

Welcome to the Best Practices Coaching Call for Tuesday, April 19, 2011. It is now a couple minutes after 2:00 p.m. in California. We're doing this at a slightly different time, in order to accommodate people in different parts of the world. So, being 2 in the afternoon here in California, it is 5 in the afternoon on the East coast of the U.S. It's going to be pretty late in Europe, so I imagine, it may reduce some of the people who are able to attend from the UK, or Spain, or other countries in Europe and Africa. But however, hopefully we'll have more a few more people able to join us from Australia and New Zealand, where it would probably be somewhere between 8 and 10 in the morning, instead of being 5 in the morning. [:58]

So anyway, let me just see, we have 24 people signed in. And we had a few more than that reserved, so probably a few more people join as afterward. The call is being recorded, so it will be posted on the members area usually within a day or two after the call is conducted. So I wanted to give you just a little update on things, before we actually get into the questions. The DVDs have been sent out, for those of you who ordered DVD copies of the course. The first month's content, which is weeks number one through four, plus the first two coaching calls were sent out as a DVD on Friday. So a few days ago. And should be arriving over the next few days or a week, depending on where you are. If you're in the U.S. it would be sent airmail, and if you're in other parts of the world, Europe or Australia and New Zealand, etcetera; or Asia, its being sent, I guess by airmail as well. I eat its airmail to outside the United States, or its standard U.S. mail for within the U.S. [2:32]

In any event, few people did receive them, and I got comments saying that it generally worked, but there was a little bit of confusion on how to get the DVD started. And so I'm going to be sending an e-mail specifically just giving some guidance on that. Basically, at the top level of the DVD, there is a file that says "Course DVD.html", and you double click on that. And then you can access all the materials there. So, that was one thing, the DVDs are coming out. As I continue on with the course development and continue onto I think week nine, then I will create the second month of materials, which will include weeks 5 to 9, and the coaching calls that happened since January. And I should be able to produce that much more quickly, because I've now worked out the mechanics of it. And so it will be much more routine. [3:36]

I am also getting the course transcribed. I had started to do that. Let me just actually switch over to Firefox here, where I can bring up the course website and just point that out. So just in terms of general news. By the way, some people have been a little confused how to get into the course website, because they don't do it frequently. If you have any questions like that, you simply go to Member Login here in the upper right, or you can go directly to the page that is ABCbestpractices.com/login. Now, if you're not logged in, you should get a name and password request here. I'm already logged in, so it shows me that. [4:31]

Because I have administrative setup, I click on "Continue". I won't go to the normal place, but I'll go to the member homepage, which will take me to where you would normally arrive when you sign in. And here, of course, is all the materials. Now, I wanted to point out that in the course, let's go to week number 5 here I've now posted. When we go to any one of these pages, using Microsoft Word and PDF, here I've now posted the transcripts. And so, I scroll down a little bit, you'll see that it says video transcript and audio version. So video transcript basically is a PDF. [5:27]

If I click on this, it will bring up the file. Let's see, open this. It will ask you how you want to open it, and I'll say I want open in Acrobat. In some cases, it will just open it up directly within the web browser window. Now these video transcripts, certainly not necessary, let's see, here it's coming up. But you may find it useful to print out. Let me just scroll down here. You'll see that you can read along with my description and perhaps

take some notes on the side. At some point, I'm planning on having someone help with putting in some time signatures, in other words saying that this section right let's say right here, what time does that start? And basically, if you're skimming through it, you'd be able to say, I'd like to look for sections about that particular topic. And I'm going to be having entire course transcribed, as well as the coaching calls. [6:36]

Actually, the coaching calls are a huge amount of material, because they're 90 minutes each time. So anyway, the video transcript is there, and the audio version, I'm not sure how useful that is. But in case you want to listen to the course materials on an iPod or something like that, or an MP3 player, you can right click and say "Save Link As..." or "Save Target As...", you can save that file, and that file and can be used in iTunes or anything else. [7:08]

So that's another option that I've been working out to make sure that you have as many different ways to access materials as possible. And in terms of the transcript, the other plan is, over time, possibly to translate it into other languages. We've had requests from people in Spain and France for that. And so it is possible that might happen. We'll see what level of interest there is for that. [7:39]

So moving on to some other things, let me go back to the course coaching calls. So in this section, if I scroll down, you'll see that the coaching call from last week, the 13th, is posted, as well as all the previous ones. So I've caught up on all of that. And let's see, in terms of the course, interesting. My screen resolution so small, it's a little hard to see. I'm going to have to reconfigure these menus as we get more weeks. The final week here is week 7 that I've created. Week number 6 I did finish up creating the part 3, some people had been asking about that. And so part 3 for room modules is posted. And that is I think a 20 minute section on this topic. So if you haven't had a chance to check that out, it will be of interest. [8:51]

Basically, how do you save and reuse configurations of elements. Perhaps a kitchen, or a bath, or an office, or an outdoor set of components. Anything that you might find useful to bring into another project, start that part of the design phase. So describe it in a few different ways you can approach that. Okay, so I think that's an update on all of the course things. We will be doing in the next call on the 28th of April. And that will be at I think at 9:00 a.m. California time. So it will be easier for people in Europe, and reasonably convenient for people anywhere in the U.S. And probably not very good for people in Australia. [9:44]

Okay, so let me look at some questions. I see there are a couple things that people have typed in already in the questions box. I do have some that were submitted ahead of time, but I will check the questions box right now. So Kenneth Andrews asks, is there a way to print out the layers in the MasterTemplate for studying layer combinations? Good question, I'll show you some things there. And Chris Sinkinson, I was looking at some of the video files on my iPad and noticed that one the first one in week five didn't work. Okay, thank you for pointing that out Chris. I'm not sure how many actually have iPads. I know Chris is one who really enjoys watching the materials on an iPad. And I am trying to make sure all the materials are playable there. So thanks Chris for letting me know and I'll take a look at that. [10:31]

It seems to mainly have to do with resolution. In other words the iPad can only handle up to a certain amount of data for its video file. And so I'll have to check on that particular lesson. Thanks for letting me know. So Kenneth Andrews, I'll get back to your question in a minute. Let me take a look at questions that I've got posed earlier. And I'm going to bring onto the screen my Apple mail. I actually have just switched, after many months of having this Mac, I've switched from Outlook to Apple's mail system. And I'm still getting used to that. Just basically used a tool called "O to M", which I guess takes Outlook and converts the materials to mailbox files,

which then can be imported into the Apple mail or other tools, even other e-mail systems. [11:35]

So, I see, in terms of questions, we've got some from Traci D'Alessio which I know not going to be on the call. So let me see whether I can squeeze that in later. And I believe James Satzinger also had a question, and said that he wasn't going to be on the call. Let me just see if James is, maybe he did make it. No, he's not on there. And Lennox, you had an attachment here. Let me take a quick look at this. And if you're on the call, we'll start with that one. Because that looked like an interesting one. I see that you're there, so let me unmute you and see if you are connected to a microphone. Lennox are you there? Hello Lennox? [12:27]

Lennox: Yes I'm here. I don't know if you can you hear me now?

Eric: I can, yes.

Lennox: Good.

Eric: Welcome. Lennox, tell us where you're calling from.

Lennox: Grenada, West Indies, Caribbean.

Eric: Aha. So Okay, you're in the West Indies, you said Grenada?

Lennox: Yes.

Eric: Right, OK. So let's see. You sent a small image here...

Lennox: A section.

Eric: You have a section, and you have a vaulted roof that's going across.

Lennox: Yes.

Eric: Okay.

Lennox: The top drawings in plan.

Eric: Top drawings in plan. Okay, so that clarifies that. Okay, so that's a good question to start out with. Let me just switch to ArchiCAD. So by the way, if any other members on the call have questions, that you haven't already submitted, please feel free to type them into the questions box in the GoToWebinar control panel. So let's just draw a box of walls. Actually, you had a shape there. I'll try to mimic that. At least something sort of similar. Is that generally, then, okay. So if we take a section, through this, so this section of course just has the two walls. And you want, in terms of a shape here, let me just - is this going to be an arc? A true arc, or is it going to be more elliptical, or what? [14:24]

Lennox: It's closer to an arc.

Eric: It's part of an arc?

Lennox: Yes.

Eric: Okay, so just to make it simple, all use a three point method here for drawing an arc. And I'll say that I

want to take this over. Now, I'm going to stop my mouse at this point. And then you'll notice the guideline shooting up. If I roll along the guideline, it will then lock it up, and then I can easily take a point here and perhaps if that's going to be the highest point, I'll make sure it goes there. So that - I just created my third point definitely in line with that wall. Now will this extend further or will it to stop at the edge? [15:06]

Lennox: It will extend only about 12 inches.

Eric: Okay. So, we can deal with more precise things in terms of how far, later. But right now, I'm just going to do that as a guide. Now, if I can create a roof shaped like that, would that be generally a good starting point?

Lennox: That's close enough.

Eric: Okay. Alright, so what I'm going to do is go back to the floor plan, so I hit F2, and am going to go to the Roof tool. And the Roof tool has a number of different methods of drawing. The polygonal method, where we can create a simple piece of a plane, that has any arbitrary shape. Rectangle similar, or rotated rectangle. We have the automated polygon method, where it will create multiple hips, multiple shapes that will intersect in hips and ridges, and then we have two options here. And the one I want to look at, obviously this one is the closest to the shape. [16:06]

Now, when I'm working with this tool, or any other tool, there is a status bar down below that says, "Enter First Point of Vaulted Roof Polyarc Profile." Now this status bar, you may or may not see on your screen, it is under the Toolbars, no, under Palettes, and Status Bar. If I turn it off, you'll see that it disappears. And if I turn it back on, we'll see it come in. So this says, what is the first point of the Polyarc profile? And it's really hard to know what that means. But let me just say that, let's see. We're were saying that this would be the low point here, and it says "Enter the tangent of the first arc". [16:54]

Now this is, I'm working sort of blind here. And I'm going to explain a better way to do this precisely later. But I want to show you the A method to do this. So what is the tangent to the first arc? So if I go out and in space like this, this determines a line in space that can be seen as a tangent. All just do it arbitrarily, so we're guessing something reasonable. Now after having clicked, it says "What is the next point of the Polyarc?" And you'll notice that there is an arc being drawn that does leave that first point tangent exactly along that line. So I'm just going to do this arbitrarily, so this is going to be roughly the general idea. I'll click again. And then it says "Enter tangent of the first arc". [17:40]

Now if I do continue on here, it will make a sort of curly queue, it will make sort of either a tighter curve that will go down, or it will make it an "S" shape. I'm just going to stop it with this point saying, no I don't need to go any further. And I'll click. Now, having done that, it's defined an arc shape. Now, it's basically asking me, down below, you'll see it says "Enter extrusion vector and define bottom surface of vaulted roof profile". So, this is a rather wordy thing. Sort of hard to figure out what it means. But basically, if I follow along perpendicular to the wall, you will see that this works. I'm just going to sort of very quickly draw one line, one quick and then I'll draw another one. [18:32]

Now, you'll notice that the arc is still sitting in space. And there are - I'm now creating a rectangular shape, by moving my mouse around, you'll see how it would move. Then I'll just click to complete it. Now, when I've done that, it asks for one more thing, which is, "How far above the current story should this be based?" The walls, I didn't pay much attention to, but nine feet is certainly a reasonable starting point for a single story

structure. It would be about three meters. And there are some other things about the thickness. I'll just say OK. And we'll see it created a bunch of pieces. Now each one of these, if I click on this, is a roof. [19:16]

So when I select it, you'll see that it's a roof. And it says that it's a 13'4". If I click the next one, it says that it's a 17'8", and if I click each one, you can see the height. So what it's doing, is it's created a number of roof pieces, each each with different base height. Now, if I look at that section now, if I go back to the section and open it, we'll see that it's created a shape at least somewhat like what I wanted. But, I didn't really have much control over it, and of course, the height is wrong. So, I could easily select these elements, and actually let's switch our Arrow tool to select everything that's partially enclosed. [19:56]

That's this geometry method here, when we have the Arrow tool. And that means that I can go across, and it will select all of these, and then I'll deselect the line, which is my reference, and I'll just move this. So I'm moving this in space, I can move this anywhere I want. This is actually a 3D move of these elements. I'll move them up. And now, although it's still too steep and not quite right, it's at least resting on the wall precisely. Now if I go to 3D, I'll bring up a 3D window, we'll see that the shape is at least the general category that you want. Is that correct? [20:40]

Lennox: Yes that is.

Eric: Okay. Now there are a few things we can do to improve this. The main one is how do we get it to be exactly whatever height you want? I drew something arbitrarily, but you know you want to be so many feet above the ground at one point, and so many feet at a particular heights due to your design constraints. But let's just say, how do I make it match that? And also this is a little bit rough looking, it's only got five pieces, and so you can see the polygon shape. So let's look at those two questions. [21:15]

So, I'm going to undo the roof here. So in other words, I'll just undo back two steps. Now, there's no roof. And I'll do it again, but before I do that, I'll change the number of pieces. So this, under the Options menu, there is a command that at first glance, might not seem to relate to this, but is called "Magic Wand Settings". Most people who use ArchiCAD have learned the Magic Wand allows you to trace another element, any element with another element, and it will try to do its best to match that other element. Now, if I was tracing a slab underneath walls, then it could match it exactly. But in the case of something like the roof, it's going to create linear segments here, even if I ask it to do the best match, which are not going to match the curve precisely. [22:13]

So it's saying, how much deviation will I allow? So this says that it was within 2 inches of the curved shape. In other words, each one of those segments was pretty close within 2 inches of the shape I drew. I could tell it now to go down to the 1 inch or half an inch or a centimeter or something like that, and it would get more segments, but if I really want to control it precisely, I may want to just say, I'd like to tell you how many segments I'd like to have along any particular arc. So I'll just say 15 segments, which is a little arbitrary, but we'll see the results when I do that. [22:51]

So, I'm telling it that I'd like it to trace whatever arc I've got with 15 pieces. It doesn't matter whether I have best match or linear segments, because roofs are always going to be linear segments as opposed to curve. Now when I say OK, I'm going to do the same thing with the Roof tool that I just did, or as close as I can approximate. I'll go back to the Vault, in I'll say, here's our tangent, and here's a shape, and clicking one more time to say that's the end of the shape, and then you'll notice that I've got this extrusion line and I'll take it over

and back. [23:28]

And then - I believe probably 10 feet is better for the wall, so I'll take it up to there, and we'll say OK. So, now you'll notice that it did this with many more pieces. And, I told it 15 pieces. I'm sure that it's 15 pieces, let's just take a look in 3D. It's now much smoother, and let's take a look at the section here. And you can see, it looks actually pretty smooth in section. A little too low. So how do I make it to be exactly the right height? Well, it turns out that if I draw a shape in the section window, and copy it, I can use this information on the floor plan to be able to create the arc exactly the right shape. [24:19]

So, let me go back to the floor plan. And we'll undo the roof, so in other words, now I'm back to having no roof. And I will paste that little piece of arc. Now, when I paste it, says "Where do you want to paste it?" Well, given my situation, I'll just say, paste it in the center of this. And then I will move it into position. So here, it's obviously in a similar orientation. I'm going to move the corner of it to there, and complete the paste. Now, this isn't the orientation that I want, as you saw, the orientation really should be going out to the side. So what I'll do is I'll select this, and say that I'd like to draw it there. [25:05]

So, I've now just taken the arc that I drew, and I've put it in relationship to the wall here. And now I'll repeat the exercise with the Roof tool. Again, having it set to do the Barrel Vaulted Roof, and this time I will use the Magic Wand. Now, the Magic Wand does not appear in any of the standard palettes, but can be invoked or brought up by hitting the space bar. So, if I press the space bar, you'll see that the Magic Wand shows up. And then I can go along the edge of this. When I'm on the edge of an element that it recognizes, the Magic Wand changes to a polygon shape. [25:52]

I'll move away from it, so you see here's a spray of articles, and here it changes to polygon. I can also go to the corner of it, and you see how the Magic Wand changes to a rather black filled in shape. And I'll click with the Magic Wand active, and you can notice that it is instantly switched modes from - to the next step. If you recall, the extrusion, where I was saying I want to take the line in space back one direction. So I'm going to take it back here, I could take it in line with the building, so then it would stop even with this, or I could take it perhaps a certain distance to the left. Let me just take it a little bit to the left here, and a little bit to the right, so it overhangs. And I'll say OK. [26:45]

Now again, I have the 15 pieces, but let's just take a look at that section. And you see that the roof matches the magenta line precisely, because I used it as a tracing guide. So, each one of these pieces here is a separate piece of roof, without seeing a line in the section, because they blend together. Now, in terms of this - the top of the roof was set at that point. So if I wanted this, I could either trim the wall to this, or I could bring this up, depending upon what was more appropriate. Perhaps I'll just say that I'll grab all of these roof pieces and move them in 3D to the bottom of the roof, goes up to the top of the wall. And now, if I go to the 3D view, you can see what I've got. So, does that give you a good - enough to work on? [27:46]

Lennox: That is very good, thank you. Very good.

Eric: Okay. Glad to explain that. So very briefly. The wall, you can draw the barrel vault by eye, or sort of sketching something in on the floor plan. By far the more controlled method of doing it is to go in a section or an elevation, and draw. Let me just undo back here, and go back to that section - is to draw the shape that you want, and then copy that shape and paste it onto the floor plan in this proper relationship. That would mean touching the wall or in line with it, and going outside the building if you want this roof to be going up. If I had it

inside the building or inverted, for example, I had this – I mirrored this. Say here, and the roof would go down, instead of going up. So here I'm going up and out. [28:56]

So basically, having copied and pasted the desired shape here, then I would just - quick review. Roof tool, switch to the barrel vault, Magic Wand along this, and after I've done that, you get the funny little shape that is being pulled out. I want to take it perpendicular to the wall. In other words, the wall on the screen is going up and down, so I want to go left to right. And generally, what you want to do is go to the inside of the building, either stop inside the building somewhere, or go beyond the building to the other side. And then, now, if I wanted it to be precisely in line with this wall, stop I can do this. And I can stop it right here. Not have any edge beyond the building. [29:46]

But that again, I go to 3D, it's now embedded into the wall. You can see that shape, because of that. So it's easiest to just move it afterward. Now, if I select one of these roofs, here, it's like an individual piece. If I have - groups are active, there is an option under the Edit, Grouping, Autogroup. So let me just show you this, this is another quick little tip here. I turn on Autogroup, it doesn't group all of these elements right now. These are all still individual. But let me just undo back, and just redo the roof one more time. And this is an interesting thing. I'm creating a bunch of elements right now with this one command, and I'd like them to be grouped, so I can easily grab them and move them around. [30:44]

I just turned on, under the Edit menu, Grouping. The option that says Autogroup. You'll notice the little checkmark. I just did that. Now if I go and Magic Wand this, whoops. I have to be in the Barrel Vault in order for that to work. Magic Wand this, bring this out and back. And now if I go to 3D, what we're going to see is if I select this, all of them are selected, because they're all part of a group. Which just means that I can move them up or down or change the settings. Perhaps I can go into the settings for the Roof tool, and change their thickness. Right now they're 10 inches thick. Let me make them - I'll say two feet. Two feet zero. Here I'll just make them thicker, and you'll see how they've all changed together. [31:37]

So Autogroup is an interesting option, I don't leave it on all the time, because it can get annoying. Because anytime you do multiple walls in a series, like a poly, if I go back to the floor plan and I draw the wall tool like this, if I select it, now all of these are selected because they're automatically grouped. And if I was only doing part of the building, something, I'll just sort of do a shape here, I've now that these grouped separate from that group, and so it's a little bit - it's not necessarily what you want to do, have Autogroup on all the time. But it is useful to know, particularly when you're creating things in 3D, that you want to be able to select easily. So I'll finish up your question, Lennox is that okay? [32:29]

Lennox: Just one factor? How do you trim the excess piece?

Eric: I'm sorry, can you say that again?

Lennox: How do you trim the excess piece on the left hand side?

Eric: Okay. So, in terms of the roofs on the left hand side. So if I select them, of course they are all grouped. Now because they're grouped, they're going to be - I won't be able to do a trim operation in order to modify the individual pieces. I would need to suspend groups. So, if they weren't grouped, this would be unnecessary. But I'm going to suspend groups, and then I will use an option here that is "Split", so you can see the icon here. It's also under the Edit menu, Reshape. And when I split, I can go and say, line up with this point here. I guess if

I go along this edge. [33:29]

So I just clicked along the edge of the wall that I wanted to do that, and you can see that it split. So it broke all those pieces of roof into separate pieces that were in line with that, and then I can delete them, there. Now, if I didn't want the ones that are down below in this area, in other words, only those. If I wanted to trim them back to face of that building or to any other line, perhaps 6 inches or a foot outside, then I can also go and split these. And now it's only going to split those off. Now we do have a slight issue. If I go to 3D here, that this particular piece up here really should - if I were to take this wall up - let me just put our Quick Select back on. Let me just select all of these walls and tell them to get taller. Up to here. [34:34]

And so just now, and sort of going into another area of modeling, I've now just selected a bunch of walls and used the option to make them taller. I'll go to the Design menu, Solid Element Operations. This allows me to do things in 3D, or a section, where I might want to say, these walls are going to get trimmed by other things, so they're going to be the target. They're going to be modified. And I'll go and select. Perhaps for convenience, I'll turn on groups back on. I'll turn off suspend. That means when I select one roof, it will select all of them, and I'll make them the operator. [35:16]

And then I'll say Subtract With Upward Extrusion, this says that I'd like to take the top part of the wall off, and I'll say execute. And you can see that these walls on the side look beautiful, but this one wall is sticking up. So what I really need to do is to make this roof the one that - if I go back to the floor plan, and I suspend groups, this particular roof here needs to extend. So what I'll do is I will change this outline, I'll add. Actually I'm going to add a shape to it. So this is changing the outline of the polygon that is this roof. by adding a shape, and I'll say that I'd like to add a shape here. [36:07]

So I've now, you can see that by the handles that this piece of roof now extends out partially to cover that wall. And if I go back to 3D, you can see that the because of solid element operations creates a relationship that this wall now is being trimmed directly by that roof piece, with the roof having been extended. So does that help you out as well?

Lennox: It certainly does.

Eric: Okay. So we combined then, just to back up – we combined then, learning how to create a vaulted roof, just in general. Then a vaulted roof using a 2D curve, in this case, that I drew in the section and could easily measure and say I wanted to be exactly this height at this point. And I put that on the floor plan as a guide, used the Magic Wand to create that exactly right. Talked a little bit about Autogroup, and how that would help to perhaps select all of the roof elements at once, so when I create them, they're already grouped. You can also select them after the fact and group them, but, Autogroup can be nice if you think ahead. [37:24]

And then, a quick little review of Solid Element Operations and how that can be used. And I guess the other question, which I answered before the solid element or the 3D was the 2D trimming, which was basically taking those roof pieces and using the “Split” command, which is that hatchet or axe up at the top. So a good question Lennox, it allowed me to explain a few different the things that I think...

Lennox: I have one related question. Can you use a line to do the split?

Eric: Can I use a line to do the split? Yes.

Lennox: As opposed to a wall?

Eric: Yes you can. So if I take a line, and let's just draw a line in space like this. And let me just select a couple of the roofs here. Three of the roofs and do the split. I can go to this line, and as long as it recognizes that I'm on the line, it will then allow me to split it. So now, I've gotten rid of those pieces. In fact, by going to the edge of the line, I'm getting this effect, I'm undoing it now, but I don't even have to have the line drawn, I can use the split command and draw a line in space. So I'm basically, if I don't click on anything, it allows me to draw any line that I like, and then you can see that it will split. So, if I wanted to line this up, let's just say split it from where this corner meets. This certain - maybe there's a window or a column or something like that, I can draw the line just on the fly. [39:13]

Lennox: Very good, thank you.

Eric: Okay, so I'm going to mute you Lennox, and I'll see what my next question is. Thanks for your question. Okay, I see Graham Richmond had a question, Does the same method apply to a compound curve profile low wave shape? I'll need to do that for my current project. So let's just extend this with a quick follow-up. Let me just do something without the precise shape, and see how that works. In other words, I'm going to go - let me just see Graham if we can unmute you there. So Graham are you there?

Graham: Yes I am Eric.

Eric: Glad to hear from you. Where you located?

Graham: Tasmania, in Australia.

Eric: Okay, so we're going from Grenada in the West Indies to Tasmania in Australia. And I guess this is a little bit easier for you to make, what time is it there?

Graham: It was 7:00 a.m. when the call started. So it was much easier than five. Thank you.

Eric: So still early, but, yeah. So in terms of the wave shape, if I go to the Roof tool, and I go to this vaulted option, let me just do it arbitrarily in space. The first point says where do I start this, the second point, if you look down at the bottom of the screen, it says "Enter Tangent Of First Arc". And now I'm drawing a shape. So I will continue this to where it's just an arbitrary point. And now it says, "What is my next tangent? Enter tangent of the first arc." So I'll just do it this way, and now you can see I'm creating another shape, and here's another tangent and down. So, whoops, I'm sorry, I didn't finish it out properly. So let me back this up. So the first point is where I start, the second point is a tangent, this is now a curve that it's creating. I could say, take it back to where I started, if that was appropriate. Now where is the next tangent? So I'll click on this, and now where is this shape going to go? And I'll pick it up here. [41:42]

Now I'm just going to make it simple and say this is a single wave, and click begin. Now, when I click to complete it, by not creating a new tangent, then it gives me this extrusion shape. And I'll just draw this back. And now if we look in 3D, we're going to see here's the wave shape. And I will point out that the first batch, which was a longer curve, has 15 pieces. And the next batch, also has 15 pieces. So, that is one of the limitations of using the Magic Wand with the fixed number of pieces, but it - that isn't necessarily too bad in this case. But in some cases, if you have small pieces of curve, you may end up with a lot of extra roof pieces. [42:34]

So, if we were to undo this, and just do it with the Magic Wand set to instead a deviation, let's say one inch, so would be like two and half centimeters here. And I'll just do something pretty similar. I guess – this. So let's take a look in 3D. So you can see that one inch actually isn't very close, or against me a more noticeable number of segments. But they're more reasonably matching that. So let me just undo one more time. In fact, let's just create in the section a shape that we want, just to generalize this. If I create a shape perhaps with the Spline tool, so to really generalize it. So, this is a Spline, and I can actually sort of adjust this and make this whatever shape I want to play with it until I get it to a pleasing shape that meets my design requirements. I'll copy this, go back to the floor plan, and paste. [44:01]

And I'll just move this off to the side, and then I'll select it and rotate it, because if I want to have it shaping the - in relationship to those walls, I will need to have it facing the same general way here. And excuse me, let me just change the Magic Wand settings to say even a little bit tighter. So half an inch, which would be a little over 1 cm. And I'll Magic Wand this. I have to go back to the Roof tool, and Magic Wand this. Extrusion Vector. Alright, that didn't work, let's see. Let me take this, I think it's because there was an actual duplicate there, because I had Magic Wanded this Spline itself. So let me just see. Let's undo, yeah, there was a duplicate, so let me just try doing that. There we go, okay. So it was complaining because it was trying to basically do two roofs on top of each other. Now if I go to 3D, you can see the shape that it created. Generally pretty smooth, because I made the tolerance to suit my needs. But, where it can, it created a single large piece, and where it needed to, it created little bitty pieces. So does that answer your question Graham? [45:52]

Graham: That's brilliant, thank you very much.

Eric: So the basic idea is you can do it, either manually by creating a series of tangents that you draw on the plan. But the best way is to actually use the Arc or Spline tools in the section and copy it to the plan, and use the Magic Wand. And if we just go back to that section here, you'll see - and if I have on Autogroup turned on, no I didn't. So let's just see how closely it matched. If I draw that, now that's interesting. Okay, there. It's within a certain level of tolerance. Obviously, the closer the tolerance is, the closer those pieces are going to be. So okay, Graham am going to put you on mute unless you had another question? [46:54]

Graham: No, that's fine, thanks.

Eric: Okay, well thanks for your question, and I know you had some other questions, we'll see if we can get to them later. Let me see, Chris Sinkinson, can you split along a curved line in terms of - so let's just go back to the floor plan and of course, now I've got a real mess here with this. Let me just select these. An arc shape, something simple. so I've now got an arc shape going across this, can I select these roofs, let's see. With Groups active, select them, then I'll suspend groups to allow me to edit them or reshape them, and let's see if I say split on this edge, it didn't actually like that. So I say Split, it says, "Click an arc edge or draw a line to split the select elements along it." And I'll go along here. And it did not do that. [48:08]

So, I would've thought that it would do that. If we were to take an arc, let's say through here, and I selected these walls, and let's say split by this arc. You can see that it actually did split the wall. So this wall is now split here, and this wall is split. So apparently some elements are eligible that way. If I select this one here, and I say split it by this arc, no, it is not allowing it to split the roof by an arc apparently. So good question. Let me just see if - I'll unmute you Chris, and , Chris, are you there? [49:09]

Chris: Yes I'm here.

Eric: So you're in the UK right?

Chris: I'm in the UK yes.

Eric: Yeah, so we're bouncing back and forth. How late is it there?

Chris: It's perhaps 11:00 p.m.

Eric: So late but not...

Chris: Not that bad.

Eric: So is that the...

Chris: That's why I asked. I didn't know if you do that with a poly line or something else, but it's just a little bit frustrating.

Eric: Right, so one thing you could do and this would be a workaround. Is I can go to the Line tool, for example, and I can Magic Wand the - let's see. If I Magic Wand with a Line tool on a curve, it can, depending on the Magic Wand settings - best match. If you Magic Wand - this is an interesting thing - if I Magic Wand - let me demonstrate one thing first. So if I Magic Wand this spline, so this spline here is a smoothly curving, or it changes curvature. It is not an actual set of arcs. These are sort of some arbitrary shapes that are being approximated using Spline, what do you call it, the mathematical tool that's known as a B Spline I believe. [50:38]

Now if I use the Line tool, and I Magic Wand this, it looks like I didn't really do anything, or maybe you notice that it got a little thicker. If I zoom in on it, you'll see that it actually - if I zoom in really, really tight, you'll see that there is an arc and there is a spline side by side. But they're obviously very, very closely related. So it matched that very, very tight. But when the Line tool is considered a cousin or related to the arc tool, so when I do that, I'm zooming way back out now, or back to here. So if I undo that here and switch the Magic Wand settings to say that instead of doing arcs do linear segments. [51:31]

And let's say the deviation - let's just say, make it more noticeable, like three inches or something like that. And if I Magic Wand this, I zoom in, you can see that now it's got a bunch of straight segments that approximate that curve. Now, if I made it closer, so I'll just undo, and I'll go back to Magic Wand, so Magic Wand settings. Let's just take it one inch, so two and a half centimeters, and let's say that I Magic Wand this arc. Now, that's a straight segment. So that probably can be used as a split, and now let me just put the Autogrouping back on, so that when I Magic Wand this, if I select one of those segments, it is part of a group, you can see the color of the handle. [52:27]

And so let me get rid of, temporarily, that arc, just for training purposes, I'll get rid of it. I would normally hide it, put it on a layer that was hidden. So see you can see now that it looks like that arc, but it's actually a series of segments. When I activate groups by turning off suspend groups, all these are selected here, and so the question is, can we split these roofs by that. So if I select all these roofs, suspend groups, and then say split, well the issue will be that the - when I do the split command, these are multiple pieces. But if I go along this edge here, so here you can see that it's split all of these roofs by a single line that I had there. [53:23]

So what we would need to do then is probably have groups suspended. Select just one, and tell it to split by

this edge here, and then select the next one, and tell it to split by the next approximate edge. And so you can basically, by sense we have fifteen roofs with fifteen operations, we could get it to trim following the curve, but it really isn't a curve, it's a series of segments. Chris, you're still unmuted, do you have any comments, would that be useful? [54:05]

Chris: No, that would do the job, yeah.

Eric: Okay. So then just backing up, in terms of coaching, the thing that I covered in terms of a concept here, is that under the Options, Magic Wand Settings, we have the option of forcing a trace to use linear segments. And using controls over how close we need it to be to a true curve. And this then gave us the option of creating a series of line segments automatically, that all of that curved pretty nicely. And then makes it possible to do a split, where the otherwise we couldn't split it by an arc. [54:47]

And so, I'm going to have to pause for just one minute. Okay, so I'm back. So another little trick related to that is if you ever want to do a polygon shape, in other words, a regular polygon like a hexagon or something like that, you can do – I'm just going to do a circle. Here is a circle, and if I go to the Line tool, and I tell the Magic Wand that I'd like to have a certain number of segments along the circle, let's just say nine segments. if I say, make it linear, then when I trace it this circle with the Line tool, in it will create that number of segments. It could be six, it could be eight, it could be any number. So we'll use a Magic Wand you can see that it has created a nine sided regular polygon there. [55:53]

So these of course are just individual lines, but I could then use, for example, the Fill tool. And use the Magic Wand. Now the Magic Wand, for those of you who haven't used it in all of its wonderful capabilities, you can also - if you have a closed shape, you can click inside it, and it will find the boundaries. And in many cases, if I go in here, it will find this. Now here, you can see the Magic Wand was finding the straight edge and approximated the arc with these two pieces, which is not maybe what I would want, so again I would want to switch the Magic Wand to say, give me a best match. And then if I use the Magic Wand in here, you can see how it fills in between the straight segment. I'll just do the next one. [56:45]

So that's some tricks with the Magic Wand, understanding what the - when you can switch between these two, or what the deviation gives you and when you switch between segments along circles to create a polygon or segments along arcs to say how many segments you want the roof to trace an arbitrary arc shape. Anything else related to – okay - Christopher for this?

Christopher: No, that's fine thanks.

Eric: Okay, well thanks for tuning in, and I'm going to go on to another question.

Christopher: Okay.

Eric: So, Graham Richmond follows up with Can you use a curve wall cutting element and solid element operations to trim the side of the wall? That is possible. It might work. So let's just - except that the floor plan will not show this. So, solid element operations are very powerful, and obviously if we go back to the 3D, I've got tops of these walls being trimmed very neatly and easily by these roofs. And you can trim the sides of something as well, but you won't see the change happen on the floor plan which of course you would probably want to. So here's what I'm going to demonstrate. [58:15]

If I go to - I'll just create a wall that's going to be an arc wall here. And I'm going to make this – actually, we'll just leave it at the 9 inch thing. And I'll trace this, let's see. Now I'm going to create it just in - now this is a wall, I'll just make it very tall, so it goes up above this. And if I go back to 3D, you can see, here's the curved wall. And maybe it actually has to be even taller than that. Take it up to 25 feet, 8 meters, something like that. Now, if I select these roofs, let's just select a couple of them. And use the solid element operations, so I'll make them the target, and I'll make this operator the wall. [59:18]

Now really, subtraction, the extrusion doesn't matter, because the wall is going straight up. So let me just say subtraction, and execute. And what we'll see is that this roof is now broken into pieces. So you can see from it's handles, the preselection that it's actually been removed, it's no longer passing through the volume of the wall. Now, if I make the wall bigger, or thicker, let's just make this instead of 9 inches thick, let's just make it 20 feet thick. Of course, it has to – I would want to reverse the shape. So if I click on the geometry, I can switch which side the thickness is. And I will switch to the other side, maybe 20 feet is more than I need so let's just say 15 or something like that. [1:00:08]

Now, the roof here is now neatly trimmed off along the side, but there are two issues. One is we've got this huge wall here. That is resolved by putting it on a layer that is hidden. In other words, I take this wall and I say, I don't want it on this layer, I want to put on a layer called “A Demo” which happens to be hidden. You'll notice the eyeball. So now, temporarily, that wall is hidden, and the roof looks like it's trimmed very nicely. But when I go to the floor plan, the roof still looks the same. In other words, that's one of the limitations of solid element operations is that it does things in 3D, but it is not create a change in the plan representation of the elements. [1:00:54]

So, that's an answer to your question Graham. Let's see okay, Kenneth, you had asked a question early on the call, and we've been going about an hour in the call. And I realize that some people did submit some questions ahead of time, so I should take a quick look at that. Let's see, Kenneth asked. is there a way to print out layers in the MasterTemplate for studying layer combinations? So good question. So let's just give you a five minute answer here, and then we'll move on to some other things. And so Kenneth, if you're on the call still, let me see, allow you to talk here. So Kenneth are you there?

Kenneth : Yes I am.

Eric: Oh, great. Where you located?

Kenneth: Clarksville, Georgia.

Georgia, okay. So we have our first American. At the last coaching call, I think everybody or almost everybody was American. This time we have a nice mixture around the world. So in terms of the layers, let's first of all, if I go to the Layer Dialog box here, there are options to see, of course, what layers you've got, and what happens when you click on a layer combination. But there's nothing that allows you - I'm sorry - there is a print command here. So what does that do first of all? If I say print, and I'll just do this to a PDF, so we can view it on screen, and I'll just say “Layers” and I'll put this on my desktop. And then let's just switch to Finder, and go to the desktop, and open up that file. [1:02:48]

So this is a rather clumsy way of recording. It basically has a layer combination, in this case, drafting, and it has what layers are visible. And it's a long list. And then here's another layer combination, all visible and unlocked,

etcetera. And if we go down to Enlarge Plan, and Floor Plan, etcetera. So you can look at this, but then is a potentially useful record, but it's pretty hard to study. It's certainly no easier to study this than it is to study the original thing in ArchiCAD. So let me just bring back ArchiCAD here. So that's what you've got for that method. We can also go under the Options, Element Attributes, and go to the Attribute Manager, where if we're looking at the layers, there is "Print A File". And I think this does pretty much the same thing. [1:03:46]

No actually, this is Attribute Manager file. Okay, so let's just try this. Layer test. I actually haven't looked at this. And it's a text file, and let's just see what that has. So if I go back to the Finder, and here's the text file, and OK, this is a little bit more interesting, because it's showing the status locked and unlocked. And some more information, it's only the layers, not the layer combinations. So, again, it's not giving us a lot to work with in terms of a study. So let me show you what I've developed in MasterTemplate that is a reference. And this was something that I went through rather elaborate process of exporting things, like what we just saw into Excel, and then in Excel, doing a bunch of calculations to create this. [1:04:58]

And what you'll see here is something that, if I zoom in, this is a graphic that I'm including in the MasterTemplate sample file, and it's also no longer in the main MasterTemplate file itself, because it's sort of an educational bit of data that we felt was not necessary, but it is in the Legend file. So if you have MasterTemplate, and you open up the main Legend file, I believe you'll find it in the worksheet. But it also is in the sample file, which you have access to. So, briefly, what this shows it is that, let me just scroll or move down here. Actually, let's see, we have - I can't highlight anything in this mode, but I can point. And you are seeing my cursor. [1:05:55]

Kenneth: Yes.

Eric: If we look at "15 Con Doc Floor Plan" here, and you can see that the first one is blue which is module building, so that means that's on. And the legend is turned off. Now if we scroll and move down, it says dimensions are on, and other types of dimensions are on. But let's see what is off. On the floor plan, the fixture labels are off, and the furniture is off, etcetera. So, you can study it here, and where this gets to be a little bit more useful as you study and say alright, so the layer for stairs, landings, and elevators is on for a lot of things, but it's not on - well there's a layer combination called "Lock and Hide All Layers", so it's everything's hidden there. [1:06:42]

But it's not on for "Show Current Canvas Limits", it's not there, that's another one. And it's not on for "Common Dimensions". But it is on for all of these construction document ones, and then it's not on for "Construction Documents, Key Building Plan Portion". So there is a version of the building plan that is just very simple, it only shows walls and it turns off things like stairs. So you can basically see where a layer is visible, and where it's not. And then you can also compare some things that might be quite similar. Let's say, what's the difference between the floor plan and the enlarged plan? It's a little hard to tell just in the layer dialog box. [1:07:26]

But the floor plan has this layer here, let me just scroll over. That is "Room Names", and the enlarged plan does not. Now I'm not quite sure why that is, I might think that "Room Names" should be on there, but this is what it was when I created this graphic. On the other hand, we've got some upper information that's on, let's see, interior elevation marks that are on in the floor plan but not in the enlarged plan. And you can study this. And I'm not saying that MasterTemplate is perfect, I always see little things that I go "Hmm? Why do we have that?" But basically, this type of a graphic which has layers on one side and layer combinations, and a way to sort of compare and see what things are on, is something that I took a long time to create, and I could create

again, or - but I haven't gotten back to it. It was one of these things that I probably spent two or three hours taking the text output and running it in Excel through various formatting and things to get there. But that at least is a could be a useful reference for you. And you can print this out of course. [1:08:45]

Kenneth: Yes, very, very much so thank you. That helps a lot.

Eric: OK, good. So I'm going to mute you then Kenneth, if that's okay. Alright.

Kenneth: Yes. Thank you.

Eric: Okay, so, let me go and - I will bring up my mail system and take a look. So we did actually start with Lennox's question, which he had submitted in fact I think a while back. And then, we didn't do it in the last call but got it in here, that's good. Let's see now Jeff Manley said he can't make the call, but he had some questions. Let's see if there's anyone else who has questions who is on the call. Jim Satzinger, so he asked a question, I know I responded to it. Jim are you not on the call? Okay, Tracy Gillesio, are you? No. Okay, Tyler, Tyler said he was on a deadline. So okay, so the other people who submitted ahead of time are not on the call. [1:09:57]

Now Stewart, you submitted initial setup, so I did answer that with the last call going back to the 13th. With Chris Sparks, plan view call out without having to redraw or copy paste details. So this one I'm not sure if I answered last time. And Chris are you on this call? No, you're not. Okay. Let's see, what about Mariya. Are you on this call? I know I answered some of these things by email. Okay Mariya, you are on the call, let me see if I can unmute you. So Mariya? Are you there? Hello Mariya? Mariya? Okay, well it looks like Mariya is out of the room. That's too bad. Because I can see that she's logged in, but, okay, let's see then. Let's leave her unmuted in case she comes back. Then Tim Ball, Lightworks. We did answer this question, thank you Tim, that was great one about Depth Queue Settings and the Complex Profiles. [1:11:12]

And Iain, I saw that you were on this call. I can't remember whether you were on last time. Iain, you're in Australia as well, right? Hello, Iain? Okay, as I recall you don't have a headset, okay. Alright. But you are on the call again, so thanks for tuning in. And I did layer combinations. Okay, so I answered that. So I guess, we're - let me see if there's any other questions that are typed in, I can take them. Otherwise I will take one of the questions that the perhaps is - Jim had - looking at these questions. Okay, alright. So here's a question that Traci had sent, and I downloaded a file. Let's see if I can open that file. And she's not on the call, she said she would watch it later. So if I go, let me save this rather messy file here right now, just on my desktop. So this is "coaching call April 19th", and let me open her file if I can. Because it's an interesting question having to do with the visibility of windows on the floor plan. Let's say open here. [1:12:56]

So it should be in downloads, and there is the PLA file that she sent. So let's see if I can get that open. She sent it as an archive file, and so for those of you who are not all of that familiar with it, when you send a file to someone else, there is an option to send it as in a format called an archive, which is supposed to include all of the library parts. And there are two questions that she had, one was her original one, and I'm just getting some warnings here that we can ignore. One, the main one had to do with the visibility of windows were not showing up on the plan. Even though they were in 3D. [1:13:53]

So let me - there we go. Okay. I'm just getting it so that her floor plan is fitting in here, and I'll say "Fit in Window". Okay, so let's just - let's say she does not see these windows on the floor plan, and let me go to 3D.

And take a look in 3D. And it's saying that there are some errors, but I zoom out, we certainly are seeing windows on the second floor. So if I select this wall, I'm seeing this wall goes from 9 feet, so 3 meters or so, to 28 feet, that's about 9 or 10 meters. Obviously up to the peak of the roof. And this wall as it's home story, it's showing what is the home story, let's see. Let me just open up the settings for the wall. The – I forget where - let's see, model. No, it's not under there. Oh, home stories, second floor. So this wall is on the second floor, it's showing there. It's projected with overhead. [1:15:22]

So what that means is that it should show the wall with being cut through at the floor plan Cut Plane settings, along with the information above. Mainly you would see that if the wall was tilted or canted. So we're not seeing the window, if I go back to the floor plan for that wall. And let's see - which is the wall here. If I zoom in on it and tab. So this wall is the 9 to 25 foot, and maybe its this one over on the side. If I hit the tab key, let's see. I'm going to get it to select the wall. And this is 9 to 17, no. Okay, maybe it's this one. 9 to 28. So that's the one there. [1:16:23]

And we did have the two windows. So why are we not seeing this? Well, we have - there probably two main things that I could think of that would cause this type of issue. One has to do with the Model View options. Looks like this is set correctly for Model View options. And if I go to Model View options, I'll just point out here that it is saying it's going to show doors and windows. Whereas if we were to switch it to, for example, a different model view like the site plan, sometimes this can be activated and people can get confused, because you can say “Hide Doors and Windows” on a certain drawing, such as a site plan. [1:17:03]

But that's not the case, I'm going to cancel. So the other thing I'll look at is under the Document menu, Floor Plan Cut Frame, and we'll see that it says “Cut Frame to current story is 4 feet”. So that looks normal, so that's conventional, that would be one meter, 1.1 meter, 1.2 meters above the current story. So that looks normal. Now, let's just take a look at our story structure. And so right now, we are on the second floor, and when I go to Story Settings, it says the second floor starts at 9 and has a height connector of zero. So here's our issue, and that is that the - there is no volume allocated for the second floor. [1:17:56]

So although these elements sit at the nine foot level, and in 3D go up properly, the Floor Plan Cut Plane settings says “Only show what's on the current story”. So you have two options here. Just one that I probably would not do, but I will demonstrate it, is Floor Plan Cut Plane and I'll say, show up to, let's just say 9 feet above this. Now who am I hearing – is that? Okay, Iain, it unmuted, but it didn't have any sound. I think it's Mariya? Mariya are you there? Mariya? I think Mariya has a dog. I'm going to mute that. [1:18:50]

So anyway, I'll just say, show up above the current story by a certain distance, 9 feet. And now you can see the doors and windows do show up. That is an option that I probably wouldn't pick because it would have other repercussions. For example, if I go down to the first floor, if I go down to go down a story, well, we're not seeing a problem, here but if we had walls that were two stories high, we might see elements there that are showing from both stories. So this could potentially be a solution. Certainly under Floor Plan Cut Plane is just to say I want to be able to go above the current story. But let me just put it back to zero, which would be conventional, saying I just want to show this story but not anything above this story. And now these disappear, and let's just look at the story structure. [1:19:53]

And look, do we have anything on the roof story. If I go up to the roof story, okay, there are some roofs. So these roofs are, in 3D, going to relate to the story structure. So let me just say, what if I change the story settings and do a more conventional 9 feet here? And now the roof thinks of itself 9 feet higher. And let's just

go back to the second floor, so I'll highlight this. When I say OK, it will show the second floor. Now the second floor is showing its information properly. When I got up to the roof story, it still looks okay, but when I go to 3D, it's going to make the roofs be too high. [1:20:36]

And you can see that all of these roofs are now floating up in space, because they were told to be a certain height in relationship to their story. So I can fix it very easily, particularly given that it's probably only roofs on this story. If I go back to the floor plan and select all of the elements on this plan, which are all just basically a bunch of roofs, I can go to the Edit menu, Move, Elevate. And I can say that I'd like to take it down by minus 9 feet. In other words, basically, I've offset the story 9 feet up, and now I'm going to take it 9 feet down, that would be 3 meters. And I'll say OK. Now, some of those elements, if I go back to 3D, will be in their proper original relationship. So that hopefully that will answer the question. [1:21:32]

That was from Traci. So basically the issue was that the stories were - it was zero height between the second floor and the roof. And the Floor Plan Cut Plane settings were saying, only show what is in the volume that this story occupies, and this story occupies zero space. So I see that there's - I see that Graham Richmond asked another question, and he said he'd emailed me. Let me see. And Mark Moscrip, I'm guessing she has a Model View issue. And yes I did of course look at that first, so thank you Mark. Let me just unmute you since we haven't heard from you. Mark you're on. [1:22:22]

Mark: Hi.

Eric: Hi, where are you connecting from?

Mark: Atlanta.

Eric: Atlanta, okay. Glad to hear from you.

Mark: Well, I am curious. When you solved the roof issue, since it was cured by setting the stories in the second floor to 9 feet, why wasn't the solution for the roofs to reduce the roof story 9 feet as opposed to selecting all the roof elements and reducing them? [1:22:49]

Eric: Good question. The height to next is used in a very limited fashion for the top story. It's really not even used. I could make this 9 feet or zero or whatever. It will affect the floor plan view of this story. But the elements that are on this story, and by the way, I'm going to mute you Mark, for a moment, because we're getting an echo. And then I'll unmute you. So the elements that are on this story, the roof story, floated up with the elevation. So basically, that is just the way that things are. Elements that are drawn on a story, or that associate themselves with that story, it's what's called the home story, will float up or down if that story has a new elevation. Heights connects has nothing to do with it. [1:23:46]

Now, I can change the height connects here for the second floor so that essentially, there would be some room for the floor plan display to show the second floor elements. I mean, normally you would have a gap between this story, this story, and the roof. Now, one reason why sometimes people don't do this or may - there's a control here that not everyone knows about. I did cover this in one of the recent coaching calls. It has to do with the showing of the story levels in a section or in an elevation. You can see that this one has a check, where the foundation basement does not. I'm not quite sure if she's really paying any attention to these. I'm guessing since she has a demo plan and a first floor and the negative ones, that these shouldn't be turned on. But let's just see what I did, and let me unmute you Mark, in case you have a comment. So you're

back, in case you want to say anything. [1:24:46]

Mark: Thanks, no, that was good.

Eric: Okay, so I'm going to mute you then. Thanks for your suggestion though, I appreciate it. So what you can see is that there, in this particular view, there is a ground plan. And then there is a story below. And in fact two stories, below and this one looks quite similar to the one up above. It basically is - this must be the original building. And so Tracy is using an approach that we see sometimes, and it can be managed properly, and that is to say, creating extra stories as a record of the As Built conditions. [1:25:39]

But it can get a little bit confusing and a little bit hard to manage. In any event, clearly we wouldn't want to have this stuff below ground, which is As Built in a section, and we wouldn't want it to say "Demo Plan" here off to the side. But if that was the only issue, then what I would do is go to the story settings and just turn off these check marks here for that. And so that basically - and maybe turn on the ones for the foundation - well maybe, I'm not sure. Maybe she does have that. So to say OK, and we'll see this update. And now you can see we've got a line for the foundation basement, but it's not showing that. [1:26:22]

We would also, in a section, want to in the section settings, if you're doing something like this, you'd want to say in the general controls for that section, whether the vertical range is infinite. And it would not make sense for it to be infinite. You'd want to say, let's say it's down to minus 9, is what she's got and up to perhaps 30 feet, so let me say basically this would cut off the bottom, and go up to whatever height. Now, it's not allowing me to say OK, because the section marker is hidden on the plan. So if I do want to make a modification here, I will have to unlock that layer. So let me go to the plan, to this particular section. It's CD-01. [1:27:11]

So let me go back to the plan, any of the plan views, and let me turn on that layer. So the marker for sections, I'll temporarily unlock, and then if I go back to that section, and go to the sections settings, we'll see that now the OK button allows me to make changes, and I can say that if I'd like to make a limited range, say minus 9 feet up to 30. Say OK. And in a moment, when it refreshes, you can see the bottom information disappears, and it's going up to 30, which is probably a little bit above where the peak of the roof is. So that's a couple of little tips about dealing with sections and the markers off to the side that show the story heights, turning them off and on, and also turning off perhaps negative dummy stories, if you are using that approach. [1:28:14]

And so those of you who are wondering what the heck this stuff in the middle is here, that's some elements in MasterTemplate that are the Interactive Legend that you can eyedrop. We can turn it off and on by turning off the Trace and Reference, or turning it on. We can also move this information - if I bring up the Trace and Reference Palette, I can say I want to move it. So I can get it out of the way. But ultimately, the reason why it exists is that you can go and eyedrop something like this, let's say this set of people. And I can put them into this thing by clicking. [1:28:54]

And you can see that I've basically just picked up the settings of something useful, and we can have other things. If I wanted to label the roof, top plate, if I eyedrop this, and take this - and so you can see that we have common labels in here. And this makes it quicker for certain purposes, whether it's labels, or 2D Framing elements, or insulation, or other things. We can eyedrop them from this legend, and then we just hide the legend when we're done. So that's an example, again, of using a worksheet in this case for Kit of Parts. So let's see, I don't see any other questions typed in, but Graham you said that you had some advanced questions in your e-mail and I'm going to see. I just switched over as I mentioned, let me see. Here's Graham, okay, so, as I

recall yes so we did skip some of these. The clear story. So let me just umute you Graham, and we'll just take this as the final question since no one else has typed in anything. So Graham, you're back on. [1:30:29]

Graham: Yes I am.

Eric: Okay, good. So you had three questions here, which do you want?

Graham: I think probably question 3, since we've run out a time, which is whether CADimage windows and door tool is really worthwhile, because I am personally trying to use the standard ArchiCAD functionality.

Eric: So just as a sort of general comment and, I think CADmage products in general are very well made and well supported. I like those guys, they are really dedicated to creating good things. The tools vary in terms of how generally useful or applicable they are. In other words, there's one for framing, that is really good if your home builder and you really want to get the framing cut list. But if you're an architect, you may not need something as elaborate as they have there. On the other hand, Door and Window Builder is something that anyone could use. It's a very rich environment for creating custom configurations for doors and windows. It's probably main strength are that you can create multiple ganged situations. [1:31:49]

In other words, two windows side by side with an arched window on top of them, or a door with a transom of an odd shape on top. Or just any sort of shape. In other words, you can have ones with a slanted top or curved top, or you can have combinations of multiple windows, some of which are openable and others are not. You can slice and dice things lots of interesting ways, as well as getting great detail in terms of the actual jam and sill, and all the components. So it is a very powerful system. That being said, some people find it confusing, because with power sometimes comes complexity. So you have to at least take some time to read the manual and get familiar with the tools. It isn't something that you can just sort of buy, and in 15 minutes sort of feel like you know how to use Door and Window Builder. [1:32:47]

I would say you need to allocate some more time than that. And maybe not all day, maybe an hour or two to play around and get familiar. But very good stuff. So depending on what your challenges are, the doors and windows in ArchiCAD have gotten better over the years. Tell me what your main frustration is with that?

Graham: Things like ganging different types of windows together. They don't actually become one window, so the schedule isn't really useful.

Eric: That is a limitation that you hit on exactly. There's no way in ArchiCAD, with standard doors and windows, to gang multiple windows together and have them show up in the schedule as one unit. So that - you have to play around with in the schedule to make it look like something is a unit, by it really won't automatically do that. But if you do CADimage stuff, then as I said, it will create a complex configuration that has a single window. So what else?

Graham: The other thing was the schedule itself. I found certainly in the ArchiCAD 14 Australian version, the schedule is very limited. And I really haven't had the time to work out how to make it useful.

Eric: The standard ArchiCAD schedule is limited did you mean?

Graham: It seemed to be better when I was using an international version a couple of years ago, when I bought the Australian version and I can't get a decent schedule together.

Eric: So, we will be covering schedules in a later section of course. But today being a coaching call, I can at least tell you a couple of little tips there. So in terms of schedules. I think CADImage does provide some scheduling capabilities that are nicely done with Door and Window builder. In particular, a way to do ones with the images, the elevation views of the doors and windows neatly labeled and even dimensioned I think. Current or recent versions of ArchiCAD, standard ArchiCAD, can do quite similar things, although with a limitation if you're ganging things to look the way you want them on the wall in the elevation, but they're actually separate components, so they won't show up with the pictures all joined together. And you essentially have to explode that set of information and then take the stuff that isn't sitting together and move it together yourself. [1:35:30]

So that is one of those things that if you only need to produce that once in awhile, and it only takes 5, 10 or 15 minutes to clean it up, then you can live with it. But if you're wanting to have updates all the time that are always current, then that becomes unwieldy. In terms of your question or comment about after switching versions to the Australian version, rather than the international version, you now don't have some of the schedules that you did, what you can do - and I'll just switch back to ArchiCAD. One last demonstration in a sense. [1:36:10]

I have this file. It happens to be based on MasterTemplate here. And we'll go back to the first floor. So here's a sample project. Whether it was MasterTemplate or the international version that you had in ArchiCAD 12, or whatever that was, if I go to one of the schedules that exists in this file, if I go to the schedules, any one of them. Now, let's say here's a cabinet schedule. So if I go to the Scheme settings, you'll see here's a list of a bunch of schedules. So these exist in this case MasterTemplate, but they maybe are in your international version and you would like them. You say, this is pretty good. So if I highlight any one of these, there's an option to export it. [1:36:58]

And when I export it, it will create an XML file. This XML file basically describes the shape of the schedule, what it has in it. And let me just put this on my desktop here. And I'll say OK. I haven't done anything there. Let me just switch to my - actually let's just switch to this window. And she's not in - no, she is using MasterTemplate version. So let me just create a new file very quickly and use the standard template version. So basically when you are in the Scheme settings, you can import the scheme from the other file. And it may need some tweaking, but you can bring in several of them literally in a couple of minutes. So if I go to Schedules, Schedules here. Let's see here. If you look in the standard file, there's only three schedules. And I'm going to go and import one. And here's, let's see I put it on the desktop. And here's an electric schedule. Say open. [1:38:20]

And you can see now it shows up, and has a name. I can change it if I want. And it says it's going to be doing all objects that have an ID starting with EL. That's my criteria. And it has certain fields which we'll see in a minute. Having imported it, let's see, go to electric schedule here. You can see that it's imported this, and it's going to have the symbol, the part name, and the remarks. So if I just go to the floor plan and put in, let's just pick, just to show you that it's not really smart. So let me just put in this arm chair, and pick up - here's a table. So these two elements, I'm just going to change their ID to start with "EL - 01". And "EL-02". So basically, I put the ID to match that criteria. When I go back to that schedule, or the electric schedule, they do show up. [1:39:32]

So couple of points there. One is if you do have any files from your earlier version that have schedules that you like, to can go into the Scheme settings and you can highlight one, and export it. Highlight another one and export it. Highlight as many as you like. And then in another file, you can go into the Scheme settings. And you

can import, and go find those files. That's the main point. And then the other is, every schedule has a criteria. Saying, I'm going to go for anything that has an ID starting with EL, any object. And it really doesn't know, in this case, whether they're electrical, it just knows whether the ID indicates it's electrical. So by simply putting in an "EL" for the ID of this, it came in. Does that give you a couple of little things? [1:40:26]

Graham: Yes it does Eric. Thanks, I'll try that. I'll try to import the schedule.

Eric: So, I'm seeing just a comment typed in by Chris Sinkinson from the UK. We spoke briefly earlier. He can thoroughly recommend it, I've used it for many years. And I'm assuming that's Door and Window builder. That's the one that we talked about for some length. So in terms of your question then, I think that they are generally good, I think Door and Window builder has some really nice options as long as you're aware of the learning curve it will take. You should look at the manual, or look at some of their training materials, rather than just saying, "God, I'm not quite sure how to use this." But it will work well, and you have at least one of our course members who has used for years and is very happy with it. [1:41:18]

So that being said, without making it an advertisement, if any of you do want to buy CADImage components, we are - my company is a reseller for them. So in other words, you can get it through us at the same price and I'll get a little commission. But if you just want to buy it directly from CADImage that's fine, or through your local reseller, ArchiCAD reseller, that's fine. But generally, it's CADimageworld.com if you want to check out all of their components. So anything then before we finish Graham? [1:41:53]

Graham: No I think I've had enough of your time this time Eric.

Eric: Okay, well thanks so much. So we're going to finish up today's call at 3:44. So we went an hour and 40 plus minutes. And I want to thank you all for watching. Hopefully the recording will come out nicely, and it will be available in the members area in the next day or two. So, as far as other little things, I am going to be getting into some of the next week of the training materials, week eight, which will focus on the Navigator, the View Map, and the Project Map, and the differences between them and when you should focus on one versus the other. And I will also be starting to get out the Quickstart course. I apologize for it taking a while, but, I'm going to be giving that a priority now. So thank you all for watching, and I'll see you or be in touch with you next week on the 28th, Thursday, which will be the next coaching call. And I'll certainly send out a little reminder and other news in between now and then. Thanks for watching. Bye bye.