2022 FDM Summary of Revisions

Part 1:

FDM 100: Introduction

FDM 100, PURPOSE: Revised language to clarify original intent.

FDM 102: Glossary of Terms

FDM 102: *New definitions for Crash Analyses, Crash Data, Crash Reports or Crash Documents, and Safe System.*

FDM 103: Standard Forms

FDM 103: *Form 121-C. Fields added for the Independent Peer Review QA Manager.*

FDM 104: Public Involvement - No Revisions

FDM 105: Aesthetic Design - No Revisions

FDM 106: Exempt Public Records - No Revisions

FDM 110: Initial Engineering - No Major Revisions

FDM 111: Final Engineering Design Process

FDM 111.3: *Revised section to incorporate the use of BIM files.*

FDM 111.4: *Revised to provide more detailed guidance for incorporating Technical Special Provisions and Modified Special Provisions.*

FDM 111.5: *Revised language for Pay Items and Summary of Quantities for clarity.*

FDM 111.7.2.1: *Deleted section title and included the language under* ***FDM 111.7.2.***

FDM Table 111.7.1: *Added: 1) Project Design Variation Memo, 2) Lighting Agency Coordination, and 3) Revise Lane Elimination to Lane Repurposing*

FDM 112: Update Engineering Process

FDM 112: *Revised language to incorporate use of BIM files.*

FDM 113: Right of Way Requirements - No Revisions

FDM 114: Resurfacing, Restoration, and Rehabilitation (RRR) - No Revisions

FDM 115: Standard Plans and Standard Specifications - No Revisions

FDM 116: Alternate Intersection and Interchange Review

FDM 116: *Changed chapter name from "Roundabout Evaluation" to "Alternative Intersection and Interchange Review".*

FDM 116.1: *Revised for Alternative Intersection reviews.*

FDM 117: Monitor Existing Structures

FDM 117.1: *Revised language for clarity of lump sum pay items for Monitor Existing Structures.*

FDM 117.2.2: *Revised language for clarity on limits for monitoring existing structures.*

FDM 117.3: *Revised language for clarity of lump sum pay items for Monitor Existing Structures.*

FDM 117.4: *Revised language for clarity of lump sum pay items for Monitor Existing Structures.*

FDM 120: Design Submittals

FDM 120.1: *Revised language to include component plans and BIM files in plans phase submittals.*

FDM 120.2.3: *Extensive revisions to clarify requirements for Typical Section Package.*

FDM 120.2.7: *Revised language to clarify when pavement design package should be completed.*

Exhibits 120-1 to 120-4: *Added Target Speed and Context Classification; Other minor revisions.*

FDM 121: Bridge Project Development

FDM 121.3.2(3): *Added bridges with auger cast piles. Auger cast piles need to be reviewed at Central Office due to the Department's limited experience, lingering design and constructability concerns, and the developmental status of the specification.*

FDM 121.3.2(4): *Clarified language for Category 2 structure classifications for components using Fiber Reinforced Polymer (FRP) materials.*

FDM 121.9: *Revised language to clarify the scope of work necessary to prepare a BDR. These revisions were initiated by suggestions from the Design Streamline Task Team to appropriately focus on the most cost-effective, feasible and practical structural solution without preceding with an unnecessarily elaborate BDR comparing and analyzing various structural alternatives. Deleted language referencing outdated training. Deleted duplicate language. Other minor clarifications.*

FDM 121.12: *Clarified requirements for Independent Peer Review of Bridges*

FDM 121.13: *Section significantly improved to specify requirements and guidelines for the assembly of plans and calculations. These changes were proposed by the SDO Plans Review Group.*

FDM 121.17: *Delete the first paragraph because it is a duplicate of requirements already in SDG 1.7.A.*

FDM 122: Design Exceptions and Design Variations

FDM 122.1: *Added reference to* ***FDM 114.1.1*** *to clarify required District Director level approval for RRR projects when certain types of work are excluded.*

FDM 122.2.2: *Changes reviewed and approved through Roadway Design Bulletin 21-06. No need for further review.*

FDM 122.3.1: *New section added to clarify when Design Variations and Exceptions should be approved.*

FDM 122.4: *Added Target Speed to item (4)(b). Other changes reviewed and approved through Roadway Design Bulletin 21-06. No need for further review.*

FDM 122.5: *Updated to adopt the 2016 edition of AASHTO's A Policy on Design Standards Interstate System.*

FDM 122.6: *Clarified when the crash analyses should be performed.*

FDM 122.6.1: *Clarified the methodology for the Historical Crash Method.*

FDM Table 122.6.1: *Updated crash costs based on revised data from the State Safety Office.*

FDM Table 122.6.2: *Updated crash costs based on revised data from the State Safety Office.*

FDM Table 122.6.4: *Updated dates for analysis years. Crash distributions did not change.*

FDM 122.7.4: *Removed delegation of authority for approval of Design Exceptions and Variations to the Turnpike Design Engineer. Other changes reviewed and approved through Roadway Design Bulletin 21-06. No need for further review.*

FDM Table 122.7.1: *Minor clarification on Design Exception for Bridges. Other changes reviewed and approved through Roadway Design Bulletin 21-06 and Office of Design Bulletin 21-02. No need for further review.*

FDM 123: Engineering Design Estimate Process - No revisions

FDM 124: QA/QC Management Plan

FDM 124: *Significant revisions including new* ***Figure 124.4.1*** *to the QA/QC Management Plan process to accommodate the use of BIM files.*

FDM 125: Quality Assurance - ***125.3.1.3:*** *Added FHWA as a reviewing party to the QAR Plan Adoption.*

FDM 126: Lane Repurposing Projects

FDM 126.3.1: *Added "Safety" to the list of offices in the District Review Team for Item (3).*

FDM 127: Community Aesthetic Features - No Revisions

FDM 128: Federal Aid Project Certification - No Revisions

FDM 130: Signing and Sealing Documents

FDM 130: *Revised to incorporate the use of BIM files.*

FDM 130.3.2: *Deleted requirements for manual signing and sealing.*

FDM 130.4: *Added new section for signing and sealing BIM files.*

FDM 131: Plans Processing

FDM 131.2.2.1: *Added new section for PS&E Package Transmittal Memo.*

FDM 131.4: *Relocated language from* ***FDM 132*** *without changes.*

FDM 132: ~~Plan Revisions~~ PS&E Submittal Package Revisions

FDM 132: *Changed title of Chapter to "PS&E Submittal Package Revisions".*

FDM 132: *Entire chapter revised for clearer detail. File naming convention examples added.*

FDM 132.4: *EQ Report revision information added. Statement regarding no AASHTOWare Preconstruction Proposal control of projects ten days before the Advertisement is to give the Contracts Office time to prepare the bid files.*

FDM 133: Retention of Electronic Documents - No Revisions

FDM 140: Lump Sum Projects

FDM 140.4: *This update is to clarify that a duplicate Lump Sum (LS) project and proposal with items and quantities are required for LS projects/proposals. The old language ("cooperative effort of the designer in providing data in an electronic spreadsheet or other means acceptable to the District Estimates Office") did not represent our current requirement of having the items and quantities in duplicate projects and proposals in AASHTOWare Preconstruction (PrP).*

FDM 150: Consultant Priority Matrices

FDM 150: *New Chapter to address post design responsibilities for the Engineer of Record. This language has gone through Central Office and District Review.*

FDM 151: Plans Revisions

FDM 151: *New Chapter with existing information moved from Sections* ***FDM 132.3*** *and* ***132.4****.*

FDM 151.1 (3): *Revised language only require clouding for the latest revisions. This was requested by the Turnpike.*

FDM 152: Shop Drawing Submittals

FDM 152: *Relocated from former* ***FDM 267*** *to fall under Post Design Services. No revisions made.*

Part 2:

FDM 200: Context Based Design- No Revisions

FDM 201: Design Controls

FDM 201: *Changes reviewed and approved through Roadway Design Bulletin 21-08 (Use of Target Speed to Select Project Design Speed). No need for further review.*

FDM Table 201.5.1: *Revised the design speed range for Context Classification C4 to minimize the impacts of Target Speed implementation on existing roadways with posted speeds of 25 mph.*

FDM 201.5.3: *Revised language in the fifth paragraph after the release of RDB 21-08. Clarified that Target Speed must be included in the Typical Section Package. Clarified that the Design Speed may be different than the Design Speed used in the original design.*

FDM 202: Speed Management

FDM 202.2.1: *Revised to make Target Speed information consistent with* ***FDM 201*** *revisions.*

FDM 202.3.8: *Simplified language recommending coordination with emergency services when deflection is considered. Added reference to new* ***Developmental Standard Plans*** *for raised crosswalks.*

FDM Table 202.3.1: *Deleted references to Textured Surface throughout the table and revised the Strategies language for C1 and C2 to indicate that speed management is not used on high-speed roadways.*

FDM 210: Arterials and Collectors

FDM 210.2: *Added reference to* ***FDM 202*** *for speed management information regarding lane widths.*

FDM Table 210.3.1: *Added Note to explain the intent of "N/A" in the table.*

FDM 210.3.2: *Added reference to* ***FDM 202*** *for speed management information regarding islands.*

FDM 210.3.2.2: *Added Commentary for hardened centerlines and median islands at intersections.*

FDM 210.3.2.3: *Added reference to* ***FDM 222*** *for more information on pedestrian facilities; defined low-growing landscaping; added Commentary.*

FDM 210.3.3: *Added reference to* ***FDM 222*** *for more information on pedestrian facilities.*

FDM 210.4: *Created a new paragraph and commentary for the paved shoulder requirements from Note 3 of Table 210.4.1 and changed the paved shoulder width from 7 to 8 feet due to ride quality issues created by construction techniques for paved flush shoulders between 5 and 8 feet wide.*

FDM Table 210.4.1: *Modified table to require a 4-foot inside shoulder (2-foot minimum for RRR projects) on divided arterials and Removed Note 3.*

FDM Table 210.7.1: *Added Note to explain the intent of "N/A" in the table.*

FDM 210.9.2: *Revised the allowable superelevation rate for existing curves on low-speed roadways to be consistent with RRR cross slope criteria.*

FDM Table 210.10.1: *Added Note to explain the intent of "N/A" in the table.*

FDM 211: Limited Access Facilities

FDM 211.1: *Added references to* ***FDOT Managed Lanes Guidebook.***

FDM 211.5: *Deleted repetitive language and referred to* ***FDM 210.6*** *so the language will not be repeated.*

FDM 211.13: *Additional criteria added to provide guidance in determining the deceleration length for exit ramp terminals on limited access facilities.*

FDM Figure 211.4.4: *Added gore striping to entrance and exit ramps.*

FDM Figure 211.13.1: *Added gore striping to entrance ramp.*

FDM Figures 211.13.2 and 211.13.3: *Added new figures for typical taper type exit terminals.*

FDM Figures 211.13.4 and 211.13.5: *Added new figures for typical parallel type exit terminals.*

FDM Exhibit 211.7: *Added gore striping to entrance ramps and deleted "solid white stripe" labels.*

FDM Exhibit 211.8: *Added gore striping to exit ramps and deleted "solid white stripe" label.*

FDM 212: Intersections

FDM 212: *Clarified "urbanized" Context Classifications as C2T, C3C, C4, C5 and C6; Clarified "rural" Context Classifications as C1, C2, and C3R.*

FDM Table 212.12.1: *Added missing data from 2011 AASHTO Greenbook.*

FDM 212.12.1: *Added/modified language and* ***Figure 212.12.2*** *to incorporate "effective turning radii" where a bike lane or parking lane is present; Modified* ***FDM Table 212.12.3*** *accordingly.*

FDM 213: Roundabouts

FDM 213.2: *Added reference to Traffic Analysis Handbook for more information on HCS and SIDRA base on recommendation from Systems Planning.*

FDM 213.3: *Language strengthened regarding tangent segments between reverse curves; a range of 50 feet (desirable), to 25 feet (minimum) is now also provided.*

FDM Exhibit 213-1: *Revised roundabout geometry to an offset left design and added striped out medians for all four approaching roads.*

FDM Exhibit 213-2: *Corrected minor labeling error.*

FDM Exhibit 213-3: *Revised roundabout geometry to an offset left design.*

FDM Exhibit 213-4: *Changed roundabout geometry to an offset left design and revised bypass lane geometry.*

FDM Exhibit 213-5: *Revised roundabout geometry to an offset left design and added 20 ft. wide striped out medians for all four approaching roads.*

FDM 214: Driveways

FDM 214.2: *Added to the list of items to consider in determining the type of driveway needed.*

FDM 214.4.1: *Added language and Commentary to better accommodate pedestrians and bicyclists at driveways.*

FDM 214.7: *Added language and Commentary to improve driveway crossing widths for pedestrian facilities where possible.*

FDM 215: Roadside Safety

FDM 215.2.6: *Moved language in the third paragraph to* ***FDM 262****. Included references to new location.*

FDM 215.3.3: *Clarified item (2) is for flush shoulder and high-speed curbed roadways; Added reference to* ***FDM 224.15****.*

FDM Figure 215.3.3: *Clarified this figure is for "Low-Speed" curbed roadways.*

FDM 215.4.1.4: *Updated crash test reference to MASH for Low Profile and Type K barriers.*

FDM 215.4.3: *With the implementation of MASH, Crash Cushions are no longer categorized by design speed. Deleted design speed from crash cushion classification determination.*

FDM 215.4.5.4: *Section rewritten, and* ***Figure 215.4.5*** *replaced, to coordinate with re-write of* ***Structures Design Guidelines 2.6*** for Pier Protection.

FDM 215.4.9.1: *New Section added to clarify requirements for shielding hazards in Work Zones on RRR projects.*

FDM 216: Earthwork

FDM 216: *Major revisions throughout the entire chapter to align criteria with current practices and Specification changes implemented in July 2021.*

FDM Figures 216.4.1 thru 216.4.5: *Added new figures to illustrates cut and fill limits and details in the revised chapter.*

FDM Figures 216.4.8: *Added new example for excavation and embankment calculations in areas where subsoil is removed.*

FDM D217: Diverging Diamond Interchanges - No Revisions

FDM 220: Railroads

FDM 220.2.1.1: *Changes reviewed and approved through Office of Design Bulletin (ODB) 21-02 (Railroad At-Grade Crossings: Signing and Pavement Markings). No need to further review.*

FDM 220.2.1.1(9): *Item (9) added after the release of ODB 21-02 to promote consideration to extend RDE markings beyond railroad gates to reduce potential for errant stops at the RDE envelope instead of the stop bar. Errant stop at the RDE envelope may result in the gate closing on top of errant vehicle.*

FDM 220.2.1.1 (under "Consider the following additional provisions for Active and Passive Grade Crossings"): *Last bullet added after the release of ODB 21-02 to ensure placement of signs allow a clear sight line to all rail signal flasher units.*

FDM 221: Utilities - No Revisions

FDM 222: Pedestrian Facilities

FDM 222.2.1.1: *Added reference to* ***FDM 214*** *for information on sidewalks across driveways.*

FDM 222.2.2: *Added language to provide curb ramps to be the same width as the sidewalk where practicable.*

FDM 222.2.2.1: *Added reference to* ***FDM 214*** *for information on pedestrian accommodations at driveways.*

FDM 222.2.3: *Significant revisions to entire section. Expanded use of special emphasis crosswalks to all locations except stop-controlled intersections. Improved coordination with language contained in* ***Traffic Engineering Manual (TEM), Section 5.2****.*

FDM 222.2.6: *Added requirement to consider the use of curb extensions in conjunction with on-street parking. The FDM previously only stated they may be used; Added consideration for emergency vehicles and commercial trucks.*

FDM 222.4: *Clarified the intent that bicycle height (42”) railings are not required where traffic railings separate the vehicular traffic from the pedestrian or bicycle facility.*

FDM 223: Bicycle Facilities

FDM 223.2.1.1: *Clarified that the 7-foot buffered bike lane is only the standard when a bicycle lane has been selected as the bicycle facility. This is to support the implementation of separated bicycle lanes and shared use paths where appropriate.*

FDM 223.2.1.5: *The Department uses keyhole lanes and bicycle boxes (intersection and two-stage) can still be used with keyhole lanes; Clarified that two-stage boxes can only be used in conjunction with a bicycle lane.*

FDM 223.2.2.1: *Removed prohibition on placing bicycle lane signs on flush shoulder roadways, to allow provision of bicycle signs when the shoulder is a "marked shoulder" marked with a bicycle lane symbol.*

FDM 223.2.3: *Clarified that a Design Variation is required for signs placed within the horizontal and vertical clearance envelope of a shared use path or the roadway lateral offset.*

FDM 224: Shared Use Paths

FDM 224: *Significant revisions throughout the entire chapter to incorporate new design criteria for Urban Side Paths, which is a shared use path in urban context classifications. The intent is to allow for shared use path geometrics accounting for the slower traveling speeds in the urban context. Reduced design speeds, smaller recovery and horizontal clearance widths, and other associated criteria are provided to allow installation of low-speed urban side paths within a smaller R/W, compared to conventional shared use paths. Supports Safety Vital Few efforts to provide additional separated bike facilities. Close review of this proposed new facility type is appreciated.*

FDM 225: Public Transit Facilities - No Revisions

FDM 226: Patterned Pavement and Architectural Pavers - No Revisions

FDM 227: Freight - Under Development

FDM 228: Landscape Design - No Revisions

FDM 229: Selective Clearing and Grubbing - No Revisions

FDM 230: Signing and Pavement Marking

FDM 230.1: *Added language relocated from* ***FDM 230.3****. The requirements are the same for both signs and pavement markings.*

FDM 230.2.5: *Added Shoulder Use Signs to list of permanent signs allowed on median traffic barriers for consistency with* ***FDM 215****.*

FDM 230.2.12: *Added criteria to support existing Figure for signing and pavement markings on Florida National Scenic Trails.*

FDM 230.3: *Relocated first paragraph to* ***FDM 230.1*** *as described above.*

FDM Figure 230.3.1: *Changes reviewed and approved through Roadway Design Bulletin (RDB) 21-07 (Wrong-Way Driving Countermeasures for Arterials and Collectors). No need for further review.*

FDM 230.3.1.3: *Removed "Roundabout Informational Markings" from list (there is no such thing); Changes to Item (2) ("Lane-Use Arrows, Wrong-Way Arrows…") was reviewed and approved through RDB 21-07; Removed redundant Item (4) which should have been deleted with RDB 21-07; Added allowance for black contrast markings for crosswalks and stop bars on concrete pavement.*

FDM 230.3.3: *Added last paragraph to support Vital Few Safety initiatives and to clarify when a no passing zone study should be performed on RRR projects.*

FDM 230.3.4: *Changes reviewed and approved through RDB 21-07. No need for further review.*

FDM 230.3.6: *Changes reviewed and approved through RDB 21-07. No need for further review.*

FDM Exhibit 230-14: *Renumbered due to the new exhibits added for wrong way driving from RDB 21-07. The old exhibit number was* ***Exhibit 230-5****. Also, incorporated pavement markings* ***from Standard Plans, Index 711-001*** *into this exhibit and revised the figure.*

FDM Exhibit 230-15: *Added new exhibit for the* ***FDM****. Relocated figures and pavement markings from* ***Standard Plans, Index 711-001*** *and updated the exhibit to reflect current criteria and guidance. Revised turn lane-use arrows and message spacings for right turn lanes.*

FDM 231: Lighting

***FDM 231:** General clarifications were made throughout this chapter based on meeting discussions with district lighting experts. The substantial changes are as follows.*

***FDM 231.1.1:** Added this new section to explain LED luminaire design, selection, and plans content process.*

***Table 231.2.1:** Added illumination values to address more conditions, including unsignalized intersections. Midblock crosswalk values adjusted lower. Added clarifying notes at bottom.*

***FDM 231.2.1:** Redeveloped environmental lighting policy to provide clarification of responsible parties along with requirements for general wildlife areas of concern and GIS buffer areas for sea turtles.*

***FDM 231.3.2:** Divided intersection information into different sections for signalized intersections and unsignalized intersections. Added extensive clarifications for 'Intersection Lighting Retrofit' purpose and inclusions. Provided all-new guidance for unsignalized intersections.*

***FDM 231.6:** Added requirement for a new "Lighting Agency Coordination" document (at the request of District lighting experts). It is a mechanism to begin and record coordination efforts prior to Lighting Plans development.*

***FDM 213.7:** Removed requirement for Lighting Design Analysis Report (LDAR) to include analysis of 3 light pole layout alternatives. Instead, added new requirement to explain benefit-decision of 3 luminaire model alternatives.*

FDM 232: Signalization - No Revisions

FDM 233: ITS

FDM 233: *A few minor revisions throughout to clean up duplicate information in Specifications and to align with Pay Item naming convention.*

FDM 233.4.2: *Changes reviewed and approved through Roadway Design Bulletin (RDB) 21-10 (Requirements for ITS Locators). Language revised based upon FHWA comments.*

FDM 233.4.3: *Changes reviewed and approved through Roadway Design Bulletin (RDB) 21-10 (Requirements for ITS Locators). Language revised based upon FHWA comments.*

FDM 240: TMP

FDM 240.2.1.6: *Added list common uses for lane closures to include and highlight possible cases for bicycle and pedestrian accommodations; Revised last sentence to clarify purpose of referenced* ***FDM 241****.*

FDM 240.2.1.8: *Removed "ridable shoulder" (not needed).*

FDM 240.2.1.9: *Clarified intent for consideration of lane closure to accommodate non-motorized traffic; Clarified intent for ridable paved shoulder in item "iv."; Added language to support allowable flagging operations for bicyclists in shoulders. Training for flaggers show scenario for two-lane, two-way roadways; Clarified that any temporary midblock crossing must meet criteria for permanent midblock crossings.*

FDM 240.2.2.12: *Deleted language that was moved into the Standard Plans. Reference to the Standard Plan added to reduce duplication.*

FDM 240.2.2.15: *Clarified the Temporary Highway Lighting optional usage policy. Provided the reference to new guidance for plans content in* ***FDM 326****.*

FDM 241: Lane Closure Analysis

FDM 241.1: *Deleted duplicate language contained in* ***FDM 240****. Corrected reference to* ***FDM 240*** *(no need to drill too deep with subsections).*

FDM 242: Traffic Pacing - No Revisions

FDM 243: Portable Changeable Message Signs - No Major Revisions

FDM 250: Hydraulic Data and Agency Reports - No Revisions

FDM 251: SWPPP Development - No Revisions

FDM 260: Bridge Structures

FDM 260.8.1: *Revisions made to bridge vertical clearance above the splash zone for consistency with* ***Structures Design Guidelines (SDG) Figure 1.3.3-1****,* ***SDG 1.4.3****, and* ***SDG 4.3.1.A****.*

FDM 261: Structural Supports

FDM 261.1: *Clarified language regarding dimensional limitations for sign and signal structure supports. There have been inconsistencies in how these limits were interpreted. Some believed the limits were only applicable for the Standard Plans. The limits are for both standard designs and project-specific designs. Design Variations will be needed if these limits are exceeded.*

FDM 261.7: *Added language for consistency with* ***Roadway Design Bulletin 20-08*** *and the* ***Traffic Engineering Manual*** *regarding the addition of flexible backplates to existing mast arms and span wires.*

FDM 262: Retaining Walls

FDM 262.1: *Added language relocated from* ***FDM 215.2.6*** *to address maintenance issues. The language is more visible to retaining wall designers in this location.*

FDM 263: Geosynthetic Design - No Revisions

FDM 264: Noise Walls and Perimeter Walls - No Revisions

FDM 265: Reinforced Concrete Box and Three-Sided Culverts

FDM 265: *Revised gap filler between adjacent precast culverts from Class I Concrete to Class NS Concrete. Class I is no longer being used.*

FDM 266: Bicycle and Pedestrian Bridges - No Revisions

FDM 267: 267 is now FDM 152 - Deleted

Part 3:

FDM 300: Production of Plans

FDM 300.1: *Added restrictions on Consultant's business logos from the Office of Design Memo 13-02.*

FDM 301: Sequence of Plans Preparation

FDM 301.2.2: *Added station and offset for pedestrian signals.*

FDM 301.3.3**:** *Added station and offset for pedestrian signals.*

FDM 302: Key Sheet

FDM 302.1: *Revised language to be consistent with the CADD documents.*

FDM 302.2: *Added language indicating that "(Federal Funds)" is not to be added to a state-led strung project.*

FDM 302.4: *Deleted the MicroStation (*.dgn) format option for county maps to be consistent with the FDOTConnect Training Guide.*

FDM 302.7: *Added phone number to list of items to appear on the key sheet.*

FDM 302.11: *Added project numbers for projects without plan sets to be placed on the lead component Key Sheets for strung projects.*

FDM 303: Signature Sheet - No Revisions

FDM 304: Summary of Pay Item - No Major Revisions

FDM 305: Drainage Map and Bridge Hydraulic Recommendation Sheet - No Revisions

FDM 306: Typical Sections

FDM 306.4: *Added Context Classification to the list of required information under traffic data.*

FDM Exhibits 306 – 1: *Updated pavement design to reflect changes to the list of available Type SP Structural Course asphalt. Revised pavement design to remove unnecessary words.* Added a Context Classification under the traffic Data.

FDM Exhibits 306 – 2: *Updated pavement design to reflect the changes to the list of available Type SP Structural Course asphalt. Revised pavement design to remove unnecessary words.* Added a Context Classification under the traffic Data.

FDM Exhibits 306 – 3: *Revised pavement design to remove unnecessary words.* Added a Context Classification under the traffic Data.

FDM Exhibits 306 – 4: Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 5: Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 6: Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 7: Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 8: *Updated pavement design to reflect changes to the list of available Type SP Structural Course asphalt.* Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 9: Added a Context Classification under the traffic Data.

FDM Exhibits 306 – 10A: *Updated pavement design to reflect changes to the list of available Type SP Structural Course asphalt.* Added a Context Classification under the traffic Data. *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 10B: *Updated pavement design to reflect changes to the list of available Type SP Structural Course asphalt. Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 11: *Revised pavement design to remove unnecessary words.*

FDM Exhibits 306 – 12: *Revised pavement design to remove unnecessary words.*

FDM 307: Summary of Quantities - No Major Revisions

FDM 308: Summary of Drainage Structures and Optional Materials Tabulation - No Revisions

FDM 309: Project Layout - No Revisions

FDM 310: Project Control - No Major Revisions

FDM 311: General Notes - No Revisions

FDM 312: Roadway Plan-Profile - No Major Revisions

FDM 313: Special Profiles - No Revisions

FDM 314: Intersection/Interchange Details - No Revisions

FDM 315: Drainage Structures - No Revisions

FDM 316: Stormwater Facilities - No Revisions

FDM 317: Special Details - No Revisions

FDM 318: Soil Survey - No Revisions

FDM 319: Cross Sections - No Revisions

FDM 320: SWPPP - No Revisions

FDM 321: *Temporary Traffic Control Plans*

FDM 321.1: *Added "Temporary Highway Lighting Plans" to the list of items that may be included in the Temporary Traffic Control Plans (TTCP). (Optional)*

FDM 322: Utility Adjustments

FDM 322.2: *Updated information to be provided for existing utilities in the plans. Added plan requirements from the Traffic Engineering and Operations Bulletin 21-05 for Department-owned subsurface communication lines.*

FDM 323: Selective Clearing and Grubbing - No Revisions

FDM 324: Miscellaneous Structures Plans - No Major Revisions

FDM 325: Signing and Pavement Markings - No Revisions

FDM 326: Lighting Plans

FDM 326.6: *Added new requirements for defining the make, model, and properties of the design luminaire in the plan view legend.*

FDM 326.10: *Added new section for Temporary Highway Lighting Plan content requirements for cases where such lighting is used (optional). Note: Project-specific Pay Item & CO review guidance no longer required.*

FDM 327: Signalization Plans

FDM 327.6.1: *Revised item (10) to include requirements for pedestrian signal station and offset as well as a reference the Standard Plans Index for pedestrian detector location and orientation.*

FDM 328: Intelligent Transportation Systems Plans

FDM 328.1: *Added FDOT Fiber optic requirements from the Traffic Engineering and Operations Bulletin 21-05. Language revised based upon FHWA comments.*

FDM 328.5: *Revised the General Notes list. Added contact information for the fiber optic cable route marker label to the list.*

FDM 329: Landscape Plans - No Revisions

FDM 330: UWHC Plans - No Revisions

Part 9:

FDM 900: NexGen Plans

FDM 900.1: *Revised language to reflect Production Support Memo 21-02 and updated plans production. Added restrictions on Consultant's business logos from the Office of Design Memo 13-02.*

FDM 901: Sequence of Plans

FDM 901.2.2: *Revised list of work for Phase II submittal to include the model development in the BIM.zip files and added station and offsets for pedestrian signals on the signalization plan sheet.*

FDM 901.2.3: *Added BIM.zip file and the Estimate of Quantities Report for Phase III submittal requirements. Revised list of work to be done during Phase III to include the BIM manifest on the Signature Sheet and confirming the project limits are consistent with the Work Program Administration (WPA) system.*

FDM 901.2.4: *Added BIM.zip file for Phase IV submittal requirements. Revised list of work to be done during Phase III to include updating the BIM manifest on the Signature Sheet and deleted the update to the WPA system.*

FDM 901.2.5: *Revised requirements for BIM zip file. Included information and calculations for Total Roadway Length, Total Bridge Length, and Total Project Length.*

FDM 902: Estimated Quantities Report

FDM 902: *Revised to require the Estimated Quantities Report for projects being produced in OpenRoads Designer that began design prior to January 2021.*

FDM 902.1: *Minor revisions to this section.*

FDM 905: Cross Sections - No Revisions

FDM 911: Model Management - No Revisions

FDM 915: Roadway Plan-Profile Sheet – No Major Revisions

FDM 916: Drainage Structures Sheet - No Revisions

FDM 917: Stormwater Facilities RDB 21-02

FDM 918: Drainage Map - No Revisions