



FDM 0 Entire FDM

Section *Varies*

Updated AASHTO Green Book references due to the adoption of 2018 AASHTO Green Book. Edits made to multiple chapters of the FDM.

Removed references to the Turnpike Design Handbook (TDH) and incorporated Turnpike criteria into the FDM as appropriate.

FDM 100 Introduction

Section *100*

Removed reference to Plans Preparation Manual, which was sunset in 2018.

Revised description of FDM organization to remove reference to Part 3, which is being sunset for 2023.

FDM 102 Glossary of Terms

Section *102.2*

Added definition of Turnpike Projects.

FDM 103 Standard Forms

Section *Form 122-A*

Added "Other" category for projects that do not fall into the New Construction or RRR Categories.

Section *Forms 126A-C*

Revised Forms 126-A, 126-B, and 126-C to provide additional information needed for Lane Repurposing Reviews.



FDM 104 Public Involvement

Section 104.1

Revised language to be consistent with current policy for public involvement

Section Varies

Specifically listed "law enforcement" as a local government agency, in response to direction to increase prominence of law enforcement in FDM language.

FDM 105 Aesthetic Design

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 106 Exempt Public Documents

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 110 Initial Engineering Design Process

Section 110.2

Clarifies schedule on required FDM deliverables (base clearance, drainage criteria, and hydroplaning) in order to keep projects on schedule.

Section 110.4.1

Clarified requirement to coordinate with Product Evaluation for Sole Source products.

Section 110.5

Clarifies all of the various functional disciplines that need to be coordinated with.

Section 110.5.2

Modified language and streamlined to widen applicability to all of the subsections. Some of the specifics were not necessary.

Section 110.5.2.4

Added requirement for coordination with the Structures Office when evaluating bridges over FDOT Right-of-Way.

Section 110.5.6

Revised to include Buy America, Build America provisions

FDM 111 Final Engineering Design Process

Section 111.3

Added Toll Facilities to list of Major Component Plan sets.

Section 111.7

Provided direction on how to get permission to lock PSEE Design Development Documentation Module.

Section Table 111.7.1

Revised Table 111.7.1 Toll Documents Section.

FDM 112 Update Engineering Design Process

Section 112.2

Replaced "pay items" with "Basis of Estimates" as part of Design Update Review.

FDM 113 Right of Way Requirements

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 114 Resurfacing, Restoration, and Rehabilitation (RRR)

Section 1.All

*Entire chapter rewritten and approved through Roadway Design Bulletin 22-01..
Additional changes were made for clarification of the Safety Assessment Dashboard.*

Section 1-1.All

Replaced references to "Safety Needs List Dashboard" with "Safety Assessment Dashboard"; removed requirement for Director sign-offs; clarified ADA requirements.

Section 114.1.1

Provided direction on how to access Safety Assessment Dashboard.

Section 114.3.4

Removed reference to SWPPP

FDM 115 Standard Plans and Standard Specifications

Section 115.1.1

Updated statement for the new annual Standard Spec publications.



ROADWAY DESIGN OFFICE

Summary of Revisions

2023 FDOT DESIGN MANUAL

FDM 116 Alternative Intersection and Interchange Review

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 117 Monitor Existing Structures

Section 117.2, 117.2.2, & 117.5

Added language to support proposed revisions to Standard Specifications, Section 108 which requires monitoring existing structures when indicated in the plans.

Section 117.3

Added "typically" in second sentence of 117.3 so we can avoid issues with designers when we need to protect a Department owned structures known to have issues.

FDM 120 Design Submittals

Section 120.1

Removed SWPPP language from Figure 120.1.1

Section 120.2.3.2(2)&120.2.3.2(3)

Change "location map" to "Work Limits and Features" and revised instructions for map placement as part of 900-series migration.

Section 120.2.3.3

Clarified when to show and label major underground utilities.

Clarified how to list project controls.

Replaced "Electronic Toll Point" with "Toll Site" to provide compatibility with GTR definitions.

Added Toll facilities and new or widened bridges to additional Typical Section Sheets.

Section 120.3.2

Revised criteria for completion and review of bridge designs

Section Figure 120.1.1

Changed "Erosion Control Plan" to "Stormwater Runoff Control Concept"

FDM 121 Bridge Project Development

Section 121.3.1

Updated list of Category 1 Structures to be consistent with edits to FDM 266.4.

Section 121.3.2

Expanded the list of structures classified as Category 2 Structure.

Section 121.9.1

Added requirement to describe pedestrian railing and fencing to be provided (supports item P2.164 also).

FDM 122 Design Exceptions and Design Variations

Section 122.7.4

Added Noise Walls to list of items requiring signature of State Structures Design Engineer. Updated Table 122.7.1 to reflect change.

Section Table 122.6.1 & Table 122.6.2

Updated Table 122.6.1 per 2015-2019 Crash Data. Updated Footnote to reflect current analysis years and publish date. Updated Table 122.6.2 Footnote to reflect current analysis years and publish date.

FDM 123 Engineering Design Estimate Process

Section 123.1

Added Estimated Quantities Report to list of items used to develop a construction cost estimate.

Section 123.2

Removed unnecessary information regarding quantity take off.

Section 123.4.1

Renamed section for compatibility with FDM 902.

FDM 124 QA/QC Management Plan

Section 124

Added language to prevent having an inexperienced engineer serve as the QA manager. Turnpike believes this is a best practice and should be incorporated into Statewide practice.

Section 124.2.1

Added language to prevent consultant staffing changes that might not have the proper experience. Turnpike believes this is a best practice and should be incorporated into Statewide practice.

Added language based on request made by Turnpike Construction. Turnpike believes this is a best practice and should be incorporated into Statewide practice.

FDM 125 Quality Assurance

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 126 Lane Repurposing Projects

Section 126.1

Clarified general language on lane repurposing.

Section 126.3.3

Clarified process for Central Office review of Lane Repurposing Requests.

FDM 127 Community Aesthetic Features

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 128 Federal Aid Project Certification

Section 128.3

Updated process for preparation of official estimate.

FDM 130 Signing and Sealing Documents

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 131 Plans Processing

Section 131.1

Added Contract Classes for Turnpike PS&E Package processing activities.

Section 131.1.1

Added items to list of Contract Documents at request of Contracts Office.

Modified the definitions for Production Date and Supplemental Specifications Package to accommodate Turnpike Project processes.

Section 131.2

Revised description of Plan Changes to reference AASHTOWare.

Section 131.5

Added information about how to address Letting Date Changes before and after advertisement.

FDM 132 PS&E Submittal Package Revisions

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 133 Retention of Electronic Documents

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 140 Lump Sum Projects

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 150 Consultant Priority Matrices

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 151 Revisions Packages

Section 1.All

Chapter 151 Revision Packages, formerly "Plan Revisions", was substantially rewritten with previous language replaced to be consistent with new Revision Packages process. Track-change version is not available. Please review entire chapter.

FDM 152 Shop Drawing Submittals

Section 152.3

Deleted specific subsection to include other subsections of the Standard Specifications that explain the Shop Drawing minimum requirements more thoroughly.

Section 152.6

Added disposition requirements in order to cover all potential review outcomes and make the submittal and review process as efficient as possible.



FDM 200 Context Based Design

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 201 Design Controls

Section

Revised SIS minimum design speed criteria

FDM 202 Speed Management

Section 202.2.1

Provided guidance on calibrating target speed during project development.

Section 202.3.8

Revised criteria for raised crosswalks

FDM 210 Arterials and Collectors

Section 210.1

Revised reference from FDM 306 Typical Sections to FDM 913 Typical Sections as part of 300-series sunsetting.

Section 210.2.4.2

Revised hydroplaning risk analysis guidance.

Section 210.2.5

Clarified section title to indicate this section describes lane drops (merging) and shifting tapers where the number of lanes remains constant. Renamed Title to: "Lane Tapers".

Section 210.3.1

Clarified that median width is dimension between the inside edges of the travel lanes.

Section 210.4.6

Changes are currently being reviewed through a separate Roadway Design Bulletin process (Audible and Vibratory Treatments for Arterials and Collectors). No need for further review.

Section Figure 210.2.1

Updated Figure 210.2.1 to show symmetrical 4 lane configuration option with two lanes sloping to the inside.

FDM 211 Limited Access Facilities

Section 211.1

Clarified that existing features designed to metric design criteria can remain for reconstruction and resurfacing projects without a Design Exception or Variation. New construction projects will be designed to the current English criteria.

Added a sentence to specify that Turnpike facilities adhere to Interstate criteria.

Section 211.1.1

Added language for interstate resurfacing projects to document AASHTO interstate standards that were in effect at the time of original construction or inclusion into the interstate system when FDM 211 criteria is not met.

Section 211.13

Added language for parallel ramp type preferences, approval requirements for taper type ramps, and existing conditions.

Section 211.16

Added access requirements for continuous lengths of guardrail or barrier wall.

Section 211.17

Added a new section for evaluating bridge approach slabs.

Section 211.2.2

Added new 4-lane section to Figure 211.2.1 showing the two inside lanes sloping toward the inside.

Added criteria to standardize shoulder cross slope transitions at bridges.

Section 211.2.3

Added language and a table to provide requirements for when a hydroplaning analysis is to be submitted.

Section 211.4

Added minimum shoulder width requirements for Turnpike Projects.



Section 211.4.2.1

Added criteria for shoulder rocking.

Section 211.4.2.2

Ensures the TDH 211.4.2.1 design is clearly shown in the plans for the contractor.

Section 211.4.3

Deleted "consider" for flush inside shoulder pavement.

Section 211.4.4.1

Clarified where to exclude ground in rumble stripes at toll sites

Section 211.9.1

Added minimum vertical profile grade requirements for new construction or when the profile is significantly modified.

FDM 212 Intersections

Section Exhibit 212-4 to Exhibit 212-7

Added 25 and 70 MPH rows in Exhibits 212-4 thru 212-7 with values for Intersection Sight Distance, and updated some columns or tables for current design vehicles.

Section Table 212.11.3

Added rows and values for 25, 65 and 70 MPH minimum tree spacing table.

FDM 213 Modern Roundabouts (Fastest Path Tools)

Section 213.3.8

Revised Figure 213.3.2 to show 4" extension of Sub-Base under Central Island.

FDM 214 Driveways

Section 214.1

Added criteria to consider access management when locating and designing driveways.

Section 214.1.1

Added context classification and multimodal traffic as criteria for driveway design.

Section 214.2

Advised designers of potentially deleterious impacts to pedestrians when larger driveway radius or flare is used.

Revised list of considerations when selecting driveway type, to include speed and context classification.

Section 214.3.6

Introduced a new Figure 214.3.3 illustrating proper measurement of driveway spacing near intersections.

FDM 215 Roadside Safety

Section 215.2.3

Added clear zone limits for ramp terminals to Figure 215.2.1.

Section 215.2.6

Added requirement to obtain concurrence from District Maintenance Engineer for slopes steeper than 1:2.

Section 215.4.6.1

Clarified setback requirements for back-to-back railings on separated parallel or adjacent bridges.

Clarified how setback requirements apply to discontinuous items.

Section Table 215.2.2

Clarified that Lateral Offset from Bridge Piers and Abutments for RRR projects at 35 mph or less is 1.5 ft.



ROADWAY DESIGN OFFICE

Summary of Revisions

2023 FDOT DESIGN MANUAL

FDM 216 Earthwork

Section 216.4.5

Clarified requirements for borrow excavation.

Section 216.6

Added requirement to specify and quantify earthwork material needed for drainage design.

Section Figure 216.4.8

Revised Figure 216.4.8 to clarify how volume of excavated subsoil is calculated.

FDM 221 Utilities

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 222 Pedestrian Facilities

Section 222.2

Included blended transitions with curb ramps as a pedestrian facility.

Section 222.2.1.1

Added reference bicycle parking (FDM 223.5) and public transit facilities (FDM 225) to ensure that minimum ADA clear widths and vertical clearance as defined in 222 are met.

Section 222.2.1.3

Clarified when drop-offs need to be shielded.

Section 222.2.3.2

Clarified criteria on sidewalk width in median island to be consistent with FDM 210.3.2.3.

Section 222.2.4

Removed Figure 222.2.1. Added reference to Standard Plans Index 522-002 instead.

Section 222.3

Removed outdated language regarding a lack of detectable warning systems for asphalt surfaces in the APL.

Section 222.4.1

Ensures pedestrians can't jump or throw any projectiles into the limited access facility. FDM shows this as optional at the discretion of DDE.

Added requirement to get district direction regarding use of enclosure on sidewalk or shared use paths over limited access right of way.

Section 222.5

Introduced new section with criteria for pedestrian gates at movable bridges.

FDM 223 Bicycle Facilities

Section 223.2.3

Clarified conditions under which urban side paths can serve as a bicycle facility.

FDM 224 Shared Use Paths

Section 224.6

Clarified longitudinal grade criteria to provide consistency with PROWAG and AASHTO Guide to Planning and Design of Bicycle Facilities.

FDM 225 Public Transit Facilities

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 226 Patterned Pavement and Architectural Pavers

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 228 Landscape Design

Section 1.All

Chapter 228 is deleted and replaced by 270 series.

FDM 229 Selective Clearing and Grubbing Design

Section 1.All

FDM 229 is deleted and replaced by 270 series.

FDM 230 Signing and Pavement Marking

Section 230.2.1.1

Clarified sign placement on Limited Access facilities.

Section 230.2.4

Clarified when and how to eliminate use of lighted signs on existing structures.

Section 230.3

Restructured and clarified criteria for selection of pavement marking material and substantially expanded Section 230.3.1 and subsections.

Section 230.3.1.2

Removed section on Profiled Thermoplastic or Standard Thermoplastic with Ground In Rumble Strips. Changes are currently being reviewed through a separate Roadway Design Bulletin process (Audible and Vibratory Treatments for Arterials and Collectors).

Section 230.3.3

Renamed Section title to Pavement Marking Maintenance and expanded content discuss refurbishment thermoplastic and hot spray thermoplastic.

Section 230.4

Clarified that red retroreflective strips are not required for highlighted sign assemblies.

Section 230.4.1

Revise criteria and figures for WWD countermeasures

Section 230.4.3

Reviewed with RDB (Wrong-Way Driving Countermeasures for Arterials and Collectors). Update: Changes will not be associated with an RDB; however, they will be included in the 2023 FDM with the same implementation schedule.

Section 230.4.4

Reviewed through RDB (Wrong-Way Driving Countermeasures for Arterials and Collectors). Update: Changes will not be associated with an RDB; however, they will be included in the 2023 FDM with the same implementation schedule.



ROADWAY DESIGN OFFICE

Summary of Revisions

2023 FDOT DESIGN MANUAL

Section 230.6.8

Added criteria for placement of Toll Route Markers.

Section Exhibit 230-1b

Modified Exhibit 230-1b to show Wrong Way signs in median oriented at 45 degrees.

FDM 231 Lighting

Section 1.All

Chapter 231 Lighting was substantially rewritten. Not all line-item changes are not marked for this chapter.

Section 231.1

Updated introduction for completeness and clarity. A primary consideration for the layout design of light poles is Roadside Safety, so a reference to FDM 215 requirements was provided.

Clarified required locations of light pole placement in this more visible FDM location. Median placement is only permitted under provided conditions.

Section 231.2

Added additional policy to cover new daytime underdeck lighting requirements proposal in new FDM 231.3.6.2

Added explanation to allow for analysis transition segments only as-needed between areas with different light level requirements.

Added explanation to clarify design considerations for 3D elevated roads.

Added new heading and information to explain the use of lighting values in Table 231.2.1 and place a maximum on light levels.

Added reference to new daytime underdeck analysis information so that it is acknowledged in this Design Criteria section.

Clarified luminaire tilt requirements.

Added requirement to light small segments between lighted areas on limited access facilities.

A reference to the new mounting height information location is provided so that the topic remains acknowledged among the other miscellaneous pole geometry information.

Inserted new Color Temperature text heading to accommodate verbiage as previously approved and released per RDB22-02.

Created new text heading to better group mounting height design explanation and place alongside Table 231.2.2. Clarified mounting height definition and analysis tolerance assumptions.

Added mitigation measures for light pole layout design to help reduce risk from locating light poles in high crash and high-risk locations.

Clarified that this design criteria is referring to "nighttime light level" to differentiate from the new draft daytime underdeck lighting requirements of FDM 231.3.6.2.

Clarified to use a "direct" illumination method in the software analysis based on District feedback.

Section 231.2.1

Added reference to draft new FDM 231.2.2 for policy on light spill.

Section 231.2.2

Added new section to provide guidance for the consideration of light spill reduction for designers by working in coordination with District offices.

Section 231.3

Provided new explanation for when a lighting design analysis is required, which will give added clarity to maintenance or other light fixture replacement initiatives.

Added bridge underdeck photometric calculation point placement details.

Added explanation requiring a new lighting analysis if light poles are moved.

Added more specific design guidance and criteria for conducting photometric analysis of illuminated roadway areas.

Added more specific design guidance and criteria for conducting photometric analysis of illuminated signs.

Section 231.3.1

Provided reference to FDM 231.3.2 vertical illumination analysis zones.

Provided statement to remind designers that full-width shoulders are included within the lighting analysis.

Added mention of bridge underpass lighting requirement within the language regarding general project lighting limits.

FDM language discusses "roadway segments" which could imply inclusion of underdeck lighting along those segments, however the new language migrated from the Turnpike Design Handbook further clarifies for underdeck analysis.

Section 231.3.2.1

Changed "grid point" term to "data point" to avoid misconceptions regarding the need for a linear point layout for vertical illumination analysis.

Section 231.3.2.1.1

Clarified wording so that this Intersection Lighting Retrofit policy is not used to avoid analysis considerations when luminaires are changed for maintenance or other purposes.

Section 231.3.4

Added clarification for the inclusion of all stand-alone crosswalks per District questions and comments. These cases, such as exit ramp crosswalks, will be treated the same as midblock crosswalks regarding lighting policy.

Section 231.3.6

Added additional acceptable underdeck luminaire mounting locations per the migrated Turnpike Design Handbook policy.

Section 231.3.6.1

Added clarification to address different illumination levels on either side of the underpass.

Added clarification to allow Districts to use bridge underdeck lighting at their discretion with regards to cases where FDM policy does not otherwise require lighting. Typical cases that may merit this underdeck lighting are provided to assist with the de

Section 231.3.6.2, Table 231.3.6

Created policy for Daytime Underdeck lighting that guides designers through the applicable procedures of ANSI/IES RP-22-11 Tunnel Lighting publication. New guidance on Lighting Plans content requirements is provided.

Section 231.6

Added brief guidance calling for the coordination of lighting systems with ITS or toll site equipment layouts in order to avoid conflicts in construction.

Section 231.7

Added references to the FDM sections that define LDAR formatting needs. Summarized the miscellaneous documents required in the LDAR and referenced their definitions in differing FDM sections.

Section Figures 231.3.1,2,&3

On the intersection drawing layouts, changed the term "Grid Point" to "Data Point" per F.261

Section Table 231.2.1



Simplified table title and headings to streamline new explanations in FDM verbiage and correspondence.

Added more ambient luminance levels to accommodate more conditions for sign lighting. Added note 3 to explain these luminance classifications.

Section Table 231.2.3

Added new Table 231.2.3 for color temperature as approved and released per RDB 22-02

FDM 232 Signalization

Section 232.5

Added direction to coordinate with the District TSM&O Engineer on selection of vehicle detection technology.

Deleted unnecessary reference to the APL.

Section 232.8.1

This was requested by Turnpike Maintenance. Coating systems other than galvanizing have been problematic with regard to early failure.

FDM 233 Intelligent Transportation Systems (ITS)

Section 233.1

Clarified minimum mounting height of cameras.

Clarified where cameras can be mounted.

Clarified requirements for security camera location.

Section 233.3

Added requirement for RMPU within each ITS field cabinet.

Added criteria related to voltage of ITS equipment.

Section 233.3.4

Added criteria for step-up and step-down transformers.

Section 233.3.4.1

Added criteria for identifying existing conduit infrastructure that will be removed or abandoned.

Section 233.3.5

Added criteria for spare load capacity in ITS field cabinets.

Section 233.3.9

Added language to accommodate generator O&M needs to optimize maintenance and constructability. Turnpike best practice recommended for inclusion in FDM.

Section 233.3.9.1

Added requirement for minimum run time for generators.

Added new criteria for fuel type and storage for generators.

Added language to accommodate provisions to monitor generator real time to improve system performance and reliability.

Section 233.4



Added requirement for coordination between ITS and Roadway in design for constructability, functionality and maintenance. Turnpike best practice recommended for inclusion in FDM.

Section 233.4.1

Clarified required approval for bridge-mounted or barrier wall-embedded conduit.

Added requirement to contact District ITS Manager for conduit color code/size requirements to help standardize conduit colors.

Added criteria for fiber cables in backbone conduit.

Section 233.5.1

Added criteria for minimum number of fibers to provide flexibility and physical redundancy.

Provided criteria for fibers in fiber optic cable backbone.

Section 233.5.1.1

Added criteria for allowable downtime in plans.

Section 233.6.1

Clarified height of mounted cameras that require lowering device.

Section 233.7.4

Added provision for existing maintenance "slab" locations with historical safety issues or deficiencies within projects.

Added new section on Maintenance Service Slabs.

Section 233.9.3

Reduce installation costs while meeting minimum detection performance.

Added language to reduce Installation costs while meeting minimum detection performance.

FDM 240 Transportation Management Plan

Section 240.2.1.16

Added criteria for Emergency Pull Off Area on Limited Access Facilities during construction.

Section 240.2.1.4

Added requirement to use superelevation criteria on Turnpike projects.

Section 240.2.1.6

Increased allowable lane closure duration to 10 hours at direction of the Chief Engineer. No further vetting on this item.

Added requirement for traffic analysis on LA lane closure.

Section 240.2.1.7

Added requirement for District Traffic Operations Engineer approval to use traffic pacing plan.

Added requirement for a contingency plan on Limited Access Roadways.

Section 240.2.1.8

Added requirement to conduct AutoTurn Analysis in TTCP documentation.

Added criteria for ramps that service tandem trucks.

Added criteria for high speed, multilane facilities.

Section 240.2.2.15

Provided additional options for meeting lighting requirements.

Section 240.2.2.20

Added new section and Figure 240.2.1 to clarify requirements for work near a limited access facility exit ramp.

Section 240.2.2.21

Added section on Temporary Drainage.

Section 240.2.2.8

Added requirement for pedestrian signal timing and temporary traffic signals.

Section 240.3

Added mitigation strategies based on Turnpike best practices.

Section Varies

Added language to incorporate Motorist Awareness System (MAS).

FDM 241 Lane Closure Analysis

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 242 Traffic Pacing Design

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 243 Portable Changeable Message Signs

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 250 Hydraulic Data and Agency Permits

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 251 Stormwater Runoff Control Concept (SRCC) Development

Section all

Revised entire chapter on SRCC Development

FDM 260 Bridge Structures

Section 260.3

Clarification statement made since FDM 260 shoulder widths do not match FDM 211 shoulder widths. Added Note 3 to Figure 260.1.1.

Section 260.9.4

Added reference to Structures Manual for details and restrictions related to making attachments to bridges.

Section Figure 260.1.1

Added note number 3 to Figure 260.1.1 to maintain approach roadway shoulder width on Turnpike projects.

FDM 261 Structural Supports for Signs, Signals, Lighting, ITS, and Tolling

Section 261.1

Revised Cantilever & Span Sign Structure Truss Depth from 9.5 feet to 8 feet.

Added reference to Structures Manual for details and restrictions related to making attachments to bridges.

Section 261.2

Required written approval of District Structures Maintenance Engineer to use custom design sign support structure.

Section 261.7

Modified the type of soils information the Geotechnical Engineer must provide to the EOR.

Section 261.8

Provided additional direction for review of the Ancillary Structures Evaluation by the District Structures Maintenance Engineer.

Section all

Substantial rewrite of FDM 261.

Section Varies

Added "tolling" to Chapter Title and Sections 261.1, 261.6, and 261.8 to support migration of Turnpike Design Handbook into the FDM.

FDM 262 Retaining Walls

Section 262.2

Added criteria for analysis of MSE walls with metallic soil reinforcement.



FDM 263 Geosynthetic Design

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 264 Noise Walls and Perimeter Walls

Section 264.2.2.2

Provided new requirement for noise wall study station limits to account for tapers, attenuators and guardrail.

Updated Noise Wall Height Criteria to clarify when a Design Variation is required.

FDM 265 Reinforced Concrete Box and Three-Sided Culverts

Section All

No comments or changes are proposed to this chapter for 2023.

FDM 266 Bicycle and Pedestrian Bridges

Section 266.2

Added new criteria for prequalification of designers of prefabricated bicycle and pedestrian bridges.

Section 266.3

Clarified requirements for peer review of bicycle and pedestrian bridges.

Added requirement to coordinate with District and local stakeholders to determine when full screening of pedestrian crossings is needed.

Revised numbering to 266.4, revised blue box text for conditions required for classification as Category 1 structure on non-conventional projects.

Section 266.4

Clarified requirements for use of prefabricated truss bridges.

Section 266.4.1

Revised name of the list where qualified prefabricated steel truss bridge producers are found.

Section 266.4.2

Modified Design and Detailing Responsibilities for Non-Conventional Projects.

Section 266.4.3

Introduced new Figure 266.4.1 to summarize project processing of prefabricated steel truss bridges.

Section 266.4.4

Clarified that FDM 266.4 criteria are used to warrant a prefabricated steel truss pedestrian bridge.

Section Figure 266.3.1

Revised drawing of Pedestrian or Shared Use Bridge Typical Section.

FDM 270 Planting Designs

Section 1.All

New chapter provides the criteria and requirements for development of planting designs.

FDM 271 Irrigation Designs

Section 1.All

New chapter provides the criteria and requirements for designing systems to distribute supplemental water to plant material.

FDM 272 Hardscape Designs

Section 1.All

New chapter provides the criteria and requirements for hardscape features. Hardscape is incidental non-living components of a landscape plan.

FDM 273 Landscape Maintenance Guide

Section 1.All

New chapter provides the criteria and requirements for Landscape Maintenance Guides.

FDM 274 Selective Clearing and Grubbing

Section 1.All

New chapter provides the criteria and requirements for development of Selective Clearing and Grubbing (C&G) designs.

FDM 275 Tree and Palm Relocation

Section 1.All

New chapter provides the criteria and requirements for relocation of trees and palms.



FDM 276 Outdoor Advertising Signs

Section 1.All

New chapter provides the criteria and requirements for outdoor advertising signs and how existing or proposed landscape is to be accommodated.

FDM 900 Production of NexGenPlans

Section 900.1

Added "Level of Development (LOD) to sentence.

Removed reference to 300 series when 900 series "is under development"

Removed reference to FDM 300.

Section 900.3

Added new sheet border sizes.

Removed references to SWPPP.

Section 900.3.1

Language revised to provide guidance when there are multiple state roads for one project.

FDM 901 Sequence of Plans Preparation

Section 901.2

Added DB Section.

Section 901.3

Minor edits to existing phase submittal summary table covering conventional projects.

Added language specifying roadway sheets that impact permits should be "permit ready" at Ph II.

Section 901.3.1

Added language to develop conflict matrix at Phase II.

Section 901.3.1 & 901.3.2

Minor edits to submittal descriptions, mostly centered around key sheet and TTC plan.

Section 901.3.5

Removed requirement to sign and seal BIM.zip file for conventional project PS&E Submittal.

Section 901.4

Added DB section from FDM 301 with edits.

Section Table 901.3

Revised Table 901.3 to to include Preliminary Drainage Map for Phase 1 submittals.

FDM 902 Estimated Quantities Report

Section 902.3

Added sentence to place summary files in the Calculations Folder.

FDM 904 Landscape Opportunity Plan

Section All

New chapter to provide plan and early coordination for landscaping in advance of landscaping project.

FDM 905 Roadway Cross Sections

Section 905.1

Added sentence describing where to place cross section sheets in PSEE.

Section 905.2

Added 24"x36" large-format sheets.

Section 905.3

Clarified labeling requirement for underground utilities.

FDM 906 Bridge Hydraulic Recommendations Sheet

Section 1.All

Pulled from FDM 305.2 with significant edits.

Section 906.3

Adds bridge dimensioning and design scour holes to profile view.

Section 906.4

Changes location map requirements and requires hyperlink.

FDM 910 Key Sheet and Signature Sheet

Section 910.2.2

Adds labeling requirement for Turnpike mile marker limits.

Added optional condensed URL project location.

Section 910.2.5

Added Utility Work by Highway Contractor in component plans set listing.

Section 910.2.6

Minor changes to plans index listing.

FDM 911 Model Management Sheet

Section 911.1

Included 24x36 sheet.

FDM 912 Project Control

Section 912.2

Included 24x36 sheet.

FDM 913 Typical Sections

Section 913.2

Includes electronic toll point locations as typical sections.

Section Varies

Minor edits throughout.



FDM 914 General Notes

Section 914.2.2

Added additional utility notes to required general notes.

Section 914.4

Provides clarification on optional Notes to Reviewers.

FDM 915 Roadway Plan-Profile Sheet

Section 915.1

Included 24x36 sheet.

Section 915.2.1

Adds option for critical section view near location.

Clarified required utility information.

Section 915.3.4

Includes requirement for treatment swale and ditch block profile with labeling.

Section 915.3.5.1

Added access requirements for continuous lengths of guardrail or barrier wall.

FDM 916 Drainage Structures Sheet

Section 916.1

Included 24x36 sheet.

Section 916.3.1

Requires specifically labeling wall zone pipes.

FDM 917 Stormwater Facilities

Section 917.1

Included 24x36 sheet.

FDM 918 Drainage Map

Section 918.1

Included 24x36 sheet.

Section 918.2

Requires labeling impaired waterbodies, treatment swales, contamination areas, etc.

FDM 919 Lateral Ditches Sheets

Section 1.All

New chapter added for 2023.

FDM 920 Soil Survey and Core Boring Data

Section 1.All

New chapter added for 2023 with significant edits to replace FDM 318.

FDM 921 Temporary Traffic Control Plan

Section 1.All

New chapter added for 2023 with significant edits to replace FDM 321.

FDM 922 Miscellaneous Structures

Section 1.All

Language taken from FDM 324 with minor edits.

Section 922.3

Included new section on approach slabs.

Section 922.4(5)

Removed "erosion and sediment control and stormwater pollution prevention plan requirements"

FDM 924 Selective Clearing and Grubbing

Section 924.1

Added language clarifying when Select C&G is included.

Section 924.3.1

Moved language on Category 1 plant removal or remaining to FDM 274.

FDM 940 Signing and Pavement Marking Plans

Section 940.6

Included specific guidance for arrow placement on overhead sign panels.

FDM 941 Signalization Plans

Section 1.All

New chapter added for 2023 with significant edits to replace FDM 327.

FDM 942 Intelligent Transportation Systems (ITS) Plans

Section 1.All

New chapter added for 2023 with significant edits to replace FDM 328.

FDM 943 Lighting Plans

Section 943.3.2

Section for Lighting Legend.

Section 943.4

Includes language for applicable information for Lighting Data Table.

Added text to incorporate new expanded data table for lighting

Section 943.5.1

Required information defined to include underdeck lighting.

Section 943.6.3

Section for Underdeck Lighting Details.

Section 943.6.4

Section for Box Girder Maintenance Lighting.

Section 943.6.5

Requires one-line diagram and panel schedule for each service point.

FDM 944 Landscape Plans

Section 944.5

Includes section for Landscape Maintenance Guide Sheet to deliver intent.



FDM 945 Architectural Plans

Section 1.All

New chapter added for 2023. Pending completion, will notify and provide when available.

FDM 946 Structure Plans

Section 1.All

New chapter added for 2023. Pending completion, will notify and provide when available.

FDM 947 Toll Facility Plans

Section 1.All

New chapter added for 2023. Pending completion, will notify and provide when available.

FDM 948 Utility Work by Highway Contractor (UWHC) Plans

Section 1.All

New chapter added for 2023 with significant edits to replace FDM 330. Pending completion, will notify and provide when available.