STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

MEMO TO: Project Managers
Business Unit Heads

FROM: Matthew Clarke, PE, Director of Technical Services

DATE: August 2, 2023

SUBJECT: OpenX Migration (August 2023 Update)

I appreciate everyone's efforts over the past 5 years to migrate NCDOT's CADD Operations to OpenRoads Designer since the distribution of the *OpenRoads Designer (ORD) Migration* memorandum. The Department has made headway, and we still have work to do. The OpenX Steering Committee was formed to provide direction and support for NCDOT project delivery teams in their implementation of OpenX. The information below describes the next steps that Project Managers and project teams are to take to fully utilize the OpenX platform (e.g., OpenRoads Designer, OpenBridge Designer, Open Ground, etc.).

Bentley is not actively supporting MicroStation V8i versions SS2 & SS4. With this comes risks to projects and delivery of the transportation program. Eventually the Department's final deliverables will be 3D products, but at this time, we are solely **focused on 2D deliverables in the OpenX platform**. The Department desires to capitalize on the benefits of migrating to OpenX:

- allowing data and design integration,
- leveraging the enhanced platform for multidisciplinary coordination,
- providing the ability to right-size the type of deliverable relative to the project need.

The OpenX Steering Committee is guiding NCDOT leadership decision-making in the implementation of OpenX within the digital delivery roadmap by developing solutions to the challenges and risks. NCDOT continues to work closely with Bentley in all disciplines, and we recognize that future improvements in some disciplines such as Geotechnical and Hydraulics will bring efficiency and better functionality of the software. Several pilot projects are being migrated from MicroStation V8i to OpenX. These projects will be used to develop a scope of services that Project Managers can use to migrate projects and inform the level of effort needed to make the transition to the OpenX platform.

Project Managers are requested to take the appropriate action as listed below for each project:

- Migrate design software to the OpenX platform if the project does not yet have an approved Design Recommendation Plan Set. This may consist of file transitions or a basic restart.
- Continue to use MicroStation V8i SS2/SS4 software if the project has progressed to a point where Right of Way Plans are complete.
- Projects that are actively being developed and designed and are beyond the Design Recommendation Plan Set but do not yet have Right of Way Plan Complete ideally should be migrated to the OpenX Platform. There are reasons that may compel a project team to

continue in MicroStation V8i such as complexity, level of effort, cost, and schedule impact.

- All projects that are being newly started and scoped are to be developed in the OpenX platform.
- STIP projects that are being restarted/re-initiated after a suspension should be migrated to the OpenX software platform, unless there are compelling reasons to continue with the MicroStation v8i software.

The Roadway Design Unit is actively testing MicroStation V8i on a computer with a Windows 11 operating system. So far, they have found that the current version of MicroStation has worked the same as on a Windows 10 computer. Testing is continuing with other technical disciplines. If no major concerns are found, this will reduce a major risk factor for projects that have had considerable design completed.

Below is a schedule that we will strive for and finalize as we look more closely at individual projects:

- The OpenX migration will be discussed as a main topic during the August 9, 2023, Project Manager meeting where more details will be provided.
- A spreadsheet will be provided to each Division/PMU/SMU by August 14 to identify the software platform that will be used to deliver each project and other relevant information. This spreadsheet will build upon the input received from Project Managers in March.
- Technical Services will schedule a specific time in the month of September with each Division/PMU/SMU to discuss projects that have had the Design Recommendation Plan Set completed and Right of Way plan development is not yet complete.
- By October 31, the software platform for each project will be noted and a migration plan and schedule will be in place for the projects that will transition to the OpenX Platform.

The earlier in the life of a project that the migration to the OpenX Platform occurs, the lesser the effort and cost. We will balance this while not jeopardizing project delivery and major milestone schedules for this effort.

As testing of MicroStation V8i continues in the Windows 11 operating system, there may be changes to this direction if risks are identified. If there is a change in direction it will be communicated to all partners.

Please hold questions on this topic until the Project Manager meeting on Wednesday August 9th.

CC:
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