

FACERS Annual Meeting

FDOT Updates

Presenter: Derwood Sheppard, P.E.

June 29, 2023



Florida Greenbook



Welcome!



Samantha Samford
FDOT Local Programs Administrator

Partnerships



FDOT

FTBA

FACERS

FBA



Florida Department of Transportation

Florida Transportation Builders, Assn. Inc.

Florida Association of County Engineers
& Road Superintendents

Florida Bicycle Association



Manual of Uniform Minimum Standards for Design,
Construction and Maintenance for Streets and Highways
Commonly known as the *Florida Greenbook*

2023 Florida Greenbook (Draft)



Manual of Uniform Minimum
Standards for Design,
Construction and Maintenance
for Streets and Highways

Commonly known as the
Florida Greenbook

FDOT Office of Design
Topic # 625-000-015

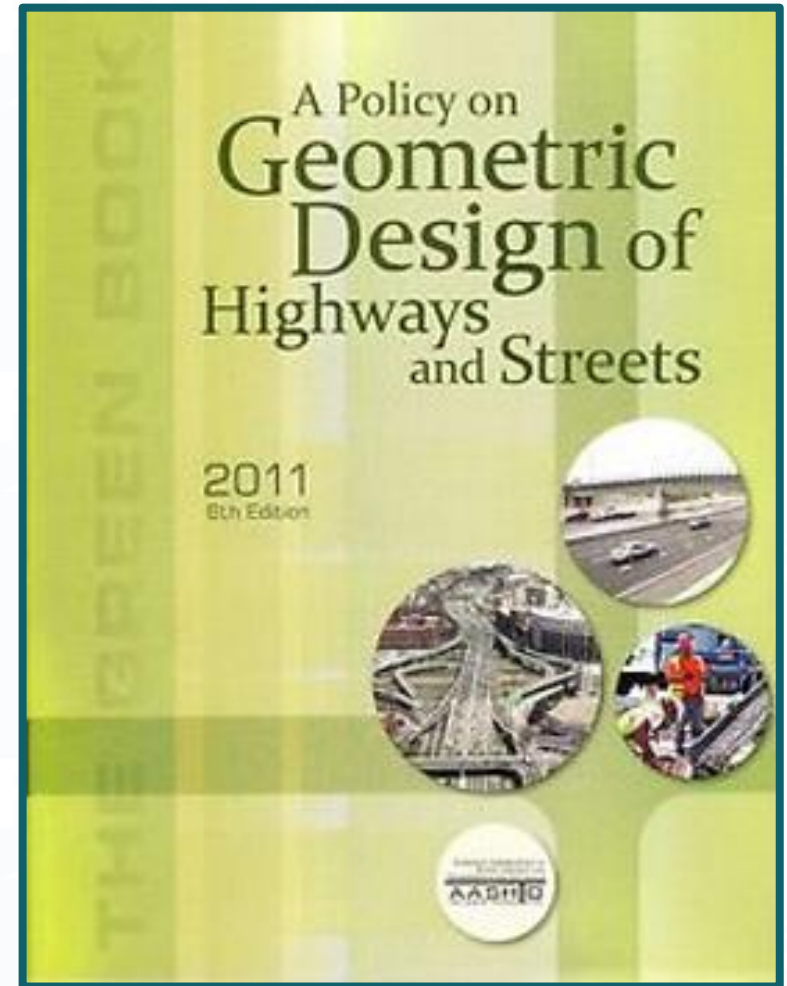
Date of Publication
2023 Edition

Florida Greenbook

2011 AASHTO Green Book



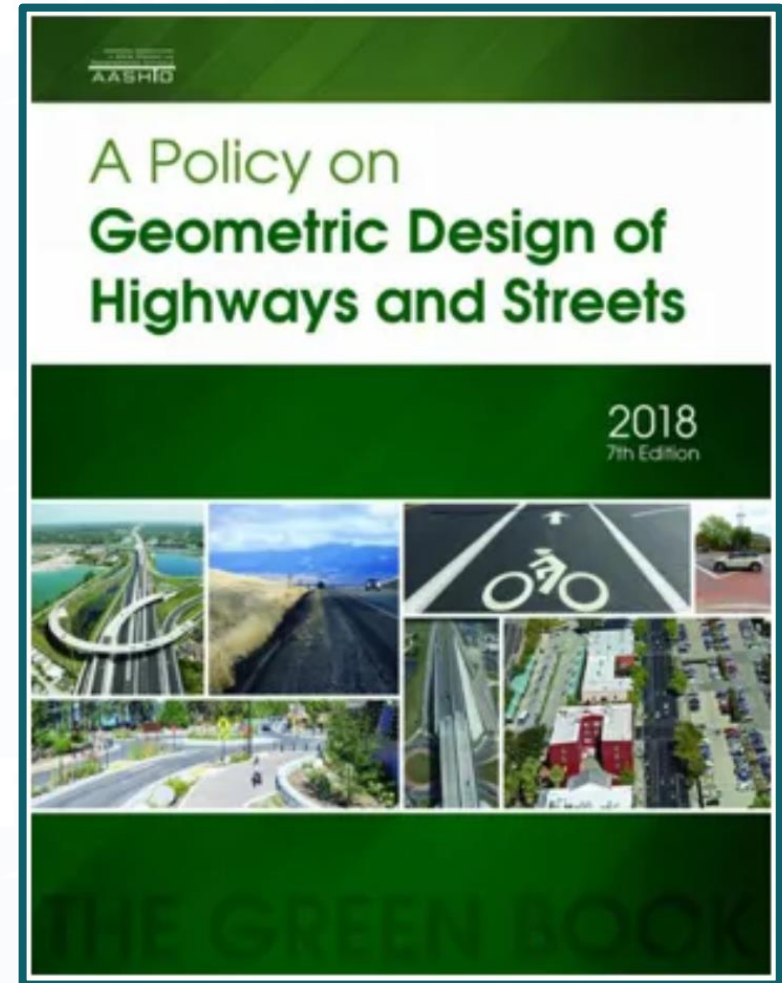
- Effective November 12, 2015
- FHWA published the Final Rule to Title 23, Code of Federal Regulations Part 625



2018 AASHTO Green Book



- Effective February 2, 2023
- FHWA published the Final Rule to Title 23, Code of Federal Regulations Part 625
- Next Update to the Florida Greenbook



Chapter 1 – Planning and Land Development



- Functional and context-based design classification determined by the local government
- Terms rural and urban are based upon population density
- Encouraged to use the same definitions for land areas as in FDOT's Context Classification Guide



Chapter 1 – Planning and Land Development



- Lane Repurposing (ref: [FDOT Lane Repurposing Guidebook, August 2020](#))



Source: SR 810 (Hillsboro Boulevard) Lane Elimination Report

Chapter 1 – Planning and Land Development



- Lane Repurposing

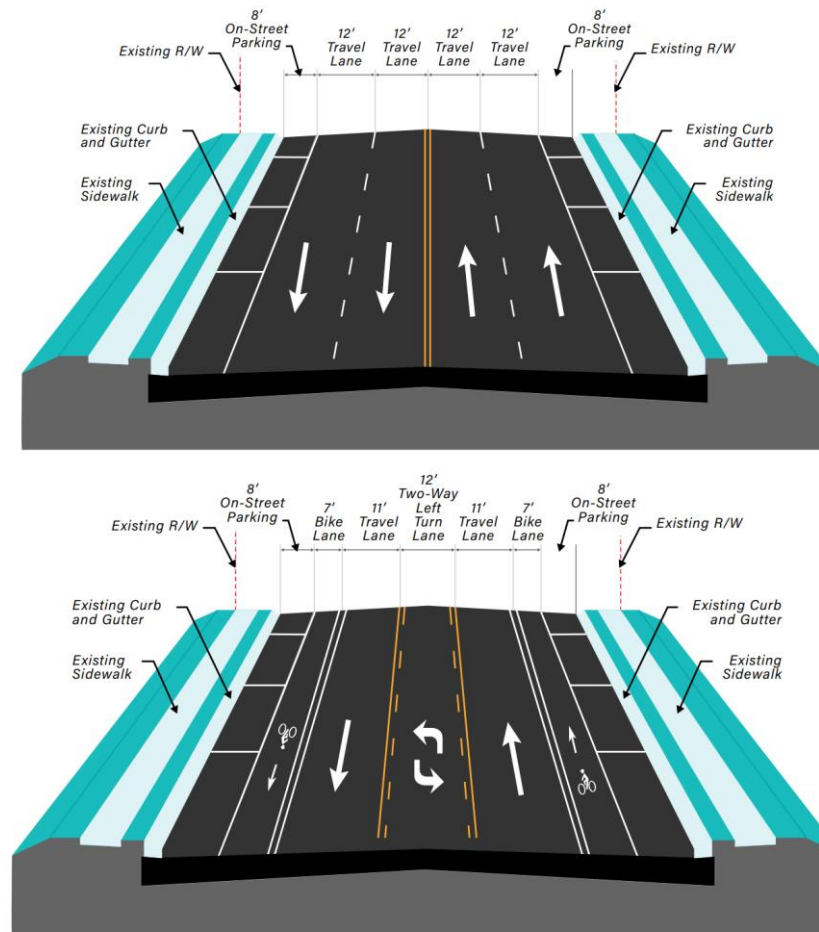


Source: SR 810 (Hillsboro Boulevard) Lane Elimination Report

Chapter 1 – Planning and Land Development



- Lane Repurposing
 - Data Needs
 - Review Teams
 - Reporting
 - Traffic Analysis
 - Safety Analysis
 - Public Involvement



Source: SR 10 (US 90) Lane Elimination Request FPID 439729-1

Chapter 2 – Land Development



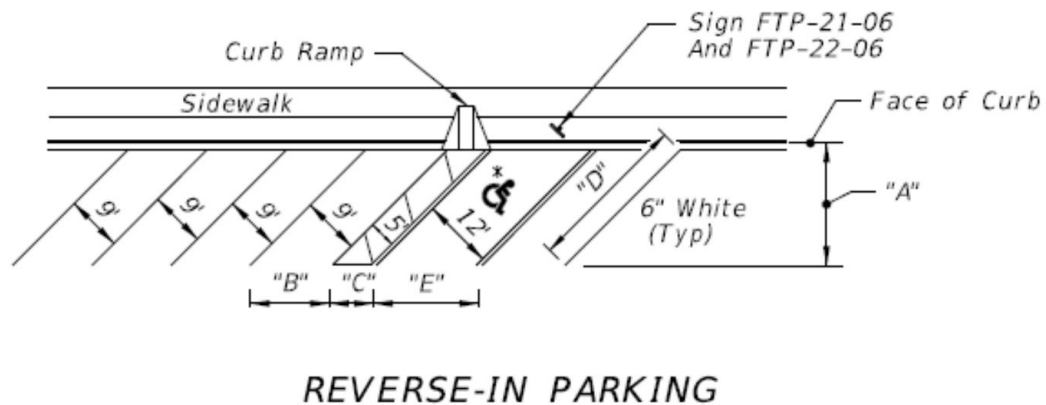
- Merged into Chapter 1 – Planning and Land Development



Chapter 3 – Geometric Design



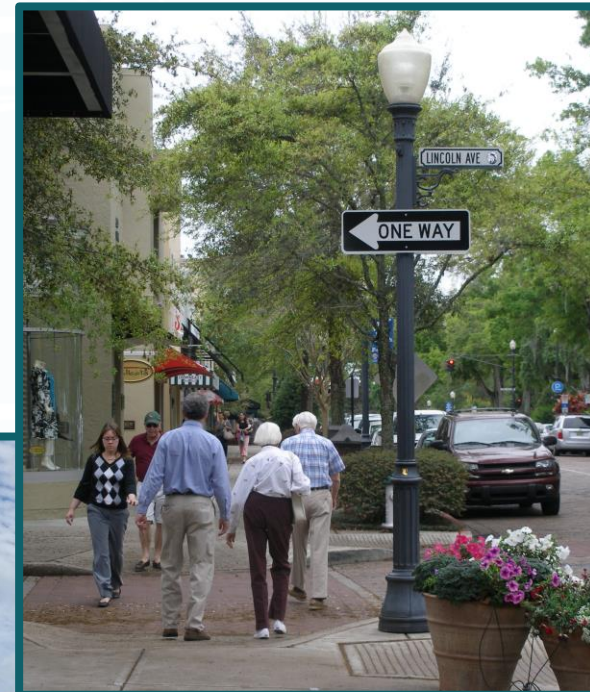
- Parking (On-Street)
 - Parallel Parking Lanes
 - Angle Parking (Forward and Reverse)
 - Parking Restrictions
- Curb Ramp requirements
 - Chapter 8



Chapter 4 – Roadside Design



- Clear Zones Clarification (curbed vs. flush shoulder roadways)
- Lateral Offset
 - Measured from Curb vs Traveled Way
 - Difference from Clear Zone
 - Updated Table 4-2 for ≤ 25 mph
- End Treatments and Crash Cushions
 - Terminology
 - LON Examples
- New *Section G – Roadside Design in Work Zones*
 - *WZ Clear Zone*
 - *Drop-Offs*
 - *Temporary Barriers*



Chapter 6 – Lighting



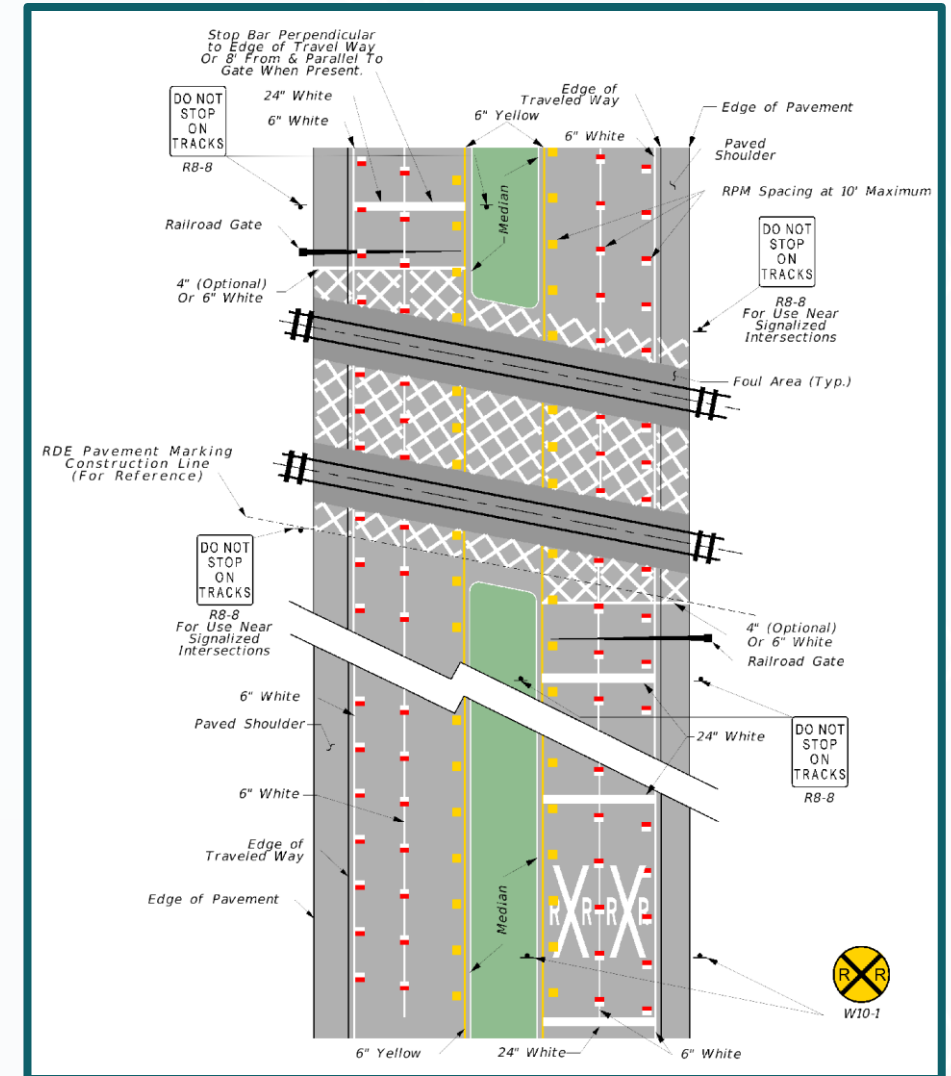
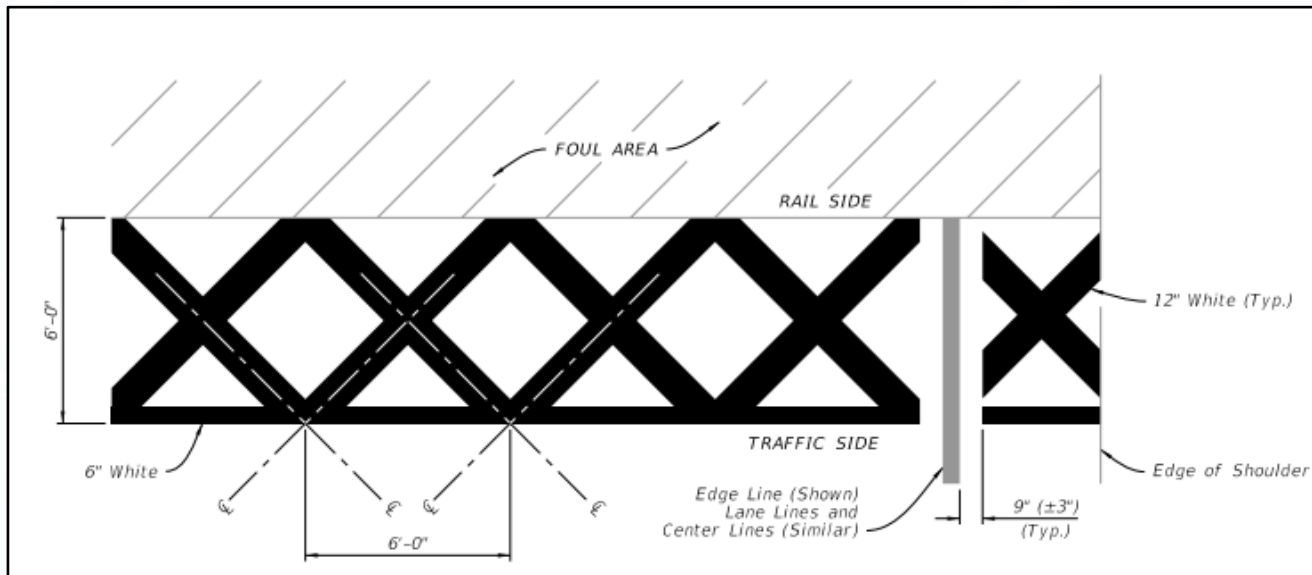
- Wildlife Sensitive Lighting
 - Florida’s Marine Turtle Protection Act (379.2431, F.S.)
 - Model Lighting Ordinance for Marine Turtle Protection Rule (62B-55, F.A.C.)
 - MarineTurtle@MyFWC.com
 - FDOT’s Office of Environmental Management “OEM Resources”
 - FWC’s Sea Turtle Lighting Guidelines website
 - FDOT Standard Specifications, 992-2.4 Luminaires for Wildlife Sensitive Lighting
 - Work Zones in Wildlife Sensitive Areas



Chapter 7 – Rail-Highway Grade Crossings



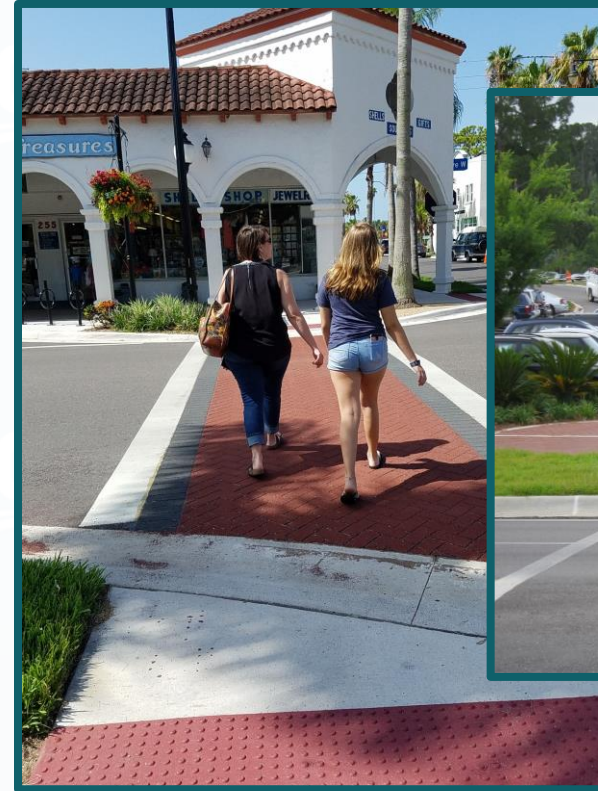
- Railroad Dynamic Envelope



Chapter 8 – Pedestrian Facilities



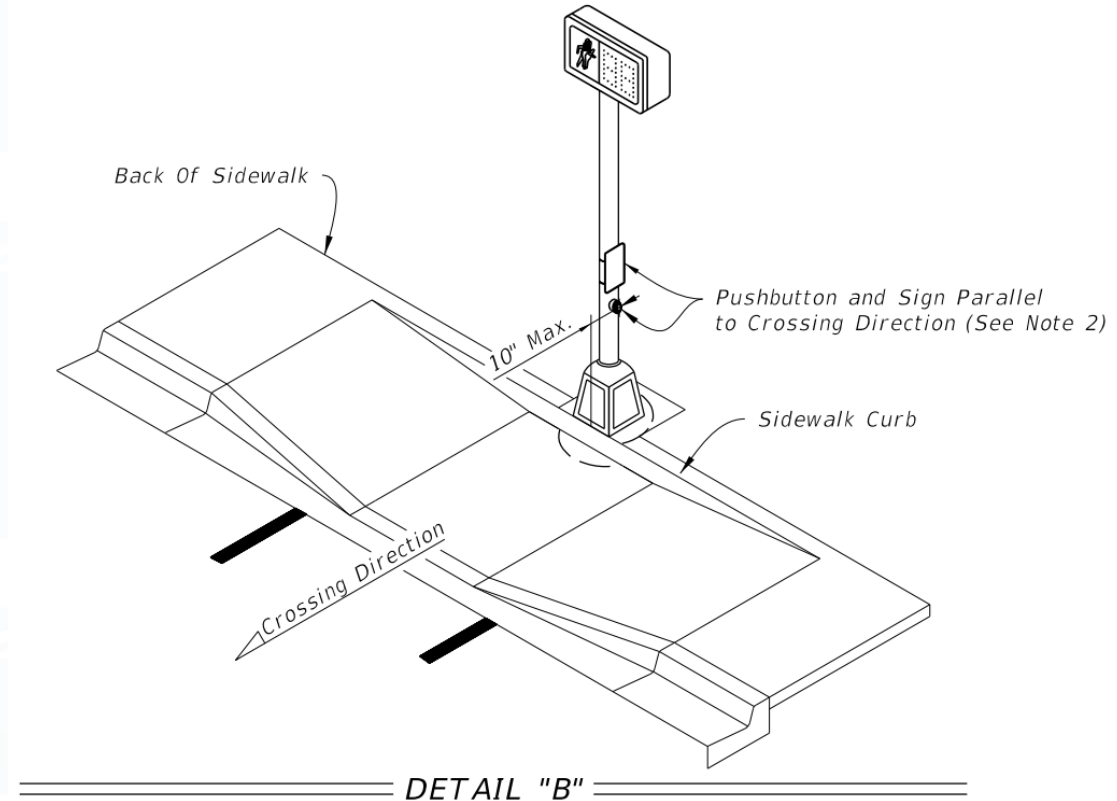
- Curb Ramps
 - Consolidation w/Chapter 3
 - Min. Dimensions & Slopes
- Curb Extensions (Bulb-Outs)
- Pedestrian Signals
 - Accessible Pedestrian Signals (APS)
 - Level Landings



Chapter 8 – Pedestrian Facilities



- Curb Ramps
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PEDESTRIAN DETECTOR ASSEMBLY
INSTALLATION DETAILS

INDEX

665-001

Chapter 9 – Bicycle Facilities



- Separated Bicycle Lanes
- Shared Use Path Width and Clearance
- Sign Placement on Shared Use Paths
- Shared Use Path Grade
- Shared use path Cross Slope
- Curb Ramps and Blended Transitions
- Shared Use Path Roadway Intersections
- Structures Width on Shared Use Paths
- Structures Grade on Shared Use Paths



Chapter 10 – Maintenance and Resurfacing



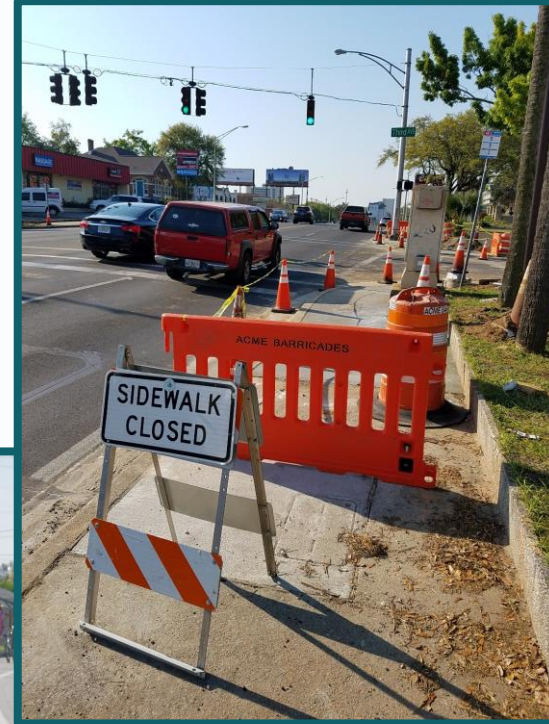
- Safety Edge Information Consolidated
- Additional Resources
 - [FHWA's Office of Safety – Safety Edge](#)
 - [FHWA's Crash Modification Factors Clearinghouse](#)
 - [FDOT's Developmental Specification for Safety Edge – Dev330SE](#)



Chapter 11 – Work Zone Safety and Mobility



- Develop and maintain a program consistent with the [MUTCD](#)
- Transportation Management Plan (TMP)
- Short Term Transverse Rumble Strips
- Temporary Raised Rumble Strip Sets
- Number and Width of Travel Lanes, Bike Lanes, Sidewalks and Shared Use Paths
- Typical Applications



Chapter 12 – Construction



- Defined the Engineer of Record (EOR) and the Construction Engineer (CE)
- Alterations in Plans
- Authority of the CE
- Qualifications for Services for FDOT Administered (Funded) Projects



Chapter 14 – Design Exceptions & Variations

- Clarified Approval requirements for:
 - Safety Projects
 - Drainage Projects
 - Landscape-Only Projects
 - Maintenance Resurfacing Projects



Chapter 18 – Signing and Marking



- Pavement Markings (*MUTCD, 3rd Revision*)
- Longitudinal Audible Vibratory Treatments (AVTs)

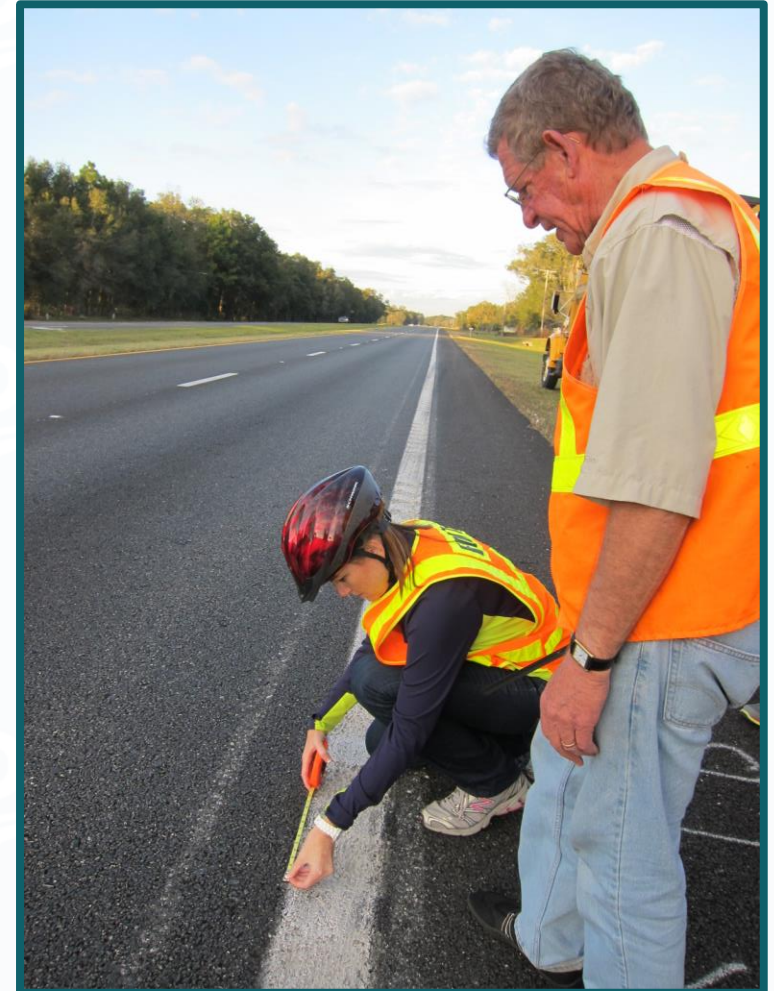
E AUDIBLE AND VIBRATORY TREATMENTS

E.1 Longitudinal Audible Vibratory Treatments

Longitudinal Audible and Vibratory Treatments (AVTs) are an effective low-cost countermeasure to reduce the severity and frequency of lane departure crashes.

Audible and vibratory treatment (AVT) shall be provided for edgelines and center lines on flush-shoulder roadways with a posted speed of 50 mph or greater and lane widths of 11 feet or greater. Sections where advisory speeds are used due to restricted horizontal or vertical geometry shall not be excluded. AVTs shall not be placed within the limits of crosswalks.

More information on these types of treatments are shown in the Department's [*Standard Plans, Index 546-010*](#) and [*FDOT Design Manual, Chapter 210 Arterials and Collectors*](#). AVT options include sinusoidal ground-in rumble strips and profiled thermoplastic. The sinusoidal ground-in rumble strip option provides the most economical and durable solution with less noise pollution.



Chapter 19 – Traditional Neighborhood Development



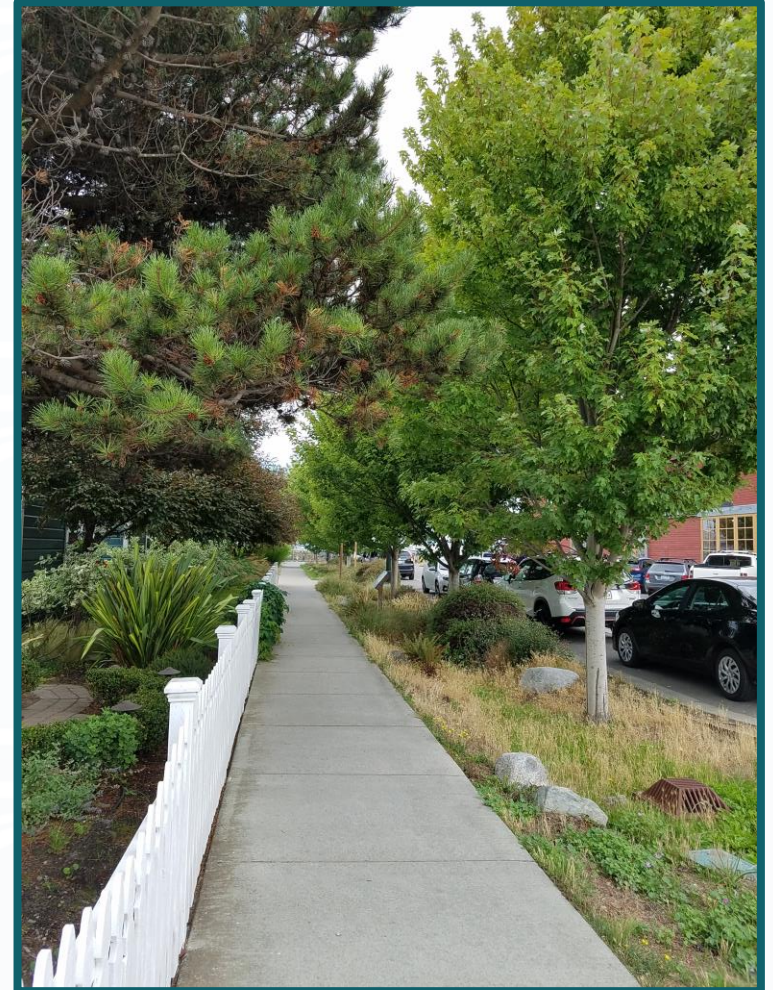
- This Chapter will remain untouched for 2023. The Florida Greenbook Committee will be incorporating context-based design throughout other chapters for a future version.



Chapter 20 – Drainage



- Regulatory Requirements
- Stormwater Management Strategies
- Green Stormwater Elements
- Hydrologic Analysis
- Hydraulic Openings
- Cross Drain Hydraulics
- Culvert Materials



New Committee Members



FDOT DISTRICT 1

Ryan Bell, P.E., PTOE
Director of Transportation
Johnson Engineering, Inc

FDOT DISTRICT 2

Ramon D. Gavarrete, P.E.
County Engineer
Alachua County

FDOT DISTRICT 3

Chance Powell, P.E.
Traffic Operations Engineer
Walton County

FDOT DISTRICT 7

D. Todd Crosby, P.E.
Assistant County Engineer
Hernando County

ASSOCIATE MEMBERS (Non-Voting)

Billy Hattaway, P.E.
Transportation Department Director
City of Orlando

Calvin Hardie, P.E.
Chief Design Engineer
City of Tampa



What's Next



- Context-Based Design Task Team Meeting Planning Workshop
 - August 22nd 1:00 PM – 3:00 PM
 - Microsoft Teams



Questions?

**VISION:
A FATALITY-FREE
ROADWAY SYSTEM**

LET'S GET EVERYONE HOME.



Contact

If you have any questions, comments or suggestions regarding the **Florida Greenbook**, please contact:

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