ORD Curb Ramp Civil Cells Q&A

Q: Will we be able to get the recording of this afterwards?

A: The recording should be available and posted soon, along with the Q&A document, on the CADD upcoming/posted webinars page.

Q: 3D cells typically use up memory and slow down the processing of a 3D model. On an urban project there could be dozens of curb ramps, which would require more modeling time and could break or corrupt the corridor model – unless the corridor is divided into shorter segments by using more template drops than what we're currently using. Do you envision FDOT requiring that 3D curb ramps be included in 3D models on future urban projects, or will they continue to be optional?

A: Level of Detail on modeling is still to be negotiated on a project-by-project basis. FDOT will be moving to a standard modeling effort for most projects with extra detail modeling on an as needed basis. As far as model processing is concerned, it is suggested to break up the model into various files. Place an intersection or group of intersections into a separate file to reduce the risk of corrupting a whole file.

Q: I don't think I have seen 3D curb ramp civil 3D in FDOT 10.11 ORD yet. Why don't FDOT provide them? Will FDOT provide them in the future if haven't already in FDOT 10.12? Thanks.

A: FDOT did provide examples in the earlier versions of SS4/SS10. However, when ORD was released, they were not completely certified for delivery. At some point in the future, we intend to deliver 3D CR CC that are tested and can be fully supported. Stay tuned. :)

Q: 3D cells typically use up memory and slow down the processing of a 3D model. On an urban project there could be dozens of curb ramps, which would require more modeling time and could break or corrupt the corridor model – unless the corridor is divided into shorter segments by using more template drops than what we're currently using. Do you envision FDOT requiring that 3D curb ramps be included in 3D models on future urban projects, or will they continue to be optional?

A: In the case where Curb Ramps are modeled on Project, our recommendation is to create a separate file for them. This helps to alleviate the performance corridor processing concerns mentioned. As far as model processing is concerned, it is suggested to break up the model into various files. Place an intersection or group of intersections into a separate file to reduce the risk of corrupting a whole file.

Q: Where would I be able to download the recording?

A: The recording will be posted on the CADD webinars page, where you originally registered for the webinar.
https://www.fdot.gov/cadd/main/webinars/fdotcaddwebinars#loadToWebinarScheduleHeading

Q: Have you consider using only one template and controlling the variables with external references and/or parametric constraints?

A: Please refer to the video for a more detailed response, but yes, some curb ramps only use one template, while others require more than one. It can depend on several factors including the slope of the ramp and how complex the ramp is.

Q: How to add the 3D to the 2D civil cell to make it a 3D civil cell?

A: Create your 2D civil cell first. Then create a new set of Reference Lines and place your 2D Civil Cell. Drop the Civil Cell you just placed and begin adding the 3D components. Test often!

Q: Are these templates available in the CIVIL FDOT ORD.itl?

A: Many of the templates I used were copies of templates available in the standard template library that were modified for specific curb ramp purposes. The modified templates are not available currently, though at some point in the future, we intend to deliver 3D CR CC that are tested and can be fully supported. Stay tuned. :)

Q: Have you attempted to use civil cells for guardrail approach and trailing ends, connections to barrier?

A: No, there isn't a way that I know of to exactly model the complex panels and post spacings of guardrail approach and trailing ends. Typically, I just make sure my guardrail component extends to the limits of the end treatments.

Q: Follow up the previous question. How to add the template to the 2D civil cell to make it 3D civil cell?

A: Create your 2D civil cell first. Then create a new set of Reference Lines and place your 2D Civil Cell. Drop the Civil Cell you just placed and begin adding the 3D components. Make sure you have the EOP line that is pulling its profile from the EOP reference line. Then create a corridor based upon the EOP line.

Q: The civil cell library that you have created will be shared?

A: At some point in the future, we intend to deliver 3D CR CC that are tested and can be fully supported. Stay tuned. :)

Q: How to create your own civil cell library? The dgnlib?

A: Create any new dgn using the FDOT 2D Seed file. Move it to the location specified in the video and change the extension to .dgnlib

Q: Is the intersection itself a terrain model or part if the curb template?

A: The intersection pavement is a terrain model with a surface template.

Q: What about the AQCESSRAMP new tool, are we going to move forward with it?

A: I have not had a chance to use it. From preliminary discussions, it could be helpful as an evaluation tool.

Q: Are all the elements from the civil cells being placed into the file that the cell is placed? If so, have you had issues with element names changing? I have had point controls disappear because of that.

A: I think this may be the cause of the issues I was having at the end of the demonstration. When I placed my Civil Cell, none of my Corridor References were working, which was why the Civil Cell looked wrong. I later discovered that all I needed to do what Process the Corridor, and it recognized the Corridor References and looked as intended. I think the element name changing may have something to do with that. I suggest testing this out to see if this also applies to Point Controls. This seems to be something specific to later versions of ORD (10.12), because I don't ever recall having this issue with older versions.