



Florida Department of Transportation

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KEVIN J. THIBAUT, P.E.
SECRETARY

MEMORANDUM

DATE: January 30, 2019
FROM: Patrick Muench, P.E., Turnpike District Design Engineer
SUBJECT: 2019 Turnpike Criteria Documents

This memorandum announces the 2019 release of three (3) Turnpike design criteria documents:

- ***Turnpike Design Handbook (TDH)***
Available on the Turnpike Design website:
<http://floridasturnpike.com/design/tdh.html>
- ***Turnpike Supplement to the FDOT Drainage Manual***
Available on the Turnpike Design website:
<http://floridasturnpike.com/design/docsandpubs.html>
- ***Turnpike Supplement to the FDOT Structures Manual***
Available on the Turnpike Design website:
<http://floridasturnpike.com/design/docsandpubs.html>

IMPLEMENTATION

These documents and associated criteria are effective on projects beginning design on or after January 30, 2019 and on projects currently in the design phase where implementation will not adversely impact production schedules as determined by the Turnpike Project Manager and Turnpike Design Engineer.

REQUIREMENTS

The major changes in Turnpike design requirements are listed below. Other changes consist of formatting, minor editing, and updated references.

Turnpike Design Handbook (TDH)

110.2 Initial Engineering Design

Hydroplaning analysis criteria added.

111.7 Project Documentation

Project documentation submittal criteria added.

120.2.3.1 Approval Process

Typical section package criteria added.

120.2.6.1 Turnpike Preliminary Traffic Control Plan

Speed reduction request criteria added.

120.2.7.1 Turnpike Pavement Design Submittals

Pavement design submittal criteria modified.

122 Design Exceptions and Design Variations

Criteria language modified.

124.4.1 Quality Goals and General Requirements & Exhibit 124-6 Field Review Log

Field review documentation criteria added.

124.4.2.2 Quality Control Tracking Stamp Requirements

Quality Control Tracking Stamp criteria modified.

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Quality Control Tracking Stamp criteria modified.

131 Plans Processing

Plan revision language relocated to Chapter 132.

132 Plan Revisions

New chapter added.

211.2.3 Hydroplaning Risk Analysis

Hydroplaning analysis report content criteria added.

211.20 Flexible Pavement Design

New section added.

231.2 Design Criteria

Design variation and exception criteria added.

231..2.2 Lighting Load Center and Wiring Criteria

Pull and splice box criteria removed.

231.2.3 Temporary Lighting Criteria

Temporary lighting criteria modified.

231.2.4 Pole Design Criteria

Light pole criteria modified.

231.3 Design Methodology

Photometric calculation criteria added.

231.3.1 Analysis Zones

New section added.

233 Intelligent Transportation Systems (ITS)

Several updates applied throughout entire chapter.

240.4.2.6 Lane Widths

Work zone travel lane width criteria added.

240.4.2.7 Lane Closure Analysis

Lane closure analysis criteria added.

267.3 Contractor Information Required

Language outlining Turnpike's shop drawing review process added.

267.4 Shop Drawings Requiring a Specialty Engineer or Contractor's Engineer of Record

Digital delivery criteria added.

267.11 Shop Drawing Flow Diagrams

Flow charts updated.

319.2 Required Information

Critical cross section design plan requirement added.

322.2 Required Information

Utility adjustment design plan requirement added.

326.6.1 Legend & 326.7.1 Required Information

Lighting infrastructure design plan requirement added.

327.5 General Notes Sheet

Signalization infrastructure design plan requirement added.

328.5 Project Layout Sheet & 328.6 ITS Plan Sheets

ITS infrastructure design plan requirements added.

328.6.1.7 Power Service Details

ITS power service detail plan requirements updated.

Roadway Guide Drawings

- MOT General Notes Guide Drawing: “Special Notes for All Resurfacing Work” note 1 deleted
- Mot General Notes Guide Drawing: “General” notes 5 and 6 updated

Traffic Guide Drawings

- Sheet 101-1: Note 15 deleted
- Sheet 108-4: “Tandem Staging Area” sign panel added

Lighting Guide Drawings

- Sheet 201: Several notes removed or modified
- Sheet 202: Cabinet ground wire added to detail, notes modified, ground rod relocated in riser diagram

CONTACT

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Turnpike Supplement to the FDOT Drainage Manual

3.7.3 Shoulder Gutter

Shoulder gutter criteria added.

Table 4.3 Scour Estimates

Scour estimate analysis criteria added.

5.4.4.2 Detention and Retention Ponds

Maintenance berm criteria added.

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Turnpike Supplement to the FDOT Structures Manual

Volume 1, Sections 1.4.5 and 7.3.1.C

Criteria modified/added for projects with bridge widenings, new structures adjacent to existing structures, repainting of existing steel girders, and cleaning/recoating of existing concrete.

Volume 1, Section 6.7.4.A.2

Widening project criteria added.

Volume 1, Section 7.6.D

Bridge Development Report criteria added.

Volume 2, Section 22.5

Bridge deck inlet criteria added.

Volume 3, Section C 3.8

Structure design life information added.

Volume 3, Sections 18.1 & 18.3

Existing structure evaluation criteria added.

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