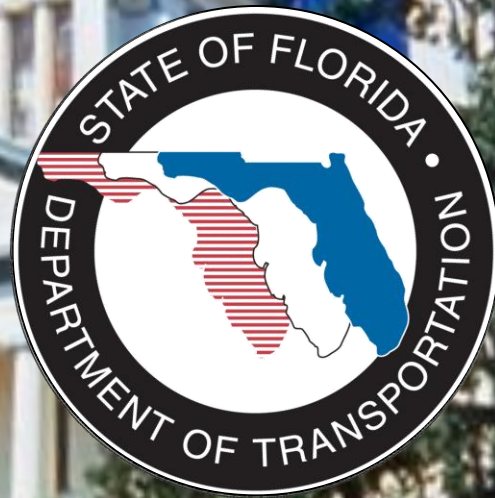


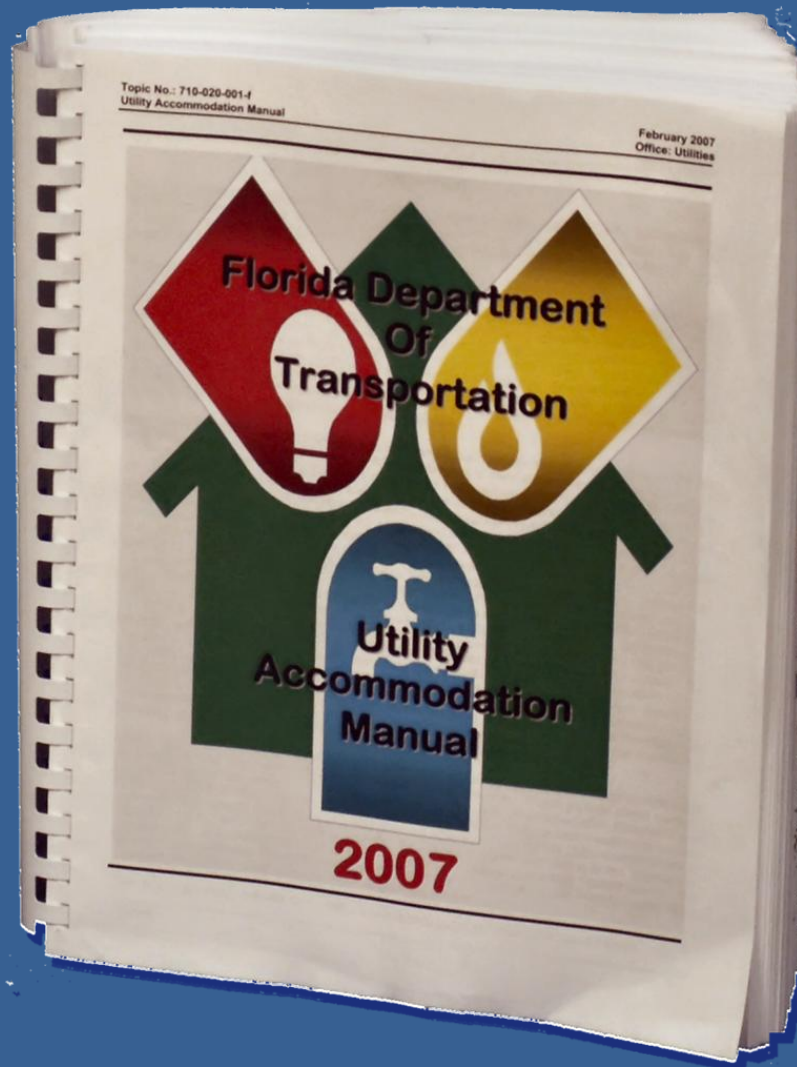
2012 DESIGN UPDATE TRAINING

2012 PPM changes due to the 2010 UAM



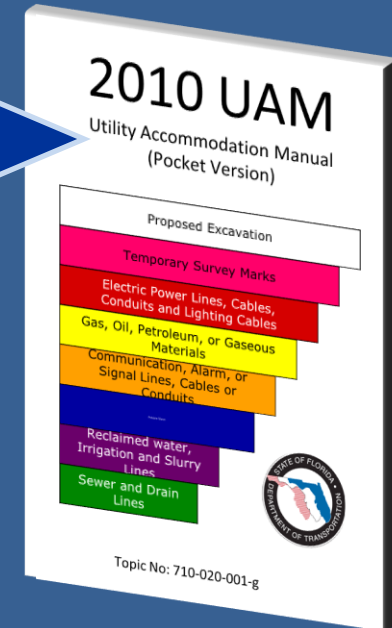
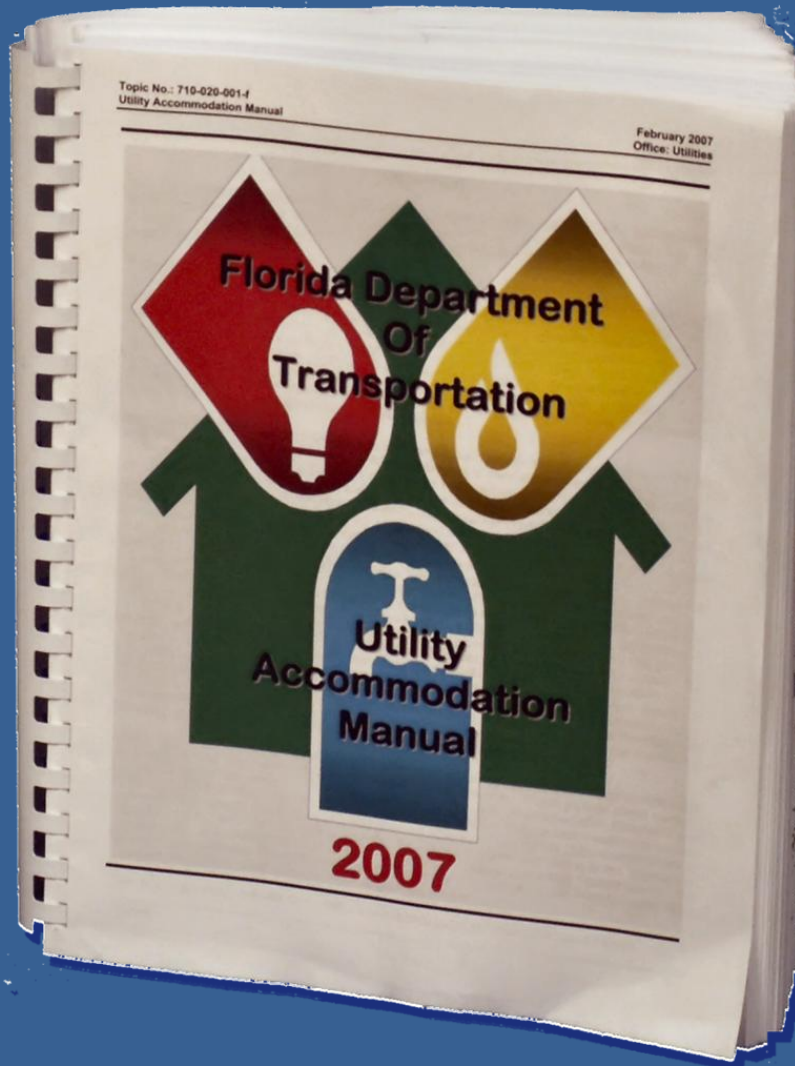
UTILITY ACCOMMODATION

Changes to the Horizontal Clearance Criteria and Utility Exception Process

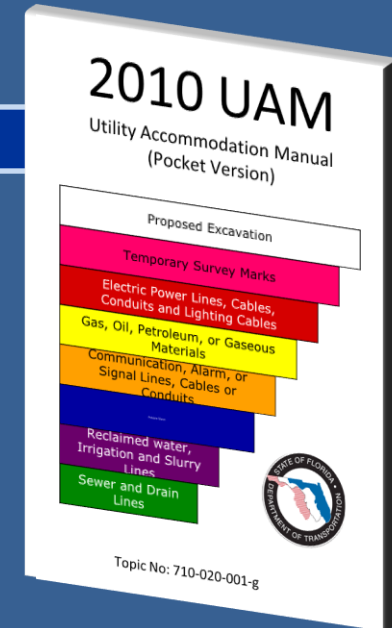
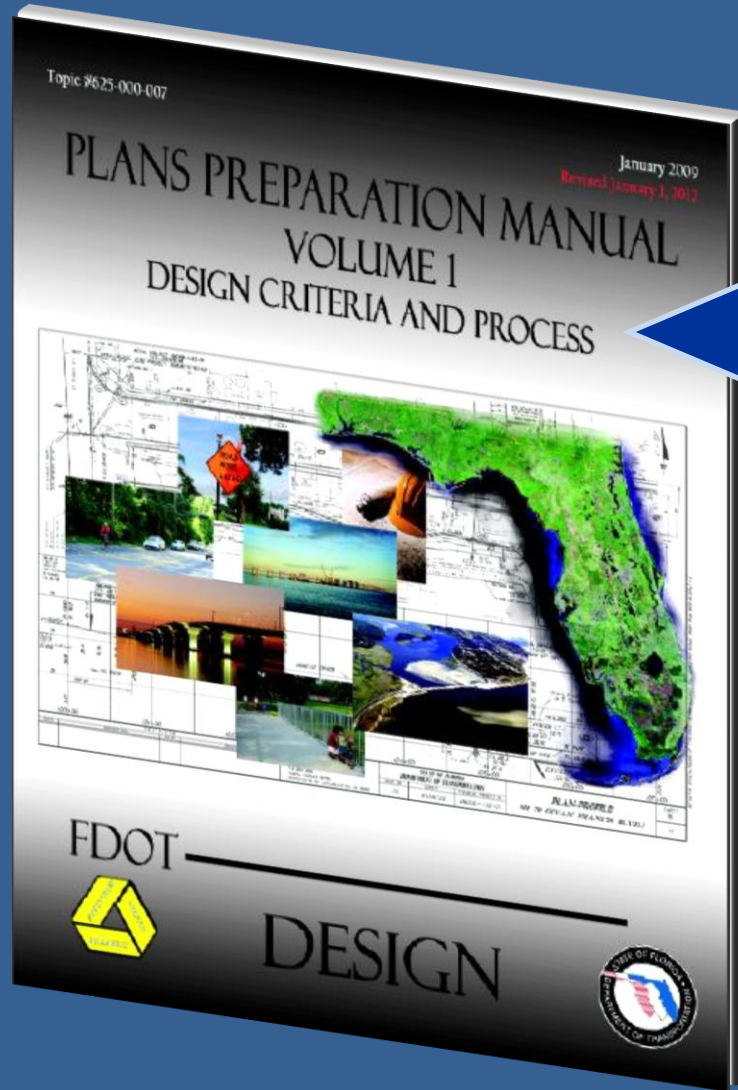


1. Changed horizontal clearance requirements.
2. Eliminated routine exceptions.
3. FDOT retains design responsibilities for the roadsides.
4. UAOs given responsibility to speaking to a hardship –not design.
5. Eliminated language and charts indicating what FDOT would generally do with respect to any exception.

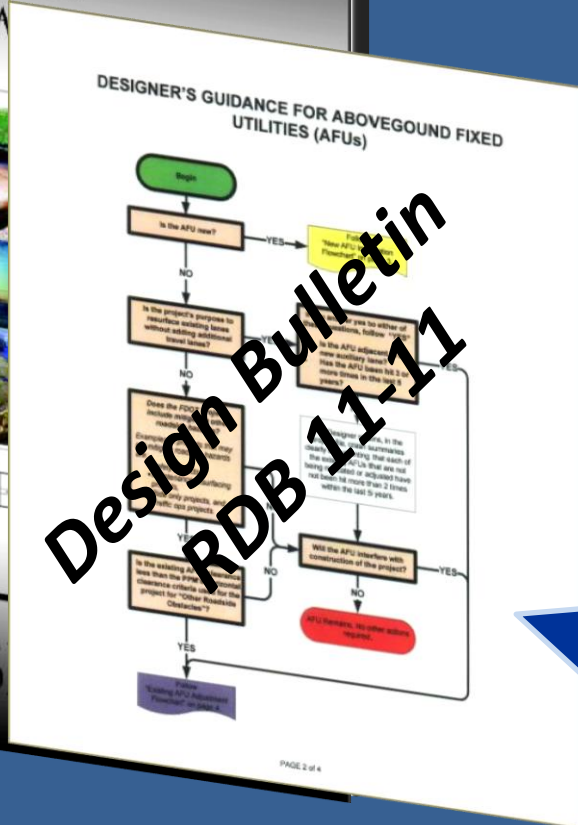
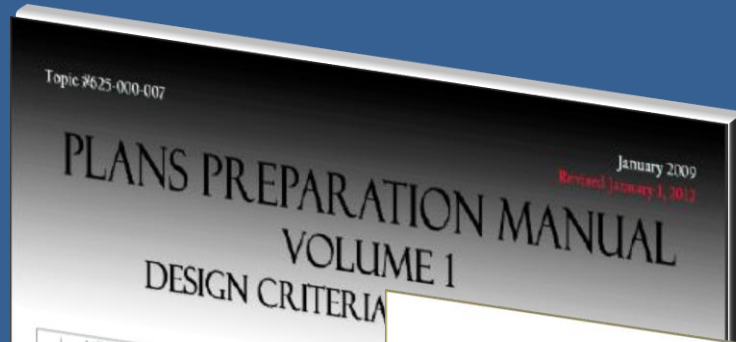
Changes to the Horizontal Clearance Criteria and Utility Exception Process



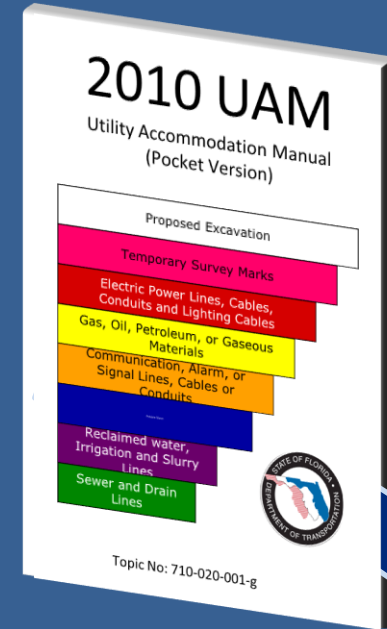
Changes to the Horizontal Clearance Criteria and Utility Exception Process



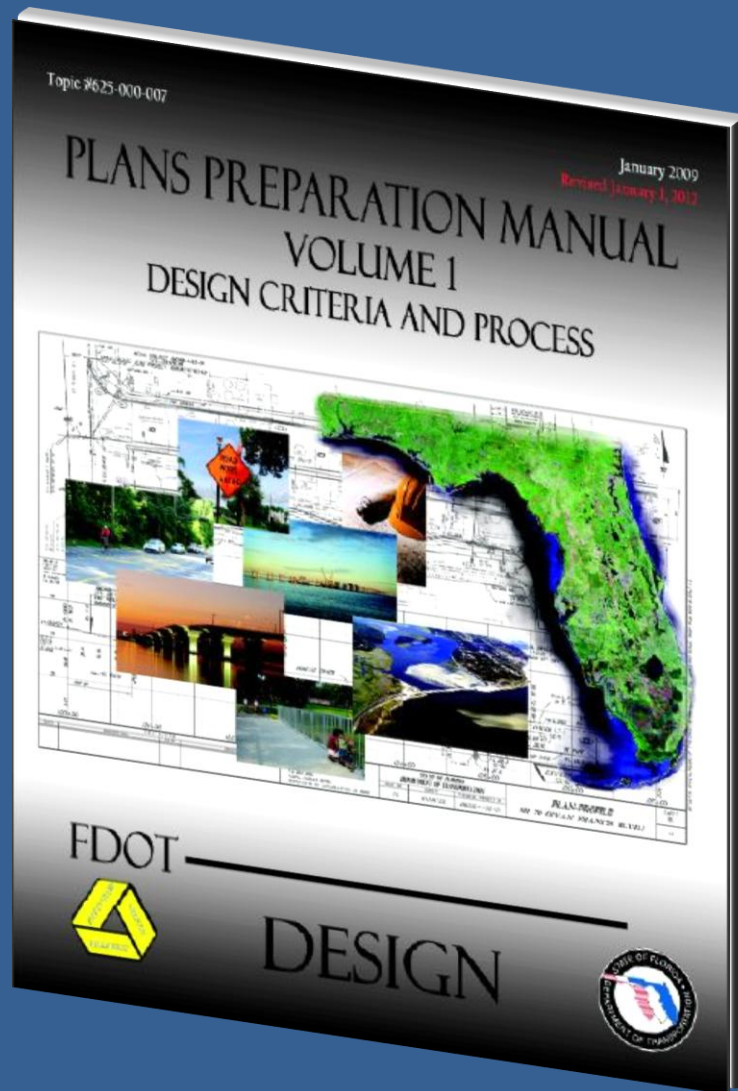
Changes to the Horizontal Clearance Criteria and Utility Exception Process



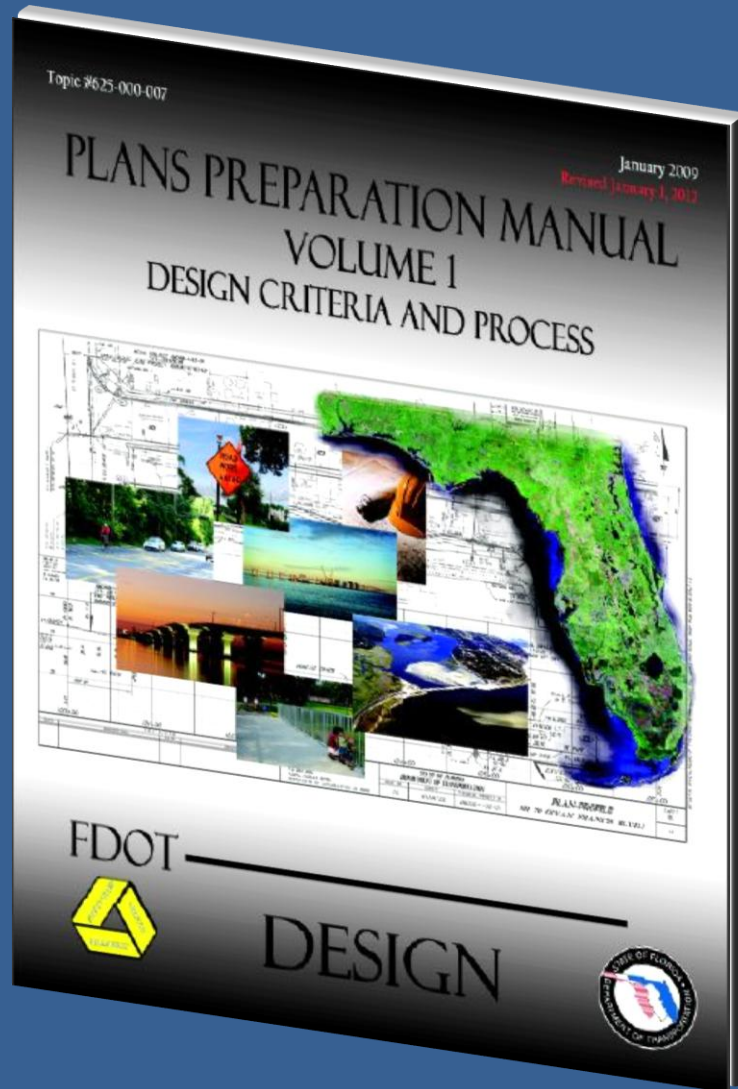
Design Bulletin
RDB 11-11



Changes to the 2012 PPM due to changes in the 2010 UAM



Changes to the 2012 PPM due to changes in the 2010 UAM

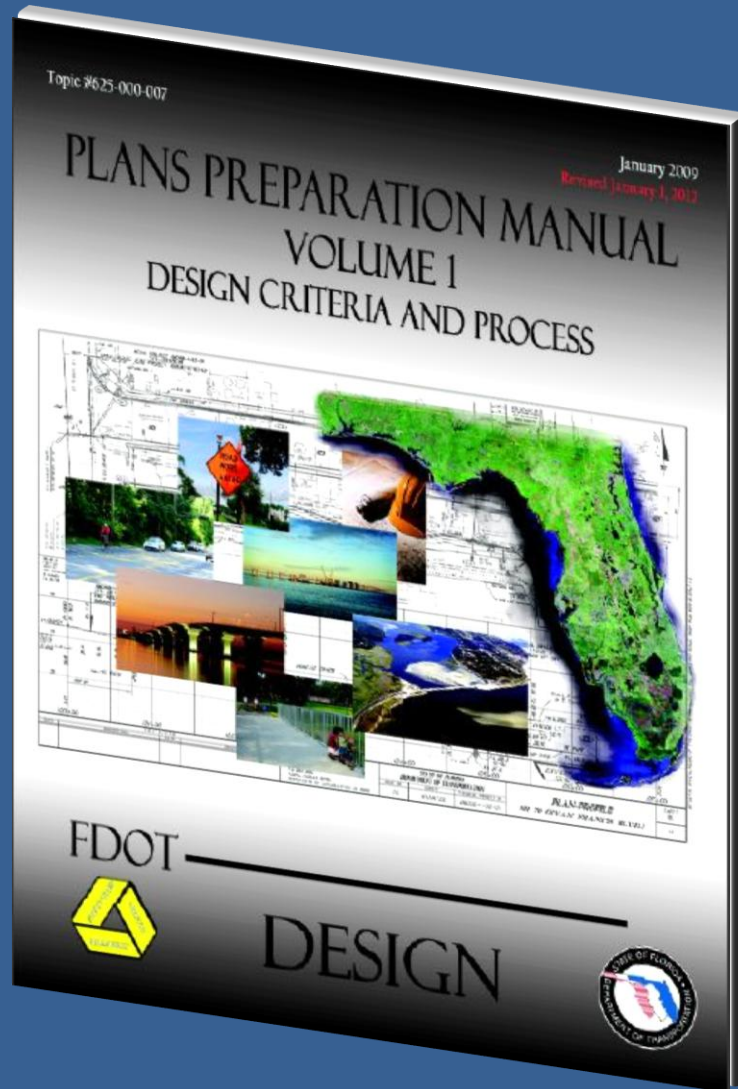


CHAPTER 5
Responsibilities for Design

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23
Revisions to
Design Exceptions

Changes to the 2012 PPM due to changes in the 2010 UAM



CHAPTER 5 *Responsibilities for Design*

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23
Revisions to
Design Exceptions

PPM Chapter 5

Utilities

5.1 General

The designer is to make reasonable efforts to accommodate all existing utilities and any utilities to be constructed during the project. The designer is also responsible for identifying needed utility work (such as the removal, relocation, de-energizing, deactivation, or adjustment of utilities) and obtaining the agreements or orders to schedule this work. Consequently, coordination between the Department and the utility.

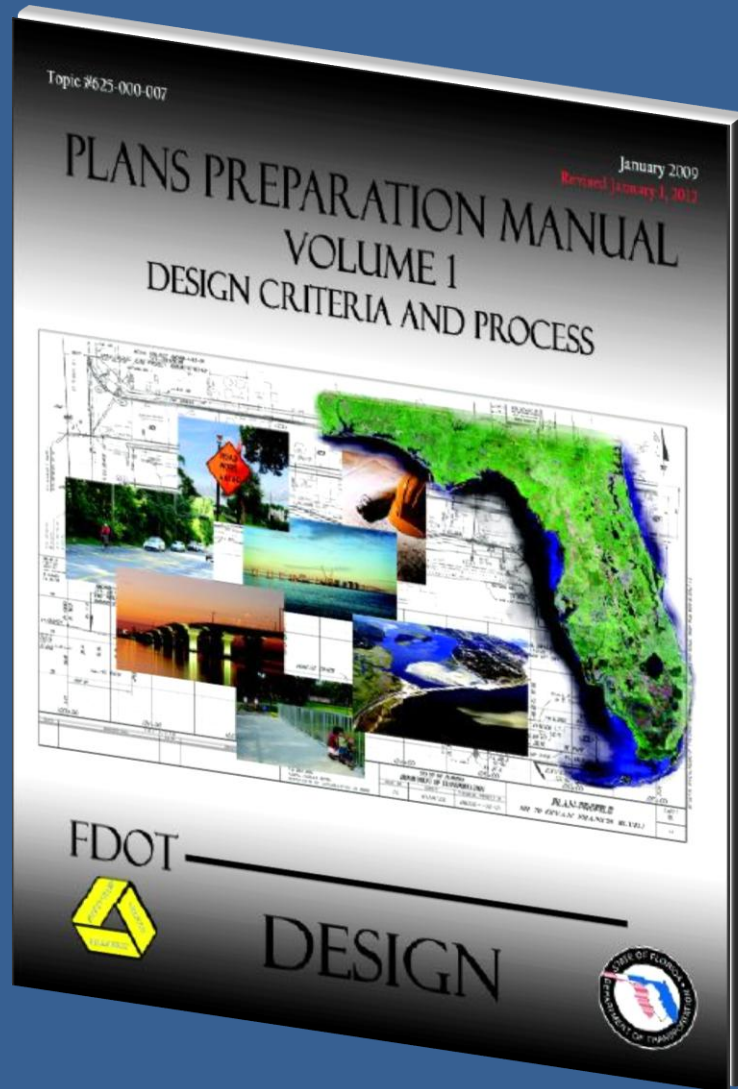
PPM Chapter 5

Utilities

5.1 General

The designer is to make reasonable efforts to accommodate all existing utilities and any utilities to be constructed during the project. The designer is also responsible for identifying needed utility work (such as the removal, relocation, de-energizing, deactivation, or adjustment of utilities) and obtaining the agreements or orders to schedule this work. Consequently, coordination between the Department and the utility.

Changes to the 2012 PPM due to changes in the 2010 UAM

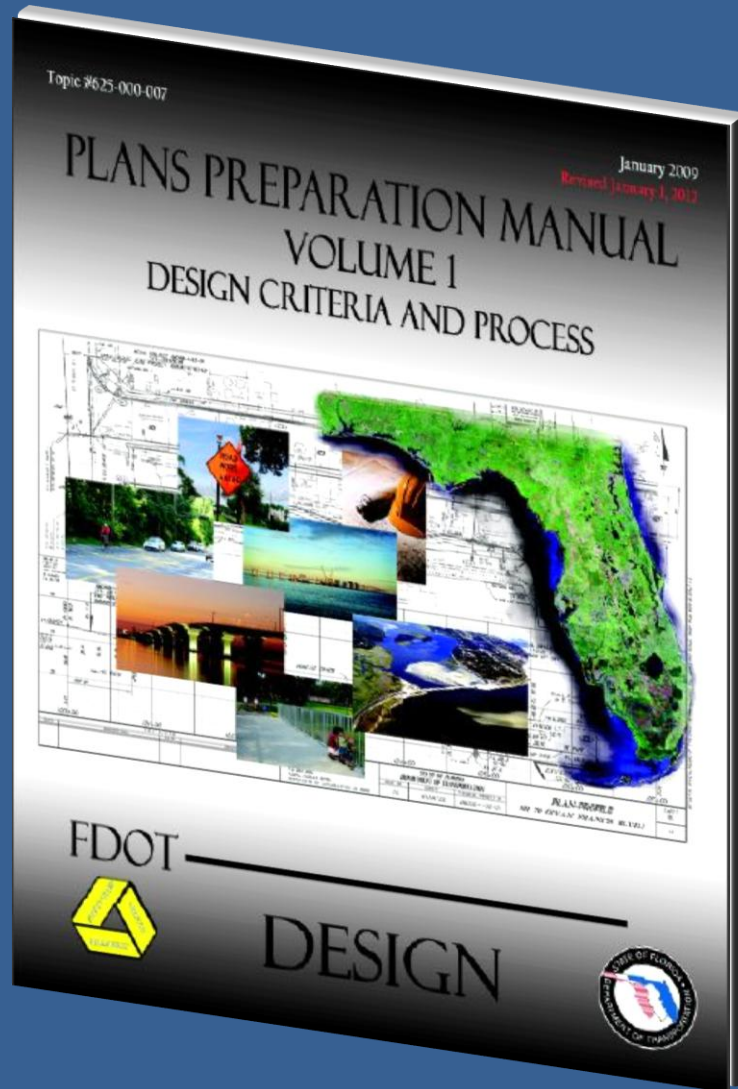


CHAPTER 5 *Responsibilities for Design*

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23
Revisions to
Design Exceptions

Changes to the 2012 PPM due to changes in the 2010 UAM



CHAPTER 5 Responsibilities for Design

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23 Revisions to Design Exceptions

Table 2.11.3 Horizontal Clearance for Aboveground Fixed Utilities (AFUs)

<p>Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.).</p>	
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Other than mid-span poles</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.</p> <p>For all other roadways the AFUs are to be outside the Clear Zones established using Table 2.11.1 Recoverable Terrain and as close to the R/W line as practical.</p>
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Mid-span poles</p>	<p>Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:</p> <p>For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.</p> <p>For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.</p>
<p>EXISTING ABOVEGROUND FIXED UTILITIES (AFUs)</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 4 feet from the face of curb shall be relocated as close to the R/W line as practical.</p> <p>For all other roadways, existing AFUs within the Clear Zones established using Table 2.11.1 Recoverable Terrain shall be relocated as close to the R/W line as practical.</p>

Table 2.11.3 Horizontal Clearance for Aboveground Fixed Utilities (AFUs)

<p>Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.).</p>	
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Other than mid-span poles</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.</p> <p>For all other roadways the AFUs are to be outside the Clear Zones established using Table 2.11.1 Recoverable Terrain and as close to the R/W line as practical.</p>
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Mid-span poles</p>	<p>Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:</p> <p>For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.</p> <p>For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.</p>
<p>EXISTING ABOVEGROUND FIXED UTILITIES (AFUs)</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 4 feet from the face of curb shall be relocated as close to the R/W line as practical.</p> <p>For all other roadways, existing AFUs within the Clear Zones established using Table 2.11.1 Recoverable Terrain shall be relocated as close to the R/W line as practical.</p>

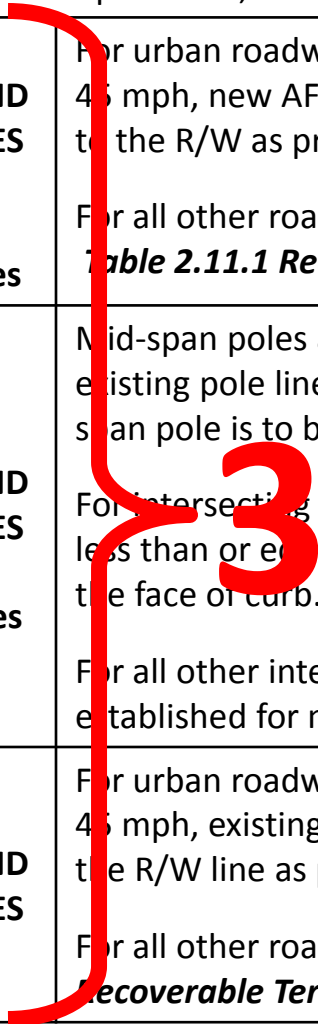


Table 2.11.3 Horizontal Clearance for Aboveground Fixed Utilities (AFUs)

Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.).

<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Other than mid-span poles</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.</p> <p>For all other roadways the AFUs are to be outside the Clear Zones established using Table 2.11.1 Recoverable Terrain and as close to the R/W line as practical.</p>
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Mid-span poles</p>	<p>Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:</p> <p>For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.</p> <p>For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.</p>
<p>EXISTING ABOVEGROUND FIXED UTILITIES (AFUs)</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 4 feet from the face of curb shall be relocated as close to the R/W line as practical.</p> <p>For all other roadways, existing AFUs within the Clear Zones established using Table 2.11.1 Recoverable Terrain shall be relocated as close to the R/W line as practical.</p>

Table 2.11.3 Horizontal Clearance for Aboveground Fixed Utilities (AFUs)

Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.).

<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Other than mid-span poles</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.</p> <p>For all other roadways the AFUs are to be outside the Clear Zones established using Table 2.11.1 Recoverable Terrain and as close to the R/W line as practical.</p>
<p>NEW ABOVEGROUND FIXED UTILITIES (AFUs) Mid-span poles</p>	<p>Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:</p> <p>For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.</p> <p>For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.</p>
<p>EXISTING ABOVEGROUND FIXED UTILITIES (AFUs)</p>	<p>For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 4 feet from the face of curb shall be relocated as close to the R/W line as practical.</p> <p>For all other roadways, existing AFUs within the Clear Zones established using Table 2.11.1 Recoverable Terrain shall be relocated as close to the R/W line as practical.</p>

Table 2.11.3 Horizontal Clearance for Aboveground Fixed Utilities (AFUs)

Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.).

**NEW
ABOVEGROUND
FIXED UTILITIES
(AFUs)
Other than
mid-span poles**

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.

For all other roadways the AFUs are to be outside the Clear Zones established using **Table 2.11.1 Recoverable Terrain** and as close to the R/W line as practical.

**NEW
ABOVEGROUND
FIXED UTILITIES
(AFUs)
Mid-span poles**

Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:

For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.

For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.

**EXISTING
ABOVEGROUND
FIXED UTILITIES
(AFUs)**

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 4 feet from the face of curb shall be relocated as close to the R/W line as practical.

For all other roadways, existing AFUs within the Clear Zones established using **Table 2.11.1 Recoverable Terrain** shall be relocated as close to the R/W line as practical.

Table 21.2 Horizontal Clearance for Aboveground Fixed Utilities

Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.). Control Zones are not applicable to AFUs.

**NEW
ABOVEGROUND
FIXED UTILITIES
(AFUs)
Other than
mid-span poles**

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 1.5 feet from the face of curb and as close to the R/W as practical.

For all other roadways the AFUs are to be outside the Clear Zones established using **Table 21.6 Recoverable Terrain** and as close to the R/W line as practical.

**NEW
ABOVEGROUND
FIXED UTILITIES
(AFUs)
Mid-span poles**

Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:

For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.

For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.

**EXISTING
ABOVEGROUND
FIXED UTILITIES
(AFUs)**

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs closer than 1.5 feet from the face of curb shall be relocated as close to the R/W line as practical.

For all other roadways, existing AFUs within the Clear Zones established using **Table 21.6 Recoverable Terrain** shall be relocated as close to the R/W line as practical.

Table 25.4.14.4 Horizontal Clearance for Aboveground Fixed Utilities

Aboveground fixed utilities are objects owned by a public or private utility agency that are more than four (4) inches above the grade and are not accepted by FDOT as crashworthy (such as strain poles, down guys, telephone load pedestals, temporary supports, etc.). Control Zones are not applicable to AFUs.

NEW ABOVEGROUND FIXED UTILITIES (AFUs) Other than mid-span poles

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, new AFUs shall not be placed closer than 4 feet from the face of curb and as close to the R/W as practical.

For all other roadways the AFUs are to be outside the Clear Zones established using **Table 2.11.1 Recoverable Terrain** and as close to the R/W line as practical.

NEW ABOVEGROUND FIXED UTILITIES (AFUs) Mid-span poles

Mid-span poles are new poles being installed as part of and within the alignment of an existing pole line. When the existing alignment crosses an intersecting roadway, the mid-span pole is to be placed as follows:

For intersecting roadways that are urban with curb or curb and gutter with design speeds less than or equal to 45 mph, mid-span poles shall not be placed closer than 4 feet from the face of curb.

For all other intersecting roadways mid-span poles are to be outside the Clear Zones established for new poles appropriate for the intersecting roadway.

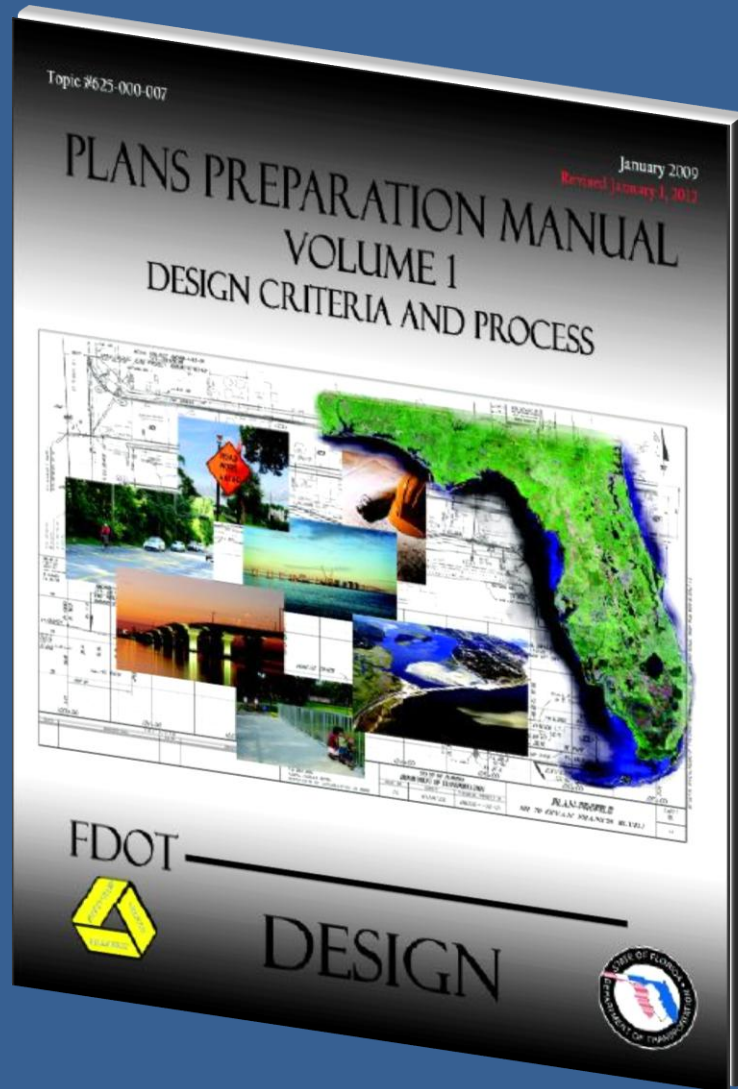
EXISTING ABOVEGROUND FIXED UTILITIES (AFUs)

Existing AFUs are not to be relocated unless they are adjacent to added or widened lanes or have been hit 3 times in 5 years. Those identified for relocation shall be relocated as follows:

For urban roadways with curb or curb and gutter with design speeds less than or equal to 45 mph, existing AFUs are to be relocated as close to the R/W line as practical and at least 1.5 feet from the face of curb.

For all other roadways, existing AFUs are to be relocated as close to the R/W line as practical and outside the Clear Zones established for the project.

Changes to the 2012 PPM due to changes in the 2010 UAM

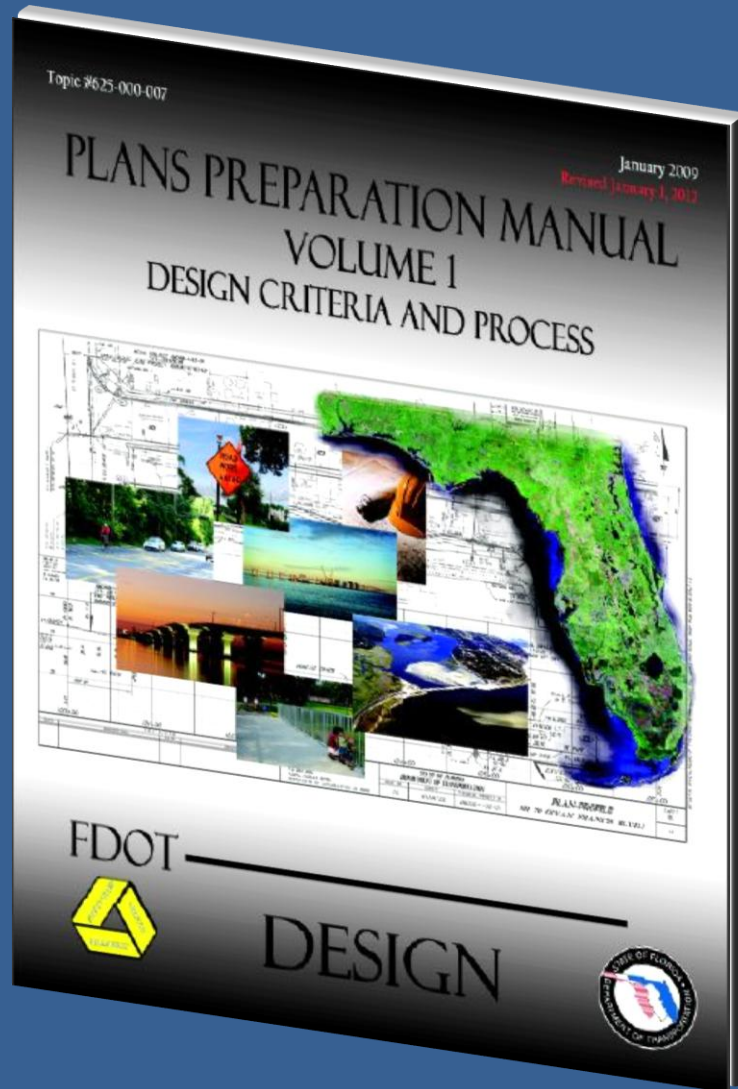


CHAPTER 5 Responsibilities for Design

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23 Revisions to Design Exceptions

Changes to the 2012 PPM due to changes in the 2010 UAM



CHAPTER 5
Responsibilities for Design

CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23
Revisions to
Design Exceptions

PPM Chapter 23

Exceptions and Variations

23.1 General

The Department's roadway design criteria and standards are contained in this volume and are usually within the desirable ranges established by AASHTO. The values given in this volume have been accepted by FHWA and govern the design process. When it becomes necessary to deviate from the Department's criteria, early documentation and approval are required. There are two approval processes used by designers: Design Exceptions and Design Variations. This chapter does not address the Utility Exception Procedure Topic No. 710-020-001 used by Utility Agencies/Owners to relieve their obligation to comply with a design requirement. When the Department's criteria are met, no Design Exception or Design Variation is required. However, when the Department's criteria are not met, a Design Exception, or Design Variation is required. This requirement applies to all entities affecting planning, design, construction and maintenance.

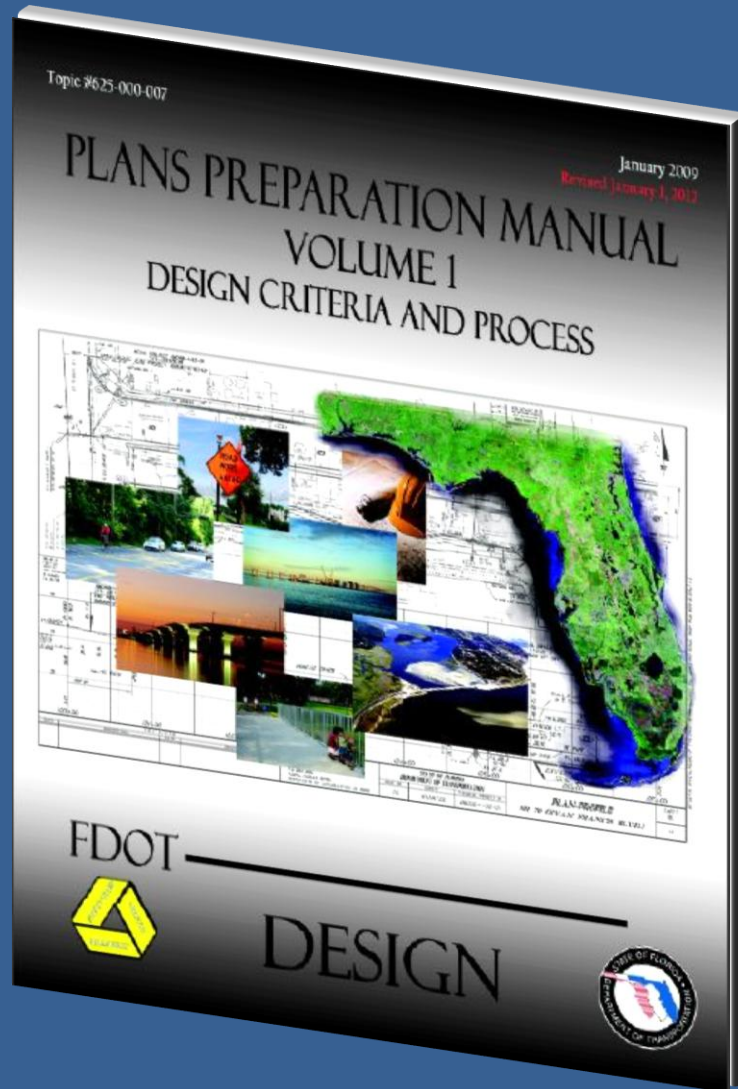
PPM Chapter 23

Exceptions and Variations

23.1 General

The Department's roadway design criteria and standards are contained in this volume and are usually within the desirable ranges established by AASHTO. The values given in this volume have been accepted by FHWA and govern the design process. When it becomes necessary to deviate from the Department's criteria, early documentation and approval are required. There are two approval processes used by designers: Design Exceptions and Design Variations. This chapter does not address the Utility Exception Procedure Topic No. 710-020-001 used by Utility Agencies/Owners to relieve their obligation to comply with a design requirement. When the Department's criteria are met, no Design Exception or Design Variation is required. However, when the Department's criteria are not met, a Design Exception, or Design Variation is required. This requirement applies to all entities affecting planning, design, construction and maintenance.

Changes to the 2012 PPM due to changes in the 2010 UAM

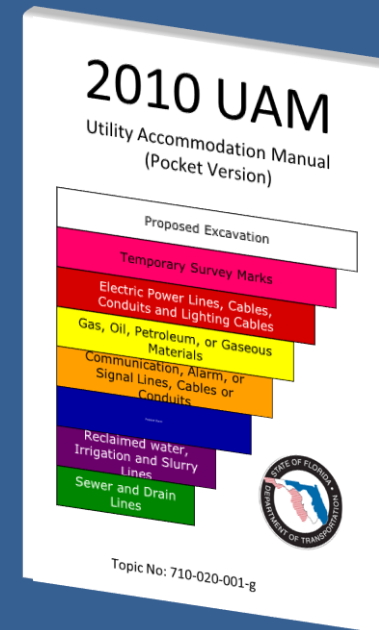
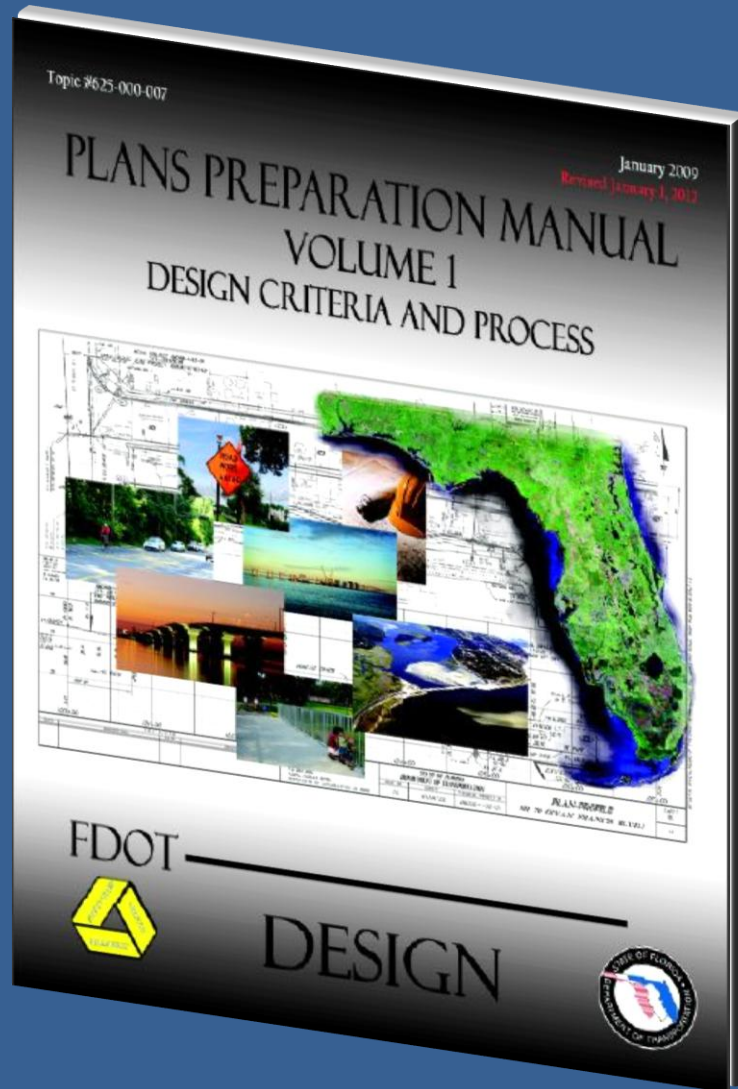


CHAPTER 5
Responsibilities for Design

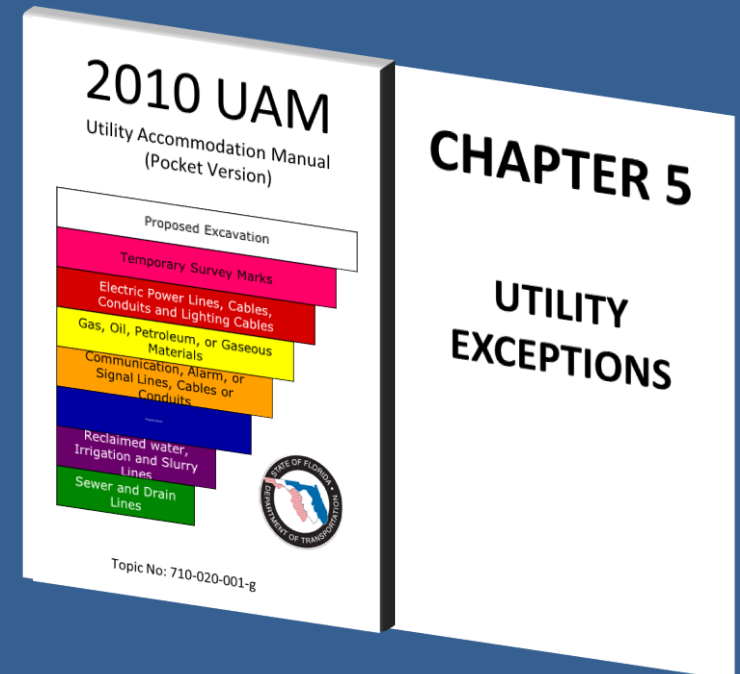
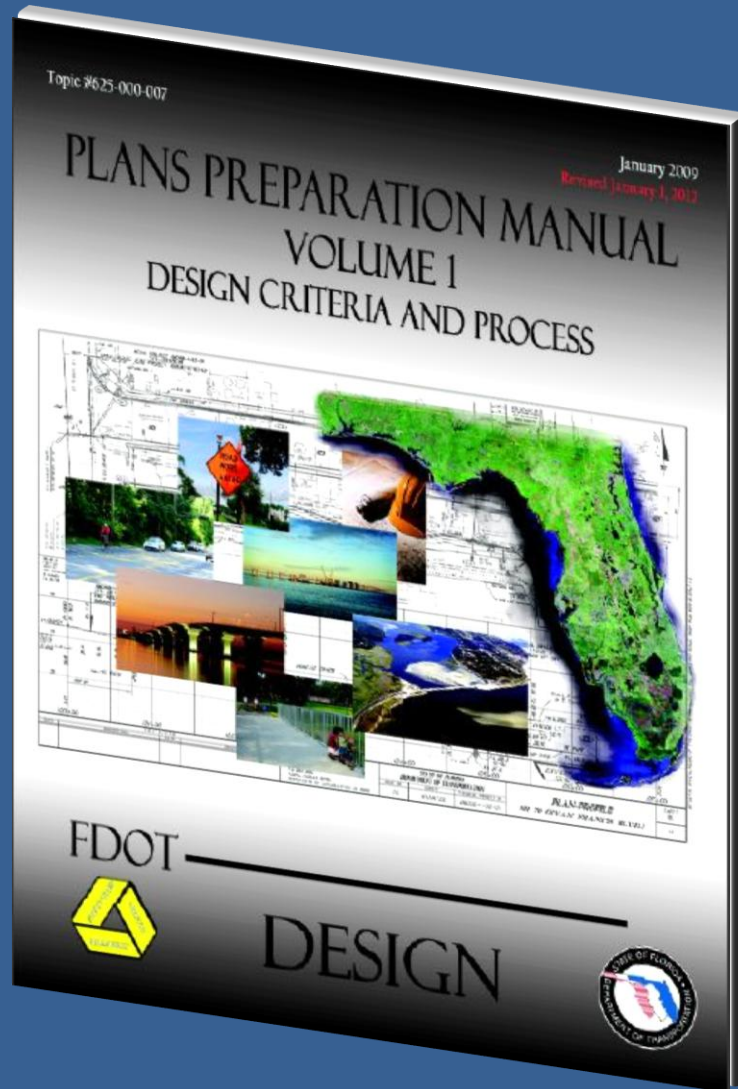
CHAPTERS 2, 21, 25
Revisions to
Horizontal Clearance

CHAPTER 23
Revisions to
Design Exceptions

Changes to the Horizontal Clearance Criteria and Utility Exception Process



Changes to the Horizontal Clearance Criteria and Utility Exception Process



UAM CHAPTER 5

UTILITY EXCEPTIONS

5.3 EVALUATION

FDOT shall grant the requested utility exception when the information supplied by the UAO clearly shows that compliance with the listed section of this **UAM** is impracticable or would create an unreasonable hardship for the UAO, and the requested utility exception does not interfere with the operation or future improvement of the transportation facility. The fact that the UAO's other alternatives are not as cost effective as the requested utility exception will not necessarily be determinative of whether the UAO would suffer an unreasonable hardship without the utility exception.

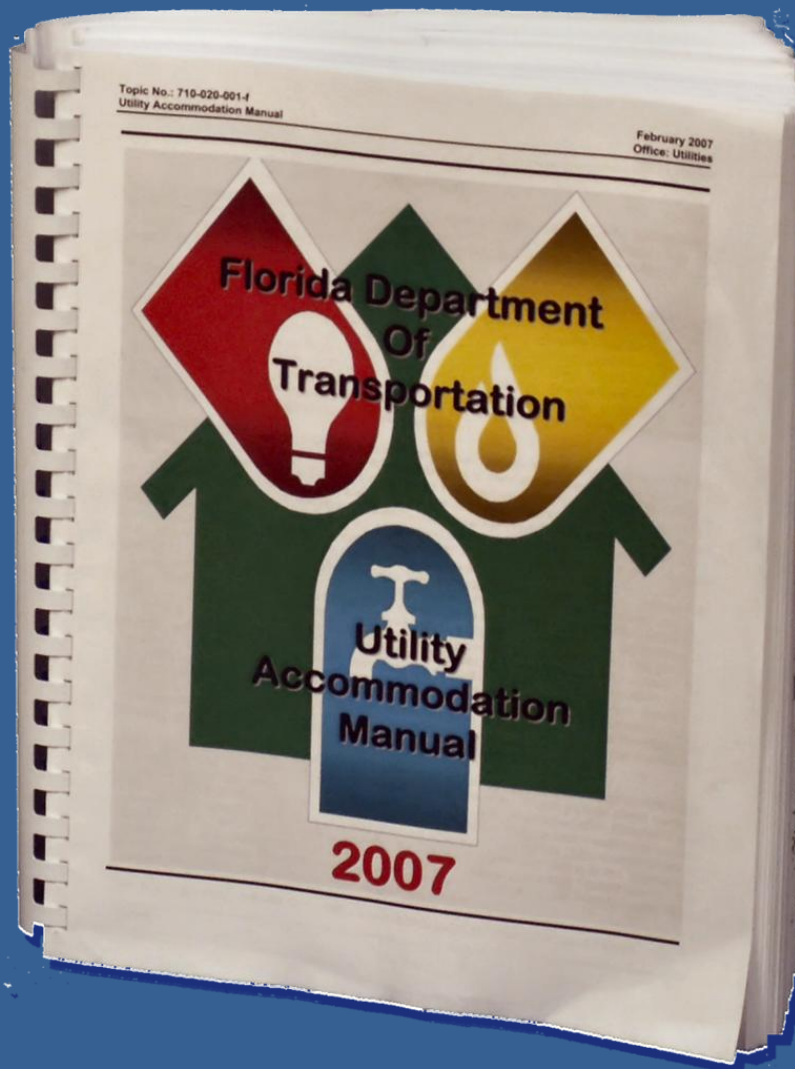
UAM CHAPTER 5

UTILITY EXCEPTIONS

5.3 EVALUATION

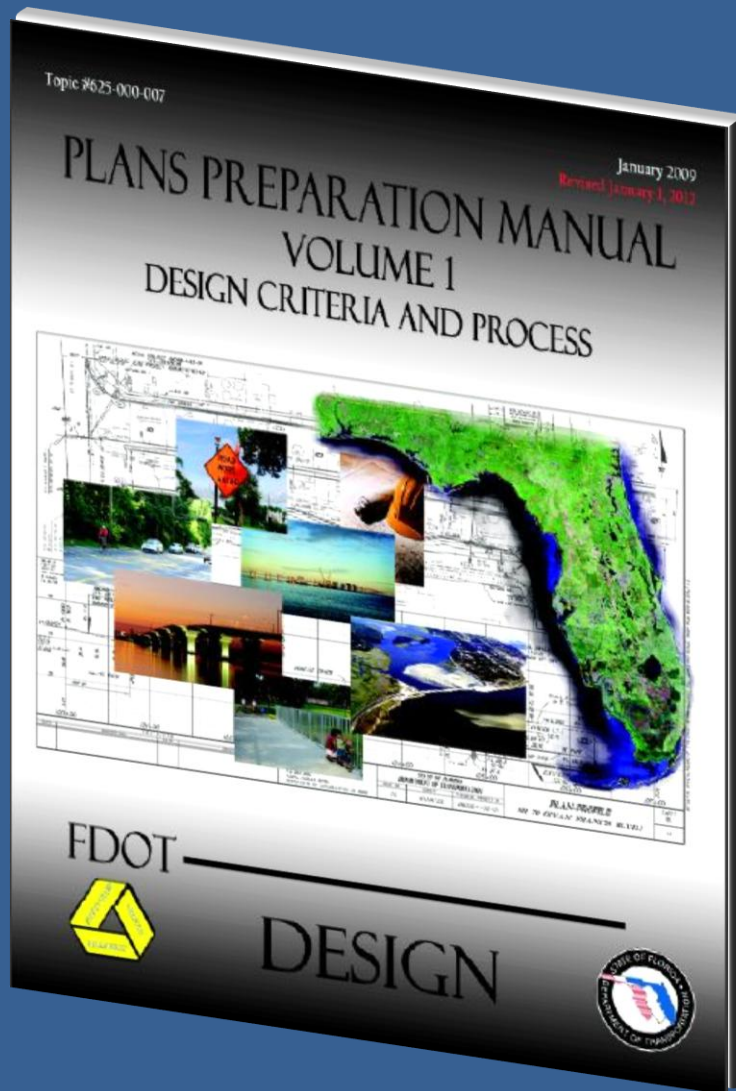
FDOT shall grant the requested utility exception when the information supplied by the UAO clearly shows that compliance with the listed section of this *UAM* is impracticable or would create an unreasonable hardship for the UAO, and the requested utility exception does not interfere with the operation or future improvement of the transportation facility. The fact that the UAO's other alternatives are not as cost effective as the requested utility exception will not necessarily be determinative of whether the UAO would suffer an unreasonable hardship without the utility exception.

Summary



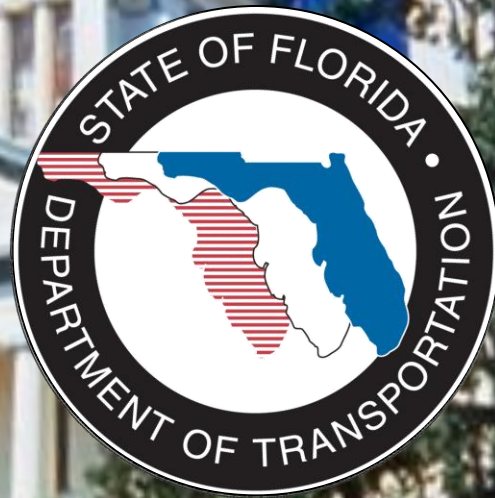
1. Changed horizontal clearance requirements.
2. Eliminated routine exceptions.
3. FDOT retains design responsibilities for the roadsides.
4. UAOs given responsibility to speaking to a hardship – not design.
5. Eliminated language and charts indicating what FDOT would generally do with respect to any exception.

Summary



1. Changed horizontal clearance requirements.
2. Eliminated routine exceptions.
3. FDOT retains design responsibilities for the roadsides.
4. UAOs given responsibility to speaking to a hardship – not design.
5. Eliminated language and charts indicating what FDOT would generally do with respect to any exception.

2012 PPM changes due to the 2010 UAM



UTILITY ACCOMMODATION