ROADWAY DESIGN BULLETIN 11-11

DATE: July 8, 2011

TO: District Directors of Transportation Development, District Directors of Operations, District Design Engineers, District Maintenance Engineers, District Traffic Operations Engineers, District Utilities Engineers/Administrators, Plans Preparation Manual Holders

FROM: David C. O'Hagan, P.E., State Roadway Design Engineer

COPIES: Brian Blanchard, Duane Brautigam, Tim Lattner, Mark Wilson, Thomas Bane, and Chris Richter (FHWA)

SUBJECT: Accommodating Aboveground Fixed Utilities (AFUs)

BACKGROUND:

Rule Chapter 14-46.001, F.A.C “Utility Installation or Adjustment” and the Procedure 710-020-001-g “2010 UAM Utility Accommodation Manual” were incorporated into State Law on January 30, 2011 and were effective immediately. On February 2, 2010, FHWA approved the 2010 UAM as meeting current federal requirements. Consequently, the Plans Preparation Manual (PPM) is being revised for publication in January 2012 to include new instructions that comply with the Rule and Procedure.

REQUIREMENTS:

1. Until these new instructions are published, please use the attached flowcharts titled DESIGNER’S GUIDANCE FOR ABOVEGROUND FIXED UTILITIES (AFUs) when accommodating these roadside features such as utility poles.

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2. The following revisions to the current PPM are necessary:

A. Chapter 2 – Design Geometries and Criteria: Eliminate Table 2.11.3

<table>
<thead>
<tr>
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<th>Horizontal Clearance for Utility Installations</th>
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B. Chapter 21 – Transportation Design for Livable Communities: Eliminate Table 21.2

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C. Chapter 23 – Exceptions and Variations: Modify 4th paragraph 4 as follows:

23.3 Approval

Approval is required from the District Design Engineer or Turnpike Design Engineer for the following:
- Design Exceptions.
- Utility Exceptions.
- Design Variations.
D. Chapter 25 – Florida’s Design Criteria for Resurfacing, Restorations and Rehabilitation (RRR) of Streets and Highways: Eliminate Table 25.4.14.4 and Section 25.4.20.

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25.4.20 Utilities (Underground and Overhead)

Horizontal clearance criteria are given in Table 25.4.14.4 and in the Utility Accommodation Manual (UAM). Additional clearance criteria are found in the UAM.

IMPLEMENTATION:

These changes are effective immediately on all projects.

CONTACTS:

If you have any questions, please contact:

Thomas Bane, P.E., State Utilities Engineer
(850) 414-4379
thomas.bane@dot.state.fl.us
Designer Guidance

These flowcharts are to guide Designers and Utility Coordinators through key coordination activities for the installation and adjustment of Aboveground Fixed Utilities (AFUs) within various FDOT project types in accordance with the new State Laws and Federal Regulations that pertain to these roadside features. Please, contact the State Utilities Engineer, Thomas Bane, P.E., (850) 414-4379, thomas.bane@dot.state.fl.us with any questions.

FLOWCHART LEGEND

- **Beginning Oval**: The "Beginning Oval" indicates the beginning of all activities.
- **Activity Box**: An "Activity Box" indicates activities to be performed.
- **Decision Box**: A "Decision Box" contains questions that must be answered either "YES" or "NO" to correctly proceed to the next activity.
- **Connecting Box**: A "Connecting Box" leads to a "Connecting Flowchart Oval" of the same color on a following page.
- **Connecting Flowchart Oval**: A "Connecting Flowchart Oval" indicate the beginning of other activities that flow from a "Connecting Box" of the same color on a preceding page.
- **End Activities Oval**: An "End Activities Oval" indicates the conclusion of all necessary activities.
DESIGNER'S GUIDANCE FOR ABOVEGOUND FIXED UTILITIES (AFUs)

1. Is the AFU new? 
   - YES: Follow "New AFU Installation Flowchart" on page 3.
   - NO: Continue.

2. Is the project's purpose to resurface existing lanes without adding additional travel lanes? 
   - YES: If you answer yes to either of these questions, follow "YES" 
     - Is the AFU adjacent to a new auxiliary lane? 
     - Has the AFU been hit 3 or more times in the last 5 years? 
   - NO: The Designer retains, in the project file, crash summaries clearly documenting that each of the existing AFUs that are not being relocated or adjusted have not been hit more than 2 times within the last 5 years.

3. Does the FDOT Project include mitigating other roadside hazards? 
   - YES: Will the AFU interfere with construction of the project? 
     - YES: AFU Remains. No other actions required. 
     - NO: AFU Remains. No other actions required. 
   - NO: Continue.

4. Is the existing AFUs clearance less than the PPM's horizontal clearance criteria used for the project for "Other Roadside Obstacles"? 
   - YES: Follow "Existing AFU Adjustment Flowchart" on page 4.
   - NO: Continue.
New AFU Installation Flowchart

1. Start "New AFU Installation"

2. Is the AFU a Mid-Span Pole being placed within the existing alignment, and as part of a previously permitted pole line?
   - NO
   - YES

3. Does the Mid-Span Pole's proposed location meet the offsets in UAM Section 4.2.3 of the intersecting roadways or behind existing barriers?
   - NO
   - YES

4. Will the proposed AFU be installed as close to the R/W line as practical and outside the offsets in UAM Section 4.2.3?
   - NO
   - YES

5. Will the proposed AFU be installed behind an existing barrier?
   - NO
   - YES

6. Will the AFU interfere with construction of the project?
   - NO
   - YES

   **YES**: The Utility Coordinator advises the Utility the AFU installation will not be allowed within the project.

   **NO**: The Utility Coordinator obtains a signed Utility Work Schedule from the Utility and advises the Utility to obtain all necessary permits for the scheduled work.
Existing AFU Adjustment Flowchart

Start
"Adjustment"

Utility Coordinator requests the Utility to sign a Utility Work Schedule to relocate the AFU as close to the RW line as practical and outside the offsets in UAM Section 4.2.3.

Does the UAQ agree?

YES

The Utility Coordinator obtains a signed Utility Work Schedule from the Utility and advises the Utility to obtain a Utility Permit for the scheduled work.

NO

The Designer and Utility Coordinator collaborates (assisted as necessary by the District Utilities Engineer/Administrator) with the Utility to explore alternatives to determines the most reasonable relocation.

Will the existing AFUs clearance be less than the PPM’s horizontal clearance criteria for “Other Roadside Obstacles” that is appropriate for the project type?

NO

The Utility Coordinator coordinates with District Utilities Engineer/Administrator to issue an “order” to the Utility to relocate to the selected location within a prescribed time frame.

YES

The Designer completes a Design Exception request for horizontal clearance. Following the guidance in the PPM appropriate for “Other Roadside Obstacles”

Is the Design Exception approved by the FDOT approving authority?

YES

The utility coordinator coordinates with District Utilities Engineer/Administrator to issue an “order” to the utility to relocate to the location approved in the Design Exception within a prescribed time frame.