DATE: April 14, 2000

TO: Registered Holders of the Plans Preparation Manual (English and Metric)

FROM: Billy Hattaway, PE  William Nickas, PE
State Roadway Design Engineer  State Structures Design Engineer

CC: Freddie Simmons, Bill Albaugh, Jack Brown, Lex Chance, Duane Brautigam, Elwin Broome, Clark Scott, Bob Nichols, Jim Mills

SUBJECT: Mast Arm Assemblies for Traffic Signals
New Design Procedures, Standards and Pay Items
- Plans Preparation Manual July 2000 Update
- Interim Standards 017740, 017742, 017744
- Mast Arm Tabulation Sheet
- Structures Standards S-1700, S-1710
- 2000 Basis of Estimates Handbook Special Update

New Design Procedures, Standards and Pay Items have been developed for the design of mast arm assemblies for traffic signals. Detailed instructions on the new design procedures and use of the new Standards are provided in the enclosed items as follows:

   Chapter 7, Section 7.4.12, Mast Arm Supports
   Chapter 29, Section 29.3, Design of Mast Arm Assemblies and Foundations
   (Complete reprint of Chapters 7 and 29 enclosed.)

   Chapter 24, Section 24.7, Mast Arm Sheets
   Chapter 24, Exhibit T-MA, Example Mast Arm Tabulation Sheet
   (Complete reprint of Chapter 24 enclosed.)

   Chapter 7, Section 7.4.12, Mast Arm Supports
   Chapter 29, Section 29.3 Design of Mast Arm Assemblies and Foundations
   (Complete reprint of Chapters 7 and 29 enclosed.)
   Chapter 24, Section 24.7, Mast Arm Sheets
   Chapter 24, Exhibit T-MA, Example Mast Arm Tabulation Sheet
   (Complete reprint of Chapter 24 enclosed.)

5. Special Update to the 2000 Edition of the Basis of Estimates Handbook dated April 14, 2000 and addendum. This special update includes pay item changes for mast arms as well as other pay item changes being implemented.

Other items associated with the implementation of the new procedures and standards for mast arms, include: (not enclosed in this mailing)

6. Interim Indexes. These Interim Indexes are to be included in the plans when the Standard Mast Arm assemblies and/or components are included in the project.
   017740 (2 Sheets) Instructions and Examples for Designers and Fabricators of Standard Mast Arm Assemblies
   017742 (1 Sheet) Component Data for Standard Mast Arm Assemblies
   017744 (5 Sheets) Mast Arm Assemblies
   These are available on the Roadway Design Office Web Site: http://www.dot.state.fl.us/rddesign/rd/rd_cadd.htm

7. Mast Arm Tabulation Sheet. This sheet is completed by the traffic design engineer of record, provided to the structures designer, and included in the contract plans. This sheet will be added to the CADD Cell Library in the Roadway CADD software when cumulative service pack release 2000.00.02 is issued later this year. Until this service release is issued, this sheet is available on the Roadway Design Office Web Site on the same page as the Interim Standards: http://www.dot.state.fl.us/rddesign/rd/rd_cadd.htm

8. Structures Standard Drawing S-1700. This Structures Semi-Standard includes the Standard Mast Arm Assemblies Design Table to be completed by the structures design engineer of record and included in the contract plans. This Standard is available on the Structures Design Office Web Site: http://www.dot.state.fl.us/structures/

9. Structures Standard Drawing S-1710. This Structures Semi-Standard includes information for site specific mast arm assemblies for which either the arm or pole, or both, do not conform to the standard components. For these conditions, this Semi-Standard is to be completed by the structures design engineer of record and included in the contract plans. This Semi-Standard is available on the Structures Design Office Web Site: http://www.dot.state.fl.us/structures/

10. Specifications. A new specification, Section 649 Mast Arm Assemblies, will be included
IMPLEMENTATION:

The new design procedures and standards for mast arm assemblies may be used on projects beginning with the January, 2001 letting. At the District’s option, projects with mast arm design underway may be completed with the current practice; however the new pay item must be used beginning with the January, 2001 letting, and coded as a special design. Use of the new Standards is mandatory beginning with the July, 2001 letting except for unique special designs where none of the components covered by the new Standards can be used. Districts are encouraged to use the new Standards as soon as possible since this will eliminate the need for shop drawings.

TRAINING:

Design Conference 2000 scheduled for August 7-11, 2000 in Orlando will include a session in the Structures Design Sessions for structures designers on the use of the new design procedures and standards on mast arms. Likewise, there will be a session for traffic designers during the Traffic Plans Sessions of Design Conference 2000. In addition, the new mast arm procedures and standards will be included in the Design Update Training which will be held throughout the State in October and November, 2000.