NEW YORK STATE OF OPPORTUNITY. Department of Transportation	ENGINEERING INSTRUCTION	EI 23-010
Title: **DIGITAL DELIVERY IMPLEMENTATION**		
	Approved: Richard D. Wilder, P.E. Deputy Chief Engineer (Design)	6/6/2023 Date

ADMINISTRATIVE INFORMATION:

- Effective Date: This Engineering Instruction (EI) is effective with projects submitted for lettings on or after May 1, 2024.
- Not applicable to locally let projects.
- This EI does not supersede any other issuance.
- This revision will be incorporated into a future update of the Highway Design Manual.

PURPOSE:

- To introduce and provide guidance to design staff on how to develop and submit a digital delivery project for capital construction projects.
- To prepare and provide information to construction staff for future digital delivery projects.

TECHNICAL INFORMATION:

- Digital Delivery is the process of providing digital data for the construction of capital projects. Three delivery methods have been identified for application based upon project complexities.
    - Traditional Delivery represents the current process of providing contractual two-dimensional plans electronically as a PDF. For simple 1R and similar project types only.
    - Hybrid Digital Delivery provides additional digital data contractually such as LandXML, PDF, spreadsheets and other digital file formats that replace specific information within the plan set. To be used on 2R and above moderate and complex project types that have not been preapproved for Model Based Digital Delivery. May be used on simple project types where digital data will benefit construction inspection or the contractor.
    - Model Based Digital Delivery expands upon the hybrid deliverable by providing a comprehensive 3D solids model that represents the majority of the work. Recommended for select complex project types only. This method requires preapproval utilizing the application embedded within the transmitted document.
- A Digital Delivery Interim Guidance Document has been developed and included with this EI to provide technical information learned from past pilot projects and design guidance for future projects.

IMPLEMENTATION:

- Approximately two projects per Region were selected for early implementation of the Hybrid Digital Delivery method. The transmitted document provides information to assist with the development and delivery of these projects. These projects will be let between May 1, 2023 and April 30, 2024.
- This guidance may be updated for projects let after May 1, 2024, based on feedback from the early implementation projects.

TRANSMITTED MATERIALS: The Digital Delivery Interim Guidance Document can be accessed at: https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm/chapter-21 under references.

BACKGROUND: Nationally, State DOTs are shifting towards Building Information Modeling (BIM) and lifecycle asset management of their transportation systems. Additionally, technological advancements in the industry such as automated machine guidance and global positioning systems are becoming common place on construction projects. These types of technologies have changed the way operations are executed in construction and offer significant value to the project overall. The Department has recognized the benefit of the technology and lifecycle asset management principles with the execution of two model based digital delivery pilot projects. The Departments model based contracting committee has categorized digital delivery into three distinct categories that will allow designers to choose the method of delivery that will maximize the value of the deliverable for design, construction, and asset management. The categories are described in detail in the Digital Delivery Interim Guidance Document transmitted with this EI.

CONTACT: Direct questions regarding this issuance to Eric Coulter, P.E. in the Main Office Design Bureau via email at eric.coulter@dot.ny.gov or phone at 518-457-8554.