



Florida Department of Transportation

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PRODUCTION SUPPORT MEMORANDUM 20-02

DATE: **August 24, 2020**

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Structures Design Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, District Consultant Project Management Engineers, District Project Development Engineers, District CADD Managers

FROM: Paul Hiers, P.E., Manager, Production Support Office

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Paul Hiers

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SUBJECT: **FDM 900 (NexGen Plans Production), FDM 905 (Cross Sections),
FDM 911 (Model Management), and FDM 915 (Roadway Plan-Profile)**

This memorandum announces the release of FDOT Design Manual (FDM) chapters 900, 905, 911, and 915. These are the first four chapters of the new FDM 900 series being developed for model-centric plan sets (NexGen Plans). The FDM 900 series also introduces the use of large format sheets: 36"x48" and 36"x72".

These four chapters are posted on the [FDM 2020 Webpage](#). A NexGen Plans crosswalk is provided on the FDM webpage as well. This crosswalk illustrates where the information contained in the FDM 300 series chapters may be found within the FDM 900 series.

FDM 900 (NexGen Plans Production)

This chapter provides an overview of the purpose and structure of the new FDM 900 series.

FDM 905 (Cross Sections)

This chapter outlines the development and delivery of cross section information. This sheet will not be included in model-centric plan sets.

FDM 911 (Model Management)

The Model Management sheet provides information for the order and naming of the models developed for the project.

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FDM 915 (Roadway Plan-Profile)

For model-centric plan sets, the Plan-Profile sheet provides a 2D representation of the design contained within the models. Because the models are the primary source of information needed to construct the proposed improvements, labeling and dimensions are minimal serving only to convey the design intent.

IMPLEMENTATION

FDM 900, 905, 911, and 915 will be implemented with the release of the 2021 FDOT Design Manual.

AMG Pilot Projects are to implement FDM 900 series chapters to the greatest extent possible when chapters become available.

Large format plan sheets may be used within traditional plan sets (FDM 300 series) with written approval granted by the District Design Engineer (or their designee). There are no changes to staff hour guidelines at this time, i.e., staff hours will continue to be based on the number of standard sized sheets (11"x17") necessary regardless of what size sheets are included in the plans set.

BACKGROUND

A NexGen Task Team was assembled in the fall of 2018 to begin discussions about the evolution of plan sets when signing and sealing models become common. The NexGen Task Team currently has more than 50 members representing most every office within FDOT and consisting of Central Office, District and Consultant groups.

To assist the team in determining the format and content of NexGen Plans, the Department implemented an AMG Pilot Project program. AMG Pilot projects have the following requirements:

- BIM (Building Information Models) files are signed and sealed
- Requires the use of AMG (Automated Machine Guidance) construction methods
- Implements NexGen Plans to the greatest extent possible

Two AMG Pilot Projects are currently in construction, and 11 more are in various stages of design. FDM 900, 905, 911, and 915 chapters reflect lessons learned through the AMG Pilot Project program, and the assessment of national best practices from states advanced in 3D development and delivery.

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