1st Digital Delivery Quarterly Session

May 24, 2023

Question: How do you plan to address existing utilities when we cannot accurately show them on plans now? Additionally, overhead wires have to be difficult to realistically model, no?

> **Answer**: Modeling existing utilities requires a Subsurface Utility Engineering process (ASCE/UESI/CI 38-22 and ASCE/UESI/CI 75-22) which assigns a quality level that gives the user an understanding of the accuracy of the modeled element. The process on modeling existing utilities (underground and above ground) is currently being developed.

Question: Is there a plan to keep these 3D models in a master file?

> **Answer**: The project models will be maintained in the authoring software with the federated model located in the online review/construction applications ProjectWise 365 and SYNCHRO. 3D models consist of multiple files and are federated together using design authoring software processes.

Question: How is geotechnical data being integrated into or used in the models? (i.e. soil borings, strata/layers)

> **Answer**: Geotechnical data and processes are currently being developed to identify soil boring locations in GIS and utilize layer data within design authoring software.

Question: Can you put the link to one of the 3d online design sample that you showed?

> **Answer**: You will need to request access to the "Construction Sand Box" through the resource account and a link will be sent to you. The Sand Box contains 3D model design samples.

Question: Are there other sites other then PASDA to get info from to create a Terrain?

> **Answer**: There are other sites that provide free terrain data. When using terrain data, one must be cognizant of the level of accuracy of the data and the source information.

Question: If and how will digital delivery impact smaller municipal projects funded with liquid fuels, for design, construction, maintenance, asset management?

> **Answer**: Digital Delivery is still developing the process for various types of projects the Department Delivers. The ability to adapt the processes and procedures for other types of projects will be available but not a requirement in the foreseeable future.

Question: What sort of concerns about constructing from digital models have been voiced by contractors?

> **Answer**: Our initial digital delivery pilot projects are starting construction this season. We are in the process of soliciting this feedback and will continue to update the industry as we learn more.

Question: Can the 3D files for the completed be shared amongst the districts for learning purposes?

> **Answer:** Districts can request design authoring software training through the CADD Resources group. The Contractor Sand Box is also available for staff to view the 3D test models. Additional digital delivery information can be found on the website and training questions can be directed to the resource account.

Question: With projects with regrading, will there be an easy way to change contours to proposed conditions. And when it is constructed, would the contractor be able to input what grading contours are constructed in the field?

> **Answer**: Existing conditions will be represented in the survey terrain and the proposed design will be represented in the proposed terrain. After construction, the constructed conditions will then be represented in a digital as-built model.

Question: Will all different views pulled from models be "To Scale"?

> **Answer**: All content is "to scale" when working with a 3D model.