So welcome everyone. Here I am in my office in San Rafael, California. And welcome to Office Hours for the Best Practices Course. We'll be spending the next hour or so together, and I'll be answering questions that you bring up. I'll be calling people up to meet with me one at a time based on the questions that were sent in ahead of time. I picked them out in a random order, and we'll invite people up. [:34]

So today is Thursday, March 17, 2011, and we're just starting, I'm going to call it phase two of the Best Practices Course. Phase one started in December and January, when the first batch of people signed up. And then I created five weeks of material, and then shifted focus to promote the course with resellers and distributors worldwide. And last week, we ended registration for another batch of people. We now have I think about 280 people signed up for the Best Practices Course which is awesome, really great. I'm delighted to have people from I think 29 different countries around the world. Of course all of the English speaking or native English speaking countries that you would expect, such as the U.S., Canada, U.K., South Africa, New Zealand, as well as of course many others from Cypress, Thailand, India, Norway, and Sweden. Just 29 different countries, it's amazing. [1:47]

So this week, I had an orientation call. I hope that some of you were able to be a part of that on Tuesday, so two days ago. That was a welcome and a little tour of the Best Practices Course website. I actually have processed that and posted it, it is up on the website now. I will be sending out an email giving people a heads up and pointing out where it is, but it's in the - I guess if you're at the member homepage, you'll see the link on the left side for the welcome and orientation. [2:26]

So today's Office Hour call, let me just see here. When questions come in. Well, welcome to Marshall in Idaho. I'm glad you're a part of this. So feel free to type into the questions box in the GoToWebinar control panel. However, I will focus this particular coaching session with the people who sent in questions ahead of time. So we're going to be switching gears to do that momentarily. A couple of other little bits of news. Week number six, I've started to create the materials for that. So the first section is on Favorites, and the Favorites Palette, and I have posted up the video tutorial that was actually already publicly available on the Favorites Palette. It's 11 minutes. But last night, I created a 17 minute additional video on the Favorites Palette, mainly focusing on how do you migrate favorites from one version of ArchiCAD to another. For example, from version 12 to version 14 is what I did in the demonstration. [3:44]

We're all expecting that ArchiCAD 15 will be out sometime in a few months, so you'll be prepared, if you're using favorites right now, for upgrading them using that training that I just have created. I just uploaded it, but I haven't had a chance to set it up on the course website, but I will be doing that later today. And continuing on with the second part of week number six, which is going to be on the Interactive Legends that are in MasterTemplate. And you can create for yourself. A lot of people have asked questions about the – now let me just see, oh here. Actually, I've been recording the sound, but I didn't have the screen being recorded. So, anyway, I hope all of you have been able to see me, and that it's sort of interesting to see me in my office. Most of the time we'll be just looking at the screen together. [4:57]

In any event, week number six, I've got Interactive Legends that I'll be explaining how I set them up in MasterTemplate, how you can set them up for your own template. Or how you can adapt them or extend

them if you're using MasterTemplate. And then the final section of week number six, will be on room modules or groups of elements that you can reuse. These are the things that you might decide that you have a kitchen that you've created in one project that probably could be used as the basis for other kitchens. Of course each design may have a different shape or size, but when you bring it in those kitchen elements, you'll be able to just move them around, stretch them, or delete things that maybe aren't appropriate, and save a lot of time rather compared to just starting from scratch. And how can you organize at in a way that you'll have access to whatever it is, whether its residential kitchens and bathrooms and bedrooms, or its commercial offices and restrooms and lobbies and things like that. So that will be the third part of week number six. [6:08]

Now let's see, so Dale Paegelow, hello. You mentioned that my video presentation is in the center of my screen so it's blocking the ArchiCAD board. And thus I cannot see what you are talking about. Also there's a long time delay in your speech on the video. Okay, well, there are some limitations to this technology. I will be moving my face off the screen when we continue, so I just wanted to give you a little bit of visual on me here in my office here in San Rafael. It's a sunny day today, it has been raining an awful lot this winter, but yesterday and today is started to clear up. And I guess we're getting close to spring, being March 17. [6:55]

So I'm going to move my visual off in a moment, but let me just see - the first person on my list is Graham Richmond. Let me see if Graham is on the line. There, Graham is on the line, so I'm going to go and unmute Graham. So Graham, are you there?

Graham: I am Eric, yes, hi.

Eric: Welcome, so where you located Graham?

Graham: In Hobart, or a little island south of Hobart in Tasmania, Australia.

Eric: Okay, well it will be pretty early there.

Graham: Close to the South Pole. Its 6:00 AM.

Eric: 6:00 AM. Okay, well I'm glad you were able to join us, and let me just move my camera off screen here, move my view, and let me just get started. Let me just bring up onscreen your question. Let's see, alright. So I'm going to bring this over onto the screen here so that we can see which you wrote, and then you and I will chat for a minute. Say you had written earlier a question about detail markers. And you said that you wanted to put detail markers on a plan in 2D, and you wanted to have them linked to the details, but the details, are the details being created from section views? [8:34]

Graham: Yes.

Eric: Okay, so then the question really is how do you create a detail marker that is linked properly to a detail that you created in another view? Would that be one way of describing it?

Graham: Yes, that's correct, without having superfluous sections or details that remain unlinked. Did you see my e-mail last night explaining that I got it sorted out?

Eric: Yes, I did see that. Let me just open up the sample project that I often use, just because it's going to give a good - let's see, we'll do the sample project here. So I'll use that, just to give some context to the demonstration. So I saw that you - let me just bring that back up here. So you had worked out a strategy where you created a section on this, passing through the points by using a slab. And you created, in the section, the new detail viewpoints, and then back on the slab, you created a linked detail marker at each location so the marker was linked. So in fact, actually, what you're doing is just perfect, you mentioned that you're hiding the section on the slab plan. So you're basically re-using the section as a way of seeing where the markers would relate to? [10:23]

Graham: Yes, I just created the section initially through the points where I wanted a detail. But once I created the viewpoints, I just set the section to a hidden layer. So it was irrelevant.

Eric: Okay, so that section then is actually not even, although you're creating the detail from that section, you're not actually wanting to include the section in the construction documentation?

Graham: Correct, yes.

Eric: Okay, I see. OK so let's quickly go through that, and just point out another way the you can simplify this. So we've got a section in this project here that I'll just take as an example. So this section marker, when I select it, we can see that it's section A. So let me just go and open here in the section Clone Folder, section A. So here is a section of the project, and let me just take what might be a typical case, where we would be drawing a detail. So if I go to the Detail tool, tell it that I would like to draw a rectangular bounding box for the detail, and I'm going to be creating a new detail. [12:01]

And so here is where I would say pick a typical area, go click to say that I'd like to create a detail layer, perhaps before I do it or afterwards. I might change this to the name that would be appropriate. And I then right click on this and say, Open Detail Drawing. We'll see this particular detail created and of course we would want to set the scale appropriate for that detail. Now if I go back to the section, of course the detail is called out here. But let's go back to the floor plan and create a link. So so far, what I'm doing is exactly like what you are referring to. [12:50]

So if I go back to, let's say, the building design section and elevations, or actually no, let me go back to the floor plan here. And so that callout of the detail should be in this area, because it was on the left side of the screen there. Now, it was an eve detail, so in fact I should go up to perhaps the second floor, or let's see, I think - I'm not quite sure. Was it - let's go back to that section. So it was on - that's right. So it was where the first floor wall met the lower roof. So if I go down to here, so it would be in this area. perhaps I might call out the detail on the first floor up above, indicating that it's up above, or on the second one, whichever would be more appropriate, or both. [13:56]

Now if I go to the Detail tool, I can say, instead of creating a new detail, I can place a linked marker. And when I do that, it says, alright, what would you like to link this detail to? So as soon as I change it from source marker, or new detail, to linked marker, it gives me that option. And I can go and scroll down and we'll see in that

detail, here is the eve detail that I just created. And I will link it to the viewpoint. [14:23]

Other options would be to link it to the first placed drawing of the point, or the drawing specifically on that sheet. But let's just link it to the viewpoint itself. And then it will - whoops. Then when I place that, say something like this, it is now links. And if I right click on it, and say Open Detail Drawing, it will go directly to that. Now right now, the layer combination is not set properly. But it is linking directly to the correct detail. I'll go back here. Now, often you'll want to have a different marker style here, because it's really not appropriate to have a rectangular or a rounded rectangle showing the window there. It's a little bit misleading. So we might want to change the marker style here. Instead of the built in detail marker, we could say no marker, or we could say detail part marker. Here's another one. [15:27]

This would be an option where we're putting in this. We can rotate this, or perhaps actually better, let me just go backward and open up the Markers Settings. And in the Marker Settings for this one, we might say that marker geometry is that the marker polygon, instead of being a rounded rectangle, will be none. And now, it basically will not outline that area, it will just have a marker. Now this, instead of saying, "Eve Detail", perhaps we're going to go in and say that the second text row here, instead of showing the name, would show - we could say that it's going to be linked. This is going to be linked to where it's placed on a sheet. [16:30]

So basically, when I say that it's going to be linked to the drawing, then it's going to be – where is that detail down here. Right now what it's going to do is its going to be prepared to show the drawing on the sheet number. And so as soon as I place a drawing on a sheet, let's just go to detail sheet. So go to Architecture Details, and let's say that I go back. So I'm moving very, very quickly. So I understand some of you may find it confusing, but let me just drag this detail in on the sheet. And again, they'll be some corrections in terms of layer combinations that we'd want to use, but the basic idea is that if I go back to the plan now, is that now it automatically says that there's a detail on sheet A-12 and it's detail number 3-A, and so A-12. So is that pretty much weight you had done already Graham? [17:46]

Graham: Yes it is, that's about what I did Eric, except that at the end I'd hid the section I used.

Eric: Okay. Now, the reason why you created the section to start the detail process was to indicate, or you wanted to copy information from that section to start the detail?

Graham: I wanted the section to generate the details at particular points in the footing. It wasn't necessarily a section I wanted to represent in the working drawings.

Eric: Right, okay. So in terms of the - by the way, one person, Mariya Lilith, indicated that she was not seeing any activity on the screen, are you seeing me as I demonstrate things?

Graham: Oh, definitely yes. It's a bit of a delay, be we're a long way away so it's fine.

Eric: And Mariya just came back on and said she reconnected, so it's working. If you have something that you need to tell me, do type it into the questions box and that way, since I have everybody muted, that is a way that you can let me know if there's something that's not going right.

So creating the detail as we did in the section, and then possibly putting this on a layer that we would hide. So if I just want to demonstrate that, I'll just take this and I'll put it on a layer. For example, I have one that says "Y special temporary hide". So this would be one where I would want to hide this information, but I don't want to delete it. So I can do that. And this section then disappears, the marker then disappears from the plan, leaving the other normal sections there. [19:39]

Now, another possibility beyond the what we just did is if you want to have a callout. For example, this detail area that's linked to a detail marker, but you actually don't need that section. In fact, if you don't even need that section at all to start the detail. Perhaps it's going to be a standard detail for a foundation, waterproofing, or anything that's rather standard, that you don't actually need to generate from a view, you can create an Independent Detail. So if I go to the Project Map, and we go down to the detail area, instead of creating a detail by calling it out in a section or a plan, I can right click on the detail group and say, "New Independent Detail". And then in that new Independent Detail, alright, so I'll just leave it as a "D-11 Typical Footing", create it. And now it's a blank screen for me to draw, or possibly copy and paste, or import a DWG, any of the above, or any combination. [20:47]

So this detail, I'll just set it to perhaps a typical detail scale, 1 inch to a foot here; or 1:10 would be a similar equivalent in the metric system. And let me just draw a circle here and a couple of lines. So let's just imagine that that is a detail drawing, and that detail, I could place on a sheet. So I'll go back to the sheet here, and go grab the detail that I just created, and just drag that on. And so this detail, I would need to change the cropping rectangle, there would be some things that I would need to work also with the layers. But basically, I've now got a detail on a sheet that is 3-C, and I could call that out. Let's say I'm going to go to the floor plan, and again, I could say I'd like to create a new detail, placing at linked marker here. And I just select that, and let's see. With reference to, if we click on this little 3 dot symbol. I can say that I'd like it to refer to the new detail that I just created, which is the typical footing, the one that I just started from scratch. And say OK. [22:17]

And then if I place this, you can see that it is now calling out the D-11, and in the same way, I could change the settings to just be a callout, and not have this rectangle. And I can change the setting to just call out the number of that. So is that something that you might find useful Graham to create a detail without even having a section as a starting point?

Graham: Yes, definitely. At the moment, I'm still building up my library, so it seems that every building is different. But at some point, I'll have a large enough library that I can use that method. [23:03]

Eric: Okay, so I guess we'll finish up. Is there anything else Graham that would be good to...

Graham: No you answered that question Eric. Thanks, I appreciate it.

Eric: OK Graham, thanks for tuning in so early in the morning. I'm going to mute you and move on to the next person. So the next person on my list. Okay, so I do see a question from Marshall typed in as a follow-up. Being as how you have a detail with a directional icon already in that area, I would move the detail you just

made over and with the Arrow icon, show the directional view. Sure, you can definitely - I am moving quickly, and this is not a complete training on how do you work with details, but yes. You can have different types of markers, and you can certainly have directional ones that would point to the area that would be relevant. That is a good point there. [24:03]

Okay, so going on to the next person on my list. And that would be Diana Tramell. Let's see, Diana is available. Okay, I do not see Diana Tramell logged in. Oh, Diana Murcia. I see, so you have a different name. So I'm going to go in and unmute you. So hello Diana.

Diana: Hello.

Eric: So welcome. Where are you located right now?

Diana: I am in Spain.

Eric: You're in Spain?

Diana: Yes. Maybe my English is not very good, I'm sorry. But I understand everything that you're saying.

Eric: Okay, well I'm delighted that you could join us. So we had our first person from Australia, the second person from Spain. How wonderful, the global connection. So let me bring up your question here, so everyone can see it while you and I start to talk. So I'll bring this up on screen. So Diana, you ask a question about changing the scale to a very small one for a site plan such as 1:500, which for Americans, that would be roughly 1 inch equals 40 feet, I think. And in that tiny scale, where you're showing the site and one or more buildings, I would assume on the site you don't want to show door and windows, because they would be so tiny that they would really be very useful information. [25:49]

So you're choosing in the Set Model view to hide your doors and windows in the floor plan, and you're also hiding door handles and knobs. And you can still see wall holes. So when you refer to wall holes, do you mean that you're seeing the hole where the door and window is, or are you referring to special holes that you're putting in?

Diana: No, I mean the complete hole, and I can see what is behind the window or the door. I can see what is behind. So, the problem is that in this scale, it is not good to see transparent elements. I don't want to see transparent elements.

Eric: Okay, so let's take a look at this. So, I'll just leave this file open. I'll just zoom out a little bit to Fit in Window here. So right now, we're at a quarter inch to a foot. And what I'm going to do is create a new view. So I'll just start from scratch here, I'll change the scale right now to 1 inch equals 40 feet. So that would be 1:480. So a similar scale. You can see everything got a lot smaller. Let me just click on 100%. So this is now, all of these markers obviously are not going to be very appropriate for this scale. So let me bring up one of my favorite palettes, called the Quick Layers palette. And with the Quick Layers palette, I can, on the fly, let me just zoom in, select things and tell them to hide. [27:33]

Let's see there. So here's a marker, I'll say turn off the layer of that selection. And here's another type of marker, let's turn off that layer. And here is, I guess the grid bubbles, we'll turn that off. And well, let's just say that we don't need these dimensions. And we'll pick whatever that is, and pretty quickly, we end up with something where at least - let's see here. So why is that? Oh, this must be on the ArchiCAD layer. Yes it is, so let me just put it on-I'll just hide that there. And this one as well. This was put accidentally on the ArchiCAD layer. Now, at this point, it appears that I've lost the walls. So let me just go in and open up the Layer Dialog and turn them back on. There must be something, let's see - A wall exterior, let's just turn that on. And so, okay. Right now, the walls are showing, but we're also seeing window and door markers. So now we can start addressing the Model View options. Now of course, we probably want to turn off the furniture - we've got a lot of noise all of the sudden. Is that you Diana? [29:16]

Diana: I'm sorry.

Eric: Okay, so I can mute you in between things if necessary, but let me just hide the furniture and fixtures. There, get this just a little bit closer to what we want. So generally, a layer combination is going to be what you want to use, but I'm just doing it on the fly here to set this up. So, if I go to the Document menu, now we can go to Set Model View. And in the Model View options, we have options for turning things on and off. Now the first thing I'm going to do is turn off the markers for the doors and markers for the windows, and look it that. [30:03]

And we'll see, now at least it's getting a little bit closer to what we might want to see on the plan. Now let me zoom in a little bit, even though this much larger than it would actually print, we're now at six times real scale here. Let's go back to the Model View and look at the options that you were doing. [30:27]

The door options, is says "Show on Plan". There is an option to Show Opening Only. And so we'll try that. And we're going to see something a little different. And now we can see the door and window openings, but not their actual symbol. And we can instead, perhaps for your purposes, we'd want to say "Hide on Floor Plan". And that would then give us continuous walls in general here. Now there is a gap here, because I actually have some walls on a demo layer, but we can ignore that in terms of this particular question. [31:06]

Now let me just hide this, this is another layer that we should probably hide. And maybe the stairs as well. So now we're getting just a footprint of the building. So if I go now to the Model View, there is an option in terms of the fills that we might want to look at. So instead of construction document, we might want to look at the fills. There is an option to override the cut fills. Now Diana, it's echoing from your end, so I'm going to mute you temporarily, and then I'll bring you back up. So I'm going to mute you for a moment. [31:50]

So now, I'm going to go ahead and override the cut fills, so instead of seeing the walls as they normally are, I might say just give me a solid foreground, and don't even show the separators. Just to make a very simple version here. I'll say OK. And now you can see the walls are solid, poche, just a simple shaded view. And if we go back to a normal scale for the site plan, they now are looking quite clean. Just remember that this little gap here has to do with my wall that's on a demo layer that is currently being hidden. But this particular line that's going across there, if I zoom in on it, you can see that's actually a slab. And we might want to hide that slab as well. [32:41]

So now, I'm just showing the walls with no holes for the doors and windows. So let me just unmute you Diana and see if this actually is getting in the way that you were hoping that it might?

Diana: Yes, yes it is similar to what I want to achieve. But my question was about the section view.

Eric: Oh, in section. Okay. So you actually had two questions I believe then. Let's see - if I go back here, so is there any way to hide the wall holes, if I activate the doors and windows, the plan has a lot of unnecessary information. So obviously, we're - what do you call it, we turned off the doors and windows there. So that - this one then, this part of the question is answered? [33:39]

Diana: Yes.

Eric: So now, in terms of sections and elevations, you want to be able to do a section or an elevation that also is at a small scale? Or I'm not quite sure...

Diana: This is in a scale 1:300.

Eric: 1:200?

Diana: 200, 300.

Eric: So this is a section that would be certainly smaller than we would often see, where you might have 1:50 or 1:100, but you've got a sections that are going to be smaller in scale?

Diana: No bigger. I mean a section with a little more detail. [34:32]

Eric: So it would be between the 1:500 and what might commonly be a floor plan or a section of 1:50 or 1:100, is that correct? [34:43]

Diana: Yes.

Eric: Okay, so let me just codify, to finish up this part here. If I go back to the Model View options, this particular one I've been playing around with is called "Custom". Let me store it as, "Site plan for Diana". So this now becomes one of the options that is available, and I can say OK. And you can see that in this little popup for the Quick Options, "Site plan for Diana" got added. So basically, in a Model View options, you can create any combination you like, and then give it a name, and it can be saved and brought up anytime you want. In a view, if we were to create a view, for example, save current view, and let's call it, "Diana's site plan". We'll see that "Diana's site plan" in the settings is actually using that new model view. [35:47]

Now let's take a look at a section then. So the sections, if I go to - let's go back to that A section here. So this is generating a section from scratch again, with all of the layers that were originally part of it. So again, we can go ahead and change things like the scale. Let me change it from quarter inch you were saying. Let's see, a 16th would be 1:92. You were talking 1:200, so this would be similar. Again, we can go ahead and perhaps hide things that are not relevant. Maybe take out the story levels in this section here. And generally just hide things that we don't want. This needs to be a layer that can be hidden, because right now it's on the ArchiCAD layer.

[36:46]

So at this point, when I zoom in on it, of course I'm still seeing more information then we would want to see at that earlier scale. So other options in the elevation or the section can be brought up by right clicking anywhere in empty space and saying Section Settings or Elevation Settings. And in that, it will bring up the sections for the marker. So it's actually the same as selecting the marker on the plan and changing the settings. Now in the Model Display, we have options, for example, do you want to have the hatching? So all of this cladding for the wall, which will probably be some - all of the sudden the name escapes me - wood shingles. We can turn that off. That would turn off the wood shingles as well as the roof tile . [37:41]

And I think that's all we might need here initially. You can see that now that's a little bit simpler. Now in terms of the windows and doors, we also, of course, could have an option for the windows and doors to be a little bit different. Now if I select an individual window here, and open it up, we have some options here when we look at the elevation. Under let's see here, general settings, so 3D detail level, it says "Detailed". I can switch this to "Simple" and say OK. And it did just change a little bit. If I zoom in on this, it's a little bit simpler. If I undo the change I just made, it's more complex. There's an extra frame that's showing. So if I redo it, you can see it's a little bit simpler. But it still has a grid in there. And maybe at a very small scale, you don't want to see that. [38:50]

Let's just see what happens if I switch this from simple to off. Okay, now at this point, it's actually empty, and we're seeing through the hole to, I presume that's an interior door that we're seeing beyond that. So the empty, or turning it off entirely, is not going to give us the simplest result. So this definitely is not as flexible as one might like, in terms of just creating a simple cutout. Now it may be possible to make that opaque. I'd have to play around with that to see, because obviously if we could just have a simple opaque color there, or even just rectangle indicating a window, that might be a way of showing it simply at a smaller scale. [39:46]

So I'm going to have to research that a little bit to see what might be most appropriate. The change that we have in terms of simple vs. complex 3D, can be controlled also in later versions of ArchiCAD, such as versions 13 and 14, in the model view options. So you'll see that in addition to the construction documents, where we were changing whether the door and window have markers, and whether they show on the plan. And we also had the option for the fill display, where it was simplifying the wall fill to be just a poche, there's an option for GDL objects. [40:30]

So this is the third set of options. And here, we can say that we'd like to have openings shown or not shown. For example, do we want to have the opening line that indicates which way the window swings open, if it is operable. We can turn this off and on. We can turn off and on things like door handles to simplify them. Here the opening line says whether to show it or not. I don't see there - there is no option here to simplify the door or window to just make it just a basic rectangle. But this would be a natural place where Graphisoft could add a control for that. But it isn't available right now. [41:23]

So Diana, I know I partially answered your question, and I showed you some interesting...

Diana: It's fine, because I was wondering myself how to do it, and it seems at the moment there is no easy

solution for this. So it's fine.

Eric: So there is no easy solution, and there may be some options. One thing is if you want to create something for diagrammatic purposes, you could select the window, for example, and change it. So this might be something as a work around, where you can select this - well there's two different things that I could to just as a work around. One is you could actually switch the window here. Let me go to the frame and sash, rather the Elevation, Sash Options. Here, we can switch it to no mullions here. Now that actually has changed the definition of the window. And so in fact, it's changed the design. But you could potentially select all windows and turn the grid off, and then take a snapshot. Essentially, take your elevation view and copy that information, and place it at that point onto a layout sheet, and then not update it later. And then you could undo the change to the windows. In other words, you could make a temporary change, take a picture of it, and then undo the change. So that would be a certainly clumsy, but possibly effective work around. [43:14]

Diana: Yes, thank you, thank you very much.

Eric: Alright Diana, thank you for your question. I'm going to mute you, and then move on to the next question. So I do see a question, or a follow-up question from Bill Putnam saying, can the window mullions get a single line in the simple setting? It does not appear that you can do that. ArchiCAD, at least not simply and automatically. The – if I go back here, and say undo, only way that you could possibly do that is to go in, and where it has the frame and sash, here, let's see - Elevation and Opening. Maybe the sash options. There is the mullion width. And mullion, or muntin width, you could change that to such a small amount. For example, let me just make that an eighth of an inch it should be, oh what, three millimeters here, and by doing that, it appears to be single lines. [44:23]

So if I zoom in on this, you can see that they're so close together, that they look like single lines. So that would be a way to you could make it down to 1 mm, and you could never see the thickness. So that would be a work around to make it look like single lines. Okay. So moving on to the next person in here. OK now, Bill, Okay so, Bill you're asking about upgrading windows automatically. You said that the window I'm picking is from library 12. So I do have a whole section on library migration, and I think it's week number four. And how you can take a project and switch the libraries and take the parts in them, and relatively quickly go and get that updated. So take a look at lesson from week number four. [45:30]

Now let's see, the next person on our list is Jutta Court. And let me see if you're there. Yes you are. Okay, so Jutta. So Jutta, is that how you pronounce it? Hello? OK, Jutta apparently is on the call, but is not right now coming on to the line. So, Jutta, if you do come back on, please type into the questions box to let me know that you're available. So let me move on. We have Eric Hathaway. So let's see if Eric's available. There you go there Eric. So Eric are you there?

Eric H: Yes.

Eric: Okay welcome, so where are you Eric?

Eric H: Kentucky.

Eric: Okay. So now we've got an American. And let me just go back to normal view here, and then I'll bring up your question. So Eric Hathaway, let's see if I can find that question quickly. There we go. Okay, so Eric brings up a question about - sorry, I have a bunch of things on my screen here. Alright. So Eric, you bring up a question - by the way, it says session timeout warning, Renata thank you, I think that was actually a little message from my browser about my connection to my contact management system. But thank you for pointing that out. [47:28]

So Eric, in Bowling Green, Kentucky. Okay, you're asking about rendering at a high resolution for putting a rendering on a board. 39x24. So in terms of our international members, that would be about one meter by two thirds of a meter. So 100 cm x 70 cm. He's asking about doing it at a certain resolution, 215 dots per inch. And if we talk about dots per inch, and we convert that to metric, I'm not sure what the standard is for metric, but if I think of dots per centimeter, there are 25 cm in an inch? Is that right? No, there's 2.54 cm in an inch, that's right. So that would be about 80 dots per centimeter. [48:29]

So the resolution here has to do with how much detail there is when something is printed out. Now, you're talking about rendering an image at 8000 x 4366, so you have rendered and put together - you originally tried to render it at 10,000 pixels, to get the print resolution up to 300 DPI and it would never do anything. So your owner wants to put it on an even bigger sheet, 4x8, that would be metrically, 1.3 meters times 2 1/2 meters roughly. So you're going to get the DPI, or size, from the printer, and you want to know about doing things at higher resolution. Can you divide the image into higher res pieces and then put the image back together in Photoshop. So anything that you didn't write here that maybe I should know about before I try to answer that? [49:22]

#### Eric H: No I don't think so.

Eric: Okay. So I think it's very clear what you're asking, which is essentially, how do I deal with very large printed output, getting resolution that's going to be suitable for that? So the first thing to realize is that although a printer may be rated at 600 dots per inch or 1200 dots per inch, or in some cases higher than that, those dots per inch that are measured for printing purposes. At least for when you look at an inkjet type printer, are actually the pixels that are the separate ink colors. In other words, you have cyan, magenta, yellow, and black, all combined together to make the color that you see. So there are four dots that create, utimately, a dot on the computer screen. In other words, each dot we have on the computer screen, we think of as a particular color. And that actually is made up of four dots, cyan, magenta, yellow, and black. [50:30]

So if we're looking at a computer screen at 300 dots per inch or something like that, or 100 dots per inch, the printed output would actually be four times that. Or between three and four, because of the way that they're arranged in a cluster. So, certainly, if you have a printer that says it can print at 600 dots per inch, that's roughly 200 dots per inch in rendering on the screen. So that's one thing that often people get confused about. They're saying, how can I make a 1200 dots per inch rendering? Well you don't need to. You only need to make something in the 100 to 200 dots per inch typically. [51:09]

Now in terms of this, I'm not going to be able to demonstrate the differences on screen here, but I'll just sort of

talk a little bit about that. 800 dots per inch, it turns out, with the smoothing that happens in a computer rendering, is actually a reasonable output for many purposes. In other words, if you print something, if you create something at 100 dots per inch. Let's say it's going to be a letter size sheet, which in the U.S. would be 8.5x11", so let's call it 8x10", by 800 dots by 1000 dots at 100 per inch, that will actually look fairly reasonable. It would be not quite as crisp as it could be, but 800x1000 pixels will print pretty nicely on a letter size sheet. [52:00]

And that would be similar to the A size sheet, I forget whether it's A1 or A5, or whatever it is in the mertric standard. Now if you take it up to 200 dots per inch, you're going to have definitely a very crisp image. So you're looking at something I think definitely quite crisp for rendering output at 200 dots per inch. So you're in the right ballpark there. However, when you have something that's 4x8', so in other words, a very large board that would be on the side of the building perhaps on a site, you're actually going to never stand up right next to it. Think about it, you're going to look at maybe from across the street, maybe from 5 feet away. You're going to be looking at the board as a whole, you're not going to put your nose up within a few inches or a few centimeters of the image. So in fact, for 4x8', you probably would want to have it down at the 100 dots per inch, or even less. Because you just won't see it, you will be going up to put your nose right up to it. [53:04]

So your target resolution may not need to be nearly as high, and you can test this out by doing a small sample and putting it out 3 feet away from you, and seeing how much detail you notice or don't notice. So that being said, there is a way that you can create renderings bigger than big in ArchiCAD, and combine them, or work with them in Photoshop. And I will tell you a couple of options here. So if I go back to ArchiCAD, and let's just take a view of this little project. So I'm generating a view of the project here. And let's say that I wanted to render that. So I would go to the Document menu, Creative Imaging, Photo Rendering Settings. And look - let's say that I'm set up to use Lightworks, which is the nicer quality rendering tool. [54:16]

And here right now it says 800x553 at 150 DPI. Now the 150 dots per inch is arbitrary. This just creates something as a reference that when it would print out, if you told it to just go ahead and print this for me, this would be 800 divided by 150 would be 5 inches, 5 and a third inches across. So in terms of metric, what would that be, it would be 15 cm roughly across. So that is what it nominally would do. If I change this to 100 DPI, it's still going to render it the same amount of work, the same amount of detail, it will just make it a little bit bigger on the paper. So it'll go across 8 inches, or that would be 20 cm, etcetera. So changing this actually just changes the nominal target size for printing, but this is where you're doing the work. [55:08]

And we can take this up, instead of 800, I could take this up to 2000 here, and you notice since I have key proportions of the window, it will boost up the vertical height as well. Now it turns out that there is a maximum. I know we can go up to 4000 here, but if we were to try 8000, it is allowing me to type that in. Let's just even try the 10,000 here. It is allowing me to do that. But it may run out of memory. It used to be that it would stop but I think 4000 or 4096 pixels, but I guess in recent years it changed that. If you are trying to do it at this size, and it's not proceeding, you may have a memory issue. [55:55]

And one of the things is that it does allocate memory for the entire image before it gets started, and that may swallow up a huge amount of RAM. You may think about JPEG images being a few hundred kilobytes or a few

megabytes, and therefore hey, I can have a huge image stored as a JPEG and it only is a few megabytes, but actually JPEG is highly compressed, and so the file actually is many times bigger usually inside photo shop after you open up the JPEG. And that's what we have to allocate. [56:33]

So if you're allocating something that's beyond what it can handle, you may want to look at the option - let's see. Brightness, this is here. Okay - Lightworks Effects, okay. So we actually do not, in Lightworks, seem to have the option for partial – but let's just actually, leave this here, and then if we do the rendering, let's say, Creative Imaging, Photo Rendering Projection, alright. It's not going to take quite a while to setup, that 10,000 pixels across. It's now effectively frozen onscreen - no, actually it's starting to do something. Let's see, but we may not – it may not succeed, and certainly we don't have time in the session to generate something that big. But if you look down at the very bottom left of the screen, you'll see that it did actually say 10,000x6900. So it is going to attempt to do that there. [57:50]

Let me see, if I hit the ESC key if that will cancel it, know that's not doing it, let me try a Command+. No, that didn't do it - no, actually let's see, let me go back to the floor plan. In fact, actually, who knows, maybe it actually - I'm not sure what it did. It certainly didn't create any rendering. What I was going to show you, in terms of Creative Imaging, if you go to the internal rendering imaging, which definitely does not give as nice an image, there was always a setting that said hey, I would like to do a partial rendering. I would like to just do a certain area. In other words, you could pick a part of the image and render it. And another part, and another part, and render it in pieces. [58:46]

But apparently with Lightworks, that option is not available. So, I guess I might need to do a little bit more research on this, to see if there is something about it that would help you. Let's see, okay. So let me just bring back up your question here. And so, your answer of - is there a way to divide a larger image into higher pieces, and put it together in Photoshop, it does not appear that that's possible with Lightworks. [59:31]

Eric H: Okay.

Eric: Now sometimes, you may have an issue with rendering an entire model. Let's say it's a bit of a complex project, runs out of memory, or just takes forever. And there is the option to possibly render a view and take part of it with a marquee, where you're saying I'd like to just look at just part of the building. Let me just switch over. For example, let me just draw a marquee, well actually, let's just draw it like this. Take the marquee to be a heavy one, and then go back to that 3D view. Actually, let's go back and say, "Just show what's in the marquee in 3D". And so, you may actually - of course I did this as a cutaway, which is an interesting option, but you may, if you think about rendering just the right side of this image here, and then rendering another slice, and rendering another slice, or possibly taking things in the background and then rendering things in the foreground. [1:00:43]

Sometimes this is useful for memory management, it wouldn't have to do with the resolution of the image, but you could potentially overlay one thing on top of another. So is that - anyway, I wish I had a complete answer, but I think Lee - the main point I would make is that you should do some testing to see what resolution really you need when you're doing a 4x8' board, you may find that you can actually do quite well with 3000x6000, or

something like that. Because, when you look at it from a few feet away, it looks just perfect.

Eric H: Okay.

Eric: Alright, well thanks Eric for your question, I'm going to mute you. [1:01:29]

Eric: Now, Lee Luxford had a comment here about Diana's question, which had to do with, if you take a new section while a model is in the view I created, the doors and windows are simply cutouts. Might this work? Well very good suggestion, in fact, somehow it slipped my mind. Let's just take that particular view - did I actually create that view? Here's Diana's site plan. Alright, so I go to Diana's site plan. So we're now looking at the building, let me get rid of the marquee, we're now looking at the building with the doors and windows turned off on the floor plan obviously. Now if I take this section, if I go directly to the section, let's say, actually - let me just take an elevation here, let me open that elevation. So very interesting thing here, let me turn off our Trace and Reference, and let me just get the layer combination appropriate for elevations. So this would be here. [1:02:44]]

Okay, so very good point Lee. And that is that when the model view option is set to hide the door and window on the floor plan, it actually does create just a cutout for the doors and windows in the 3D. Now we are seeing through them. In other words, we are actually seeing the staircase past the doorway, and we're seeing the frame of the windows, so it is possible that this may may not work very immediately, but we certainly could work with this as a starting point. Perhaps even as a real clumsy work around, just putting in a little extra piece of something behind the doors and windows to block out the background that you could put on a special layer. That would be potentially something that could give you a clean result. So Lee, it's certainly worth studying a little bit more. It appears that the model view options that affect the floor plan for doors and windows also affect the elevation in this interesting way. So thank you for your suggestion. [1:04:08]

So I see Jutta, your back now. So I had skipped you, so we'll go on and bring up your question. So in fact, Jutta it looks like I left you unmuted. Are you there? So I'm going to mute you and unmute you, Jutta are you there? OK, I'm not hearing anything. Do you have a microphone? In order to hear, we would need to have you on the microphone, or have you call in using one of the phone numbers that was supplied. So at this point, I don't hear you, so I'm going to have to move on. [1:05:07]

So let us see then, I have - it's now a few minutes after one, so we have one more person who I had said would probably get a chance, and that is lain Dykes. And let me just see lain's question here. I believe lain actually said that he does not have a microphone. So let me just see what that is. Okay, so lain says, I can only listen in, I don't have a microphone. Let me just see, by the way, if that's changed since you wrote that email. I'm going to unmute the connection there. So lain, are you there? Okay, so I guess you're probably not there. Now Jutta, Jutta wrote that she seems to have difficulty with a microphone, and will work on this in the future. So, okay, we'll hope to catch you live on another call. [1:06:19]

Since both of you, the last two questions, we don't have audio, let me just see which one we could finish up with. So lain, I think you have a question about the Floor Plan Cut Plane settings, and

showing walls on particular stories. And this is a limitation, definitely a limitation, on the visibility of walls. In other words, in certain objects, we have the ability customize exactly where we want to see them. So for example, if I go back to - If I go back to the first floor plan here, and in its normal view, and I select it, let's just say that I select the slab. [1:07:16]

So this is a slab for the step, and I can go into the settings for it. And it says, do I want to show it on the home story only, or up one story or down one story, etcetera. And then there's even Custom, which allows me, in the case of slabs and roofs, to choose specific ones that I want, how they're going to be done. I guess in this case, it's a range rather then discreet stories. I know in some cases, you can choose specific stories. I believe that maybe in the roof one. Let's go up to the roof plan here and select the roof, and open up the settings here. And if we go to Custom for this - now I guess it's a range. So you could say it's on its own story, and how many stories up or down if you want to see it. [1:08:11]

So if we go back to the floor plan, and we choose - you were talking about a wall that might be on a low ground floor terrace wall. And you might want to see many stories above. So if I draw a wall, let's just say that I put this out in space here, these walls, and I select them. The question is, will they be visible, what controls do I have? And you can see that it says Home Story Only or All Relevant Stories. So Relevant Stories would mean if the wall goes up, let's say above the top of the first floor or the ground floor, and up to the story above, if its height starts to go into that range, it would then be eligible to be seen on that story above. But it will not automatically be seen on a remote story, if it doesn't actually stick up in there. So in other words, you won't see it from above, because the story down below is - you wouldn't see it like an aerial type of view. [1:09:31]

Now, you did point out an option that not many people know about or explore, and that has to do with the Floor Plan Cut Plane settings, where for any particular view, you can choose to have a display limit down possibly below this current story. So you could say, I'm showing the roof plan, but I would like to see also the information on certain stories below, or going down to a certain height below. So this would be the way that you would work around it, is you would put these walls on a layer separate from other ones. This layer would then be turned on, let's say maybe you're in a roof plan, and this layer would be turned on in conjunction with that. And then the roof plan, even though it might be up several stories above, could display down to the ground floor. But by only having the layers for the specific walls that you would like to see, then they would be able to be seen. [1:10:43]

So I think it will take too long to set this up for an example, but I think your work around is good, you just need to control it by layers. So only, when you're up on that roof story for example, or that upper story, you would need to make sure that the layers for other things down below that you don't want to see are turned off. So of course, if you have things that you want to show walls on the upper story, and certain specific walls on the lower story, but not in general, than you may have a problem managing that. Probably the best work around in that situation would be to copy the information from those walls down below, and paste a copy of those walls up on the top floor, where you want to see it, and explode them. Basically make a graphic copy. Because when you explode walls or anything, you get the line work that looks perfectly the same, but you don't have any 3D elements. You wouldn't have walls floating up in space for example. [1:11:54]

So that way you can create an accurate copy of what you want, perhaps even dash it, or do something else if

you want to change it's look in that remote location. Of course, it's not going to be kept up to date, it's not going to actually move if those walls move, so it means a little bit of a disconnect in your virtual building, but it could help you resolve that. So I hope that is at least useful lain, if you I know you can't talk, but if you can type in to the question thing, let me know whether that was at least useful to you. [1:12:35]

And we'll finish up then Jutta, since you can't do the microphone, let me just see if I can bring up the question, and perhaps address that. So here is Jutta, who asked a question about pen colors in black and white printing. And you're saying that you do different pen colors in black line weights to have the drawings readable. Okay, so you're definitely working on getting the drawings to have higher quality. Now, when you print in black and white in PDF, there's no grayscale, and the pen weights seem to be very similar. And the printed product does not correspond with a screen image. Okay. So let's just look at a couple of things that sometimes get people – Oh, by the way, let's see lain wrote thanks. So I'm glad you were there, and I hope that at least was a little bit useful for you. It's a tricky question lain. Not everything has an elegant answer. So hopefully I gave you a couple of little extra ideas there. [1:13:48]

Now Jutta, let's go back to the plan here. Now if I zoom in on this here, everything is still looking very thin, because my view on screen is not showing true line weight. So if I turn on true line weight, we're going to see a much different result. Now we are at four times real scale. If I go to 100% here by clicking this, we're going to see something a little bit closer to the printed output. Of course, the screen can never represent the printed output in the same way, because it just doesn't have the level of detail that you would find on paper. But when we output something to PDF, so let me just go and let's say that I want to print this. So I'm on a Mac, let me just go ahead and say I'd like to print this little piece here. So I'll say just the current zoom right now. And I'll say, give me a PDF, so Save As PDF. So when I do it this way, I don't seem to have any options here for the quality of the image. Let me just put this on my desktop, and we'll take a look. [1:15:03]

So when I said, Save As PDF using the Mac method, it doesn't give me any quality options. Now on the other hand, if I do save as, and we'd say I'd like to save as a PDF file, by the way, some of the options for PDF were revised to between ArchiCAD 10 and 11, going to 12. So I'm not sure what version you're on Jutta, but anyway, I'm in 14 obviously. So if I go to PDF file, you'll notice when I said Save As, there's Page Options and Document Options. If I do Page Options, here's the size of the paper. So obviously picking the paper size that I want. Here is Document options. And here is where we have something - in fact maybe I had skipped over this earlier. It "Save PDF with color/black and white/grayscale. So obviously you would choose the one that you prefer here. [1:16:04]

And then hairline is an option that would say, I want everything to be very thin. Or if hairline is not turned on, then it should give us true line weight. So let me say current zoom here. And I'll just go ahead and say OK. It won't be hairline, it will be in color. And let's just say OK again, I'll put this on the desktop here. "Test 2". And we'll say Save that. So let's just take a look then on my desktop. So I've got my desktop here, and so the first one, bringing up. And we can see the different line weights, and in color, and let me just go and bring up the second one. I think actually both of these have the same results in here. So if I zoom in, let's see - scroll over here. Okay. Alright, so in any event, I'm getting the result that has the weights and colors, and should be able

to be controlled in ArchiCAD with those controls that I've pointed out. [1:17:56

Perhaps the issue that you might have been having had to do with that hairline option. In fact, when you do a print or plot, there is an option for hairline, which is useful for draft output. It will use less ink and maybe it's easier to markup on top of something if it's done in hairline. But obviously, if you want two have a better looking output, you won't click hairline. And then here, this is right now set up for a laser printer, and I can choose whether it's black and white or not, and if it's in a laser printer, you may have some options for grayscale separate from this. But in any event, I would look at some of these controls here, and this may affect the PDF. For example, if I do put it in hairline, and then switch to PDF and say, Save As PDF, that may affect it. [1:18:54]

Certainly I had that option, very clearly, when I went, instead of printing, I went to just Save As, and had the option for the document options in PDF. Now I was doing this from the plan view, we could do it from any drawing window, or we could do it from a layout sheet. So if I'm on a floor plan layout sheet here, of course I would have similar options. And we can also do this in Publisher, where we're outputting multiple drawings in PDF format. I think that's a little beyond what I want to focus on in today's call. But hopefully, there's some useful information there for you Jutta, and for others. If you can respond, just let me know that you saw that, I'd appreciate it. [1:19:43]

And it is now about 20 minutes after one here in California. So we'll finish up. We went a little longer than I originally planned. So I see Jutta wrote, "Thank you for the advice". Okay, great. So let me just put my own smiling face back on. And I know that the image may be a little delayed or out of sync, but I want to thank you for tuning in. I will be posting the recording of this in the members area. I've also got a bunch of other stuff that has just been posted or is about to be posted this week. So we'll be continuing on with the course. I really am so happy to have all of you as a part of the course, and whether you're on this call live or watching the recording, I look forward to getting your feedback. Please put comments in the area of this page where this recording is posted, and send emails. I try to respond everything, and sometimes it takes me a little while, because I get snowed under, but I really appreciate the opportunity to work with you and help you learn ArchiCAD. So thanks for tuning in, take care. [1:21:13]

Oh, last thing. Chris Sinkinson, who is from the UK, was asking me about getting some things working on iPad, since I've had some things not display properly. And apparently, the last one that I put up there works just fine. So I'm looking forward actually to getting an iPad at some point in the near future. They are sold out at the moment, but I think they're fun and probably a fairly practical way to watch things like training materials like this. So again, thanks for watching, I will be back in touch by email, and we'll have our next coaching call. I'll announce in probably about two weeks. I'll schedule another office hours call towards the end of march. But please give me feedback, because I would like to know if you have any suggestions on this format. And hopefully, this was useful to all of you. So thank you.