or in other types of views. I will put this back to link to project origin here. Then we don't have to worry about where the origin or its rotation. Now that was a cover fill. If we wanted to look at that in the case of fills, it would be very similar. So I will go to this fill tool. I've got this already setup for ceramic tile, so it should be similar, and I'm about to draw it. [0:09:56]

Now when I draw it, you'll notice something funny, it actually came in just as a solid color. Now if you look carefully you think the solid color is the same for the walls. And what that means is that this fill is considered in the same category as the walls. It's got a category of cut fill. So a cut fill is generally in ArchiCAD's terminology a fill representing an actual material in space that is being cut through. Like when you cut through the walls to create a floor plan or a section. Now if I change this to cover fill, then we're going to see that it shows a different way. So I do have the option of either designating this differently, in other words, it's a cover fill rather than a cut fill. [0:10:44]

Or if I want to - and I just undid the change - I can go to the Document menu, Set Model View, Model View Options, and either manually change my fill display option here so I don't override the cut fills. And they will show naturally, and you see how that works. Or I can go into the Model View Options and to switch to a different one. In other words, when I'm doing something like the standard one for floor

plans, that one will give me what I want. So in other words, I can switch this as a whole to other ones. Let's say what I had was the one - let's see. Let's just switch it to a different one. In fact, let's go to the Room Finished Plan again, and you can see that it's got a model view option called Room Finished Plan which has the walls in a simplified form. [0:11:40]

So generally this can be confusing for people, so I just wanted to take a little extra time to explain it. In this case probably the simplest thing to do would be to switch this from the category of cut fill, which it is not, and turn it into either cover fill or drafting fill. It is a cover on a surface. If this is a tile, then we can think of it as something that covers a surface. But we can also put it into drafting fill and it will look the same way. So these categories here allow ArchiCAD to treat different types of fills in different ways. For example, simplifying the walls in this case, but still allowing us to see the cover fill in full detail. [0:12:24]

Now let's look at some sub element options in the layout book. So if I go to the let's say the finished plan here, or let's say the interior elevation drawings here and I zoom in, if I select this drawing, you'll see that the drawing has a title down below. Now I can move the title around by pressing down on this, and you'll see that there's the option for move sub element is the first one in this top row. And that allows me to reposition this title entirely. Now if I press down on any of these points and instead of choosing to move sub element, I choose to use the stretch icon, then it's going to move something or another, it's going to change the size of something. [0:13:11]

In this case, it's changing the diameter of the circle. So it's actually going to make it bigger. In another case when I press down here and do the stretch, it's changing where the text is. So it's actually stretching away from some base reference point. Or if I go to this point here and use the option for stretching, I'm now moving just the text, that is the title of the drawing. Or if I go to this other one, then I'm changing where the position of the scale is. So all of these are - you might think of them as sub elements, but in terms of ArchiCAD, it's stretching or changing the size of a particular coordinate values that is attached to a hot spot. [0:13:58]

That's what these diamond shaped magenta hotspots are. Whereas when I go to the moves sub element, I'm moving a larger component, in this case the entire title around. Now let's go and place a drawing onto a sheet here. For example, I'll go back to the first floor plan here. And let's say that I wanted to put in an enlarged kitchen plan onto that sheet. So I'll just switch my view say to a larger scale, say 3/8 inch to a foot. And then I will switch my layer combination to one that's intended for enlarged plans. So that will turn on and off different things, and I can put in some more information at this larger scale. [0:14:43]

And let me just zoom in a little bit tighter here so that it's sort of arranged the way that I think I might want to show. In other words, I want to show the kitchen and not much else from the context. And then I'm going to go and create a new view based on that. So I say Save Current View, and we'll just call this "Enlarged Kitchen Plan" and create that. Now right now I'm not in a clone folder, so it just showed up directly underneath whatever view I was last highlighting. Otherwise it would just show up at the bottom below whatever clone folder I was in. [0:15:25]

Now having done that, if I go back to the sheet of the interior elevations, I want to show you how if we wanted to put in let's say this kitchen plan perhaps on the sheet with the interior elevations of the kitchen and there's just a small amount of space, then I might want to drag this in. let's say drag the view in, and then reposition it and crop it. And so in terms of drawings, I might want to just sort of quickly grab it and drag it up sort of in the rough position and crop it. So if I go to the edge of the drawing I have the standard polygon options for cropping. Now sometimes you may want to actually use an option here like the Boolean subtract. [0:16:10]

And then you can, for example, crop out something. I'll just undo something arbitrary like this. So I'm basically cropping out this shape. And of course I can adjust the polygon boundary here to show whatever I want. So the shape of the drawing can be cropped to show whatever you need. But sometimes what you need to do is actually adjust the drawing within a frame. So let me just show you how that would work. If I get this sort of framed in, in the way that it would fit; between let's say the existing context. In other words, there are other drawings. I might want to adjust this within the frame. So I'm going to go to the center point and use the sub element. And you can see how the frame is staying still, and I'm actually just repositioning the drawing within that frame. [0:17:03]

So there are times when you want to draw the frame very carefully to fit in, and then adjust the drawing view within the frame by moving the sub element like that. Now let's switch back to this view, actually to the kitchen, and we're going to go and do some editing of elements and look at editable hot spots. So if I select let's say this cabinet, you'll notice - and I zoom in on it - you'll notice that there are magenta hotspots and there are green ones. Now this happens to be a cabinet that is part of a group, that's why it's got the green color here. And that's why these handles are hollow. But since groups are suspended. I can edit this element individually. And I can go ahead and demonstrate some things. [0:17:56]

Now I'm going to go and press down on the center point here, this diamond shaped hot spot. And you'll notice that in addition to all of the standard options, we have the one that's moving the individual point. And when I select that, you can see that it's showing me overhang to front cabinet, and I can actually move that around or type in a value. And the cabinet size didn't change; it's still showing a certain size that it did before. But I've made the overhang for the cabinet differently. Let me undo that, and you'll see that the numbers stayed the same. Now if I go to the center of the side, I can also change the overhang on, in this case, the end, because the cabinet here is the last one in the group, so it could potentially have an overhang. [0:18:41]

Sometimes cabinets might have rear overhang, and so you can adjust all of these with these diamond shaped hot spots if you wish. And I'm just undoing them. Now if I go to the corner here, we need to look at the prompt, and it says cabinet width and depth. So we're actually able to change the entire setting of the cabinet. You can see how that actually just made the cabinet smaller in both directions. Now if I go to the corner of this cabinet, in this case, it still gives me an icon that says Move Node. It does not give me a prompt, in other words, I can't tell what I'm changing. But the visual feedback allows me to see that I'm changing the width of the cabinet, not its depths. [0:19:27]

So I'm just changing one dimension here. So sometimes that can be good to do, but we didn't get the tracker, so it would be a little bit harder to type in a value. You might be able to do it by eye or snap it to something else. Now let's take a look at when we have this cabinet a little bit more complex. This is cabinet base 2D, for 2 doors, 15. And if I select this one, it is also cabinet base 2D 15. But you'll notice that it has a sink. So that's just one of the parameters in that library part. So that means that with the sink we have some additional ability. We can press down on the editable hotspot and move the sink around. And so I can just reposition it to be closer to one side or another or centered. [0:20:15]

Now it will prevent me - if I bring my mouse down, and you notice I'm bringing my mouse way down - it's stopping at the end of the cabinet, it's not letting me take the sink out of the cabinet. In a similar way, if I were to use the option to shorten the cabinets, I'm taking it down; it will stop at a certain point. My mouse has gone way down, but it's stopping at the minimum width and basically matching what the sink has. So in some cases, ArchiCAD will prevent your editing, because it thinks that you don't have enough room to do something or prevents you from getting it below the minimum. [0:20:51]

Now in the case of this cabinet with the sink, it starts to have some odd behavior on some of the hot spots. For example, if I take this overhang to the front of the cabinet, you'll notice as I pull it out it's actually moving the sink and moving the back at the same time. So I would call this a bug in the library part. Instead of just adjusting the part that I'm grabbing, it's adjusting a whole bunch of things that it's calculating. And you could get in there and make it do what you want and reposition it, but it's going to be a little confusing. If I go to the back of the cabinet here similarly, as I move this back, it actually was repositioning the sink, and in fact changing the depth of the cabinet, not just the overhang. So when the sink is in error, the programming of this part actually is not functioning as well as I think it really should. [0:21:42]

Now you can always go into the library part and go into the parameters and you'll see all of the parameters here for the cabinet. And you'll see the options for let's say the counter. And what's - the backsplash, the overhang. Here are the overhangs that I was just adjusting. So you can type it in here and it probably would work just fine if you typed in a value here. It wouldn't cause a distortion. But when it's doing it visually onscreen it's getting a little confused. But these are where those parameters are. You may also find most of them in the kitchen cabinet settings, the visual ones that you can type in or adjust here for that. [0:22:28]

So now let's look at some of the unique features that we can edit with the pet palette interactively for doors and windows. I will select this door, and you'll see three editable hot spots as I zoom in on it. One of them is at the end of the swing, and I can press down and use the option here that is for moving the individual node as opposed to moving the door as a whole. And I can then change the opening angle and it says "Opening angle in 2D". Now if you think about it, the opening angle is usually at 45 or 90° in 2D, but in 3D, when you're doing interior elevations, it's conventional for the door to be closed. Sometimes you may want to open the door in 3D. Let's take a look in 3D at the wall as a whole - and I will just bring up this wall. [0:23:23]

And you can see that this door is closed here, but it does have a similar hot spot that I can edit and adjust, and I can make the door swing open any number of degrees. So let's just say that I wanted it to be 45°. Now it's generally quite easy to adjust the settings such as opening of the door in 2D or 3D where you can see the hotspot. But if you ever want to find where this is located, sometimes it can be a bit confusing. If I go into the door settings here, it may actually be pretty tricky to find where it all the parameters this is located. And you can see that in this particular door here in this library, I found that the place where it you can set it is under the visual or a graphic settings under "Opening" where we can see the opening angle in 3D and 2D are specified. But this will vary by library part. So I generally, in cases of these types of parameters, use the one that is visually presented on screen rather than trying to find it buried in the parameter box. [0:24:27]

Now with windows, we have a similar option. We can go and tell the window to open a certain angle. This is affecting it on 3D. If I go back to the floor plan, we'll go and see that this particular window has not been adjusted here. But we could, for example, make the window have its own opening like this. If I go to the window here that is a slider, it will have a similar hotspot that will allow me to go - let's see, press down here. And perhaps change the opening of the slider on the floor plan independently of the 3D. So those are all options that depend upon the window and door programming. [0:25:17]

If I select this window you'll notice that it has the marker, right now we've got dimension markers showing, and I have an editable hot spot here. I can move this around. Sometimes you need to move it to find a more legible or neater place for it to be displayed. As I move that you'll notice that this other hot spot moved along with it. This is the offset center line, so in other words, I can move this until I get it centered. It also allows me too actually, if I did have a line, and sometimes you'll have markers with a line pointing to the door or window, then I believe that this particular marker, it says it has the center line length. So it is specifying that. [0:25:59]

In the case of the door here, as I move this door marker, you can see that it's also affecting this one. But this is just the offset, it doesn't have a line, it won't move in and out. So it really depends upon the marker programming. So those are some of the unique features of doors and windows in plan and in 3D. But one more that's very powerful has to do with the 3D grill or actually the ability to set up a custom grill for windows. So if I look at this window - let's actually go to 3D and select perhaps this window here. I can go and open up the settings. And in the area where we control the sash, I can put on a horizontal and vertical grid, and determine the number of grid separators with that. [0:26:51]

But sometimes we want to have a very complex grid, one that is not a regular one. In other words that we want to adjust manually. And then we can choose the option to make a custom grid. Now whatever number of divisions that we put in here will start out regular, but we can adjust them. And you can see how I can go grab one of these diamond hot spots and move it up or down. And in some cases I've been able to go and take the endpoints and adjust this also visually here, but I'm finding that sometimes it doesn't work in the 3D window very well. So what I'm going to do is bring up an elevation and just show you how easy it is to adjust when you're looking at the correct elevation. [0:27:34]

So I believe this would be the north elevation here. And if we Fit in Window and adjust this window to fit our screen better and zoom in on it, you can see that this window has those hot spots showing up in elevation. Now if I go and press down on one of the diamond ones at the end and use the option to move that node, I can actually shorten it. And ArchiCAD is very smart here; it actually shortened it to where it met the other mullion or divider. So we can get here by snapping it to the divider here. I can get this sort of effect. So perhaps we want to have something like this that I'm drawing, and we can then adjust these divisions up or down. So it's possible to do that in the elevation and type in distances very precisely. [0:28:34]

In fact, if I wanted to move this whole thing out to the side, I can do that, so I'd get a very different look. But you'll notice that sometimes it's better to do things in a different order. In other words, I've just moved these vertical dividers, and now I have to manually go and reposition the horizontal ones until they connect. So after a little while of doing it, you'll get used to it. but probably the key thing that I found is that you don't want to spend too much time on this before you know how many dividers you have, because if you decided you wanted to have another divider here, essentially it would start over with a regular grid, and you would have to So I would suggest that you make a sketch of what you want, figure out how many dividers you need, and have it set for that. And then you can adjust them as you wish visually or numerically to create that affect. [0:29:25]

Let me just pull this one up for example. And we can have this perhaps like that. Okay so those are some of the editing features for windows and doors that are unique. I'm going to finish up this lesson with what can be pretty confusing in terms of editing with the pet palette, and that has to do with editing the detail marker call out that you might put - and I'll just go to a section. And we'll put a detail marker call out. So I'll go to the Detail tool here and I'll say that I'd like to create a new detail viewpoint. That will allow me to use the option to create a boundary. In this case, I'll just start out with something simple like a rectangle. And I'll draw a box around an area and then click with the hammer to say this is where I'd like the detail call out to have its little corner, the elbow here. [0:30:25]

And you know I can change the settings of the detail marker. Let's say that I want to say that the lower row is going to - if I open this up, I don't want it to show the name. Instead I'm going to want to show the referred drawing after I've put this drawing onto a sheet, that would show up. We have all sorts of options there. So let's look at how we can adjust the position and geometry of this detail marker call out. You'll notice that there are a bunch of diamond hot spots. I'm going to press down on one of them. and I will use the option to stretch. I'll move the pet palette where we can see it a little bit better. So when I use that, then I can actually move this particular point around, and you can see the prompt that says I'm moving the marker head position in X and Y. [0:31:17]

And so I can move it wherever I wish, and the programming of this is actually pretty nice, because I'm moving the corner of it and it's repositioning. If I move it down a little bit here, you can see how it's assuming that I want to go horizontally rather than vertically. Now if I go to this diamond one here, this is affecting the marker length. So I can, for example, bring this back over and then change the length of it very flexibly. If I go to the center point here and stretch this, this also does the same thing; basically both of these diamond spots affect the length of that line. The diamond spot here affects the polygon



radius. So in other words, how curved or not is it going to be. I've got the option in the detail marker call out for a rounded corner. And obviously we might want to change that depending upon our preferences. [0:32:11]

Now if I press down on any of these, and instead of using the stretch marker, I use the option to move sub element, then it's rather odd, the feedback. It looks like I'm moving the entire call out. Let me just move it over to the side here and what you'll see is when I click, it's moved, instead of the entire marker, just that corner. So it did the same sort of thing. If I move it down let's say to the bottom left, you can see how it's moved it. So the feedback is odd, but it's still essentially moving the marker head, because the marker, the actual box describing the area of the detail that's going to be focused on in the drawing is not being adjusted. [0:32:54]

Now it comes up from time to time that you draw it in one shape, and you would actually like to adjust it. Perhaps I don't want to take it past this corner of the roof, I want to make it a little narrower or making it more typical detail. Now I can't adjust the shape here if I'm not showing the boundary. In other words, when I deselect it, you can see that I've got a nice graphic, but I'm not showing the rectangular boundary that was the actual shape that is being copied and referred to. In order to do that, I need to go to the View menu, and go to the Onscreen View Options and turn on Marker Range. [0:33:34]

So this is an example of a marker, and the marker in this case has a range which is this rectangular shape. Now if I select it, you'll see that, in addition to the same editable hot spot that I had before, I also have sensitivity to the edge of the call out and I can go edit the polygon shape. So for example, I might make this narrower. And you'll see how the boundary of the graphic actually follows along with that. There are some variations in terms of the settings here for the mark of geometry. And this will depend upon the particular marker you choose. But the one that we are using which is the built-in detail marker has the option for whether we're doing a rounded rectangle or a circle or an ellipse or things like that. I prefer the rounded rectangle that we've got here. [0:34:29]

Now there's also an option for whether the working mode will have the shape of the graphic follow the clipping polygon or whether you're just editing that polygon separately. And I don't know how useful this is. I'll just demonstrate it very quickly. I'm going to cancel this, and as you notice if I change the shape of the polygon, the graphic changes. If I turn this to turn off the marker range, you can see how that's adjusted. But let me turn that back on to the marker range and select this again, and just change the settings for the marker geometry to say that I'm going to, instead of following the clipping polygon, I'm going to edit the polygon. When I do that, I can edit the shape, perhaps make it bigger or smaller, and you can see the call out still stays the same. [0:35:25]

So I've actually now separated the cutout for the marker from the graphic. So if I turn off the marker range, you can see the graphic still shows this, but if I do actually select this marker and open the detail drawing here, you can see how it's actually gone further. You can see the original boundary is this one, but it's actually extending further here. So if we did a rebuild refresh, rebuild from source view, we're going to get all of that area included, whereas if I go back to the section here, the boundary of this has

not been updated necessarily. Let's just select this and see what it's got. You can see the boundary is now going over to the side here. So we can always see it when we select it, but we can't edit this unless we are in the showing marker range. And then we can edit this either independently of that or in the case that I think it's more common, and what the default setting is, is that the we're normally having the shape of the call out following the clipping polygon. And you'll notice it now coordinates with that. and if I do move it in or out you can see how that graphic changes. [0:36:53]

So normally you're going to be showing things with the marker range turned off, because it will look neater, here you can see the call out. But certainly when you need to adjust the shape of this, you need to turn that on. For example, maybe we want to make it not as high, it's going up higher than we need. So again I'll go turn on the marker range temporarily, select it, and go and use the option to crop it in. and that affected both the clipping area as well as the graphic that we're seeing here. So this concludes our lesson on using the pet palette to work with edible hot spots as well as moving sub elements. For example in this case of the detail marker call out, as well as sub elements for many other things including drawings within frames and fill origins, etc. This has been Eric Bobrow; I look forward to getting your comments and questions on the page down below. Thanks for watching.

[END OF AUDIO, 0:38:01]