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](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](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](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.

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

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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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