



## Florida Department of Transportation

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GOVERNOR

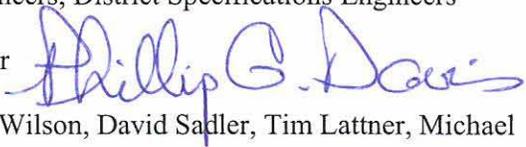
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### ESTIMATES BULLETIN 13-11

DATE: July 26, 2013

TO: District Design Engineers, District Estimates Engineers, District Specifications Engineers

FROM: Phillip "Greg" Davis, PE, State Estimates Engineer 

COPIES TO: Trey Tillander, Dan Scheer, Alan El-Urfali, Mark Wilson, David Sadler, Tim Lattner, Michael Shepard, Chester Henson

SUBJECT: Highway Signing

**BACKGROUND:** Sections 700 and 994 of the specifications were recently updated to include the Minimum Specifications for Traffic Control Signals and Devices (Min Specs, Sections A652, A699, and A700), new sheeting requirements, and new requirements for Highlighted Signs. In addition, Section 699 (Internally Illuminated Signs) and Article 781-3 (Dynamic Message Signs) were amalgamated into Section 700. Also included with the specification update are changes to the pay item structure, to provide more consistent measurement and payment between sign types and sizes.

Note that some of the pay items continue to be paid as an assembly (sign, post, foundation), while other items have been separated into components: signs panels, support structure, and sign beacons. Additional notes are provided with the new pay items below. Refer to the new Section 700 specification for complete details on measurement and payment.

**IMPLEMENTATION PLAN:** Effective with the January 2013 letting, update plans, pay items, and specifications.

The following pay items are valid through December 31, 2013:

699- 1- AB	Internally Illuminated Sign
700- 20- AB	Single Post Sign
700- 21- AB	Multi-Post Sign
700- 22-ABC	Overhead Truss Span Sign
700- 23-ABC	Overhead Truss Cantilever Sign
700- 38-AAB	Overhead Truss Lighted Sign- Monotube
700- 39- AB	Overhead Cantilever Lighted Sign- Monotube
700- 46- AB	Existing Sign
700- 48- AB	Sign Panel
700- 70-	Lighted Overhead Sign- Bridge Mounted
700- 82-	Overhead Sign- Span Wire Mounted
700- 83-	Overhead Sign- Bridge Mounted

- 700- 89-ABC Electronic Display Sign
- 700- 90- AB Flashing Beacon Sign
- 781- 5-ABC Dynamic Message Sign Support Structure
- 781- 4A-BCD Dynamic Message Sign

Selected E700- items for Maintenance Signing are valid through December 31, 2013:

- E700- 42- Sign Span Wire (Re-Tension Cable) and (Replace Cable)  
*Use 634-4 items for Span Wire Assembly*
- E700- 46- Sign  
*Various functions; use new 700- items below.*
- E700- 48- Sign Panels  
*Use 700- 3- items below.*

The following pay items will be available for projects let January 1, 2014 and later:

**700- 1- AB Single Post Sign, per assembly**

*Sign assembly includes sign panel(s), post(s) and foundation*

A= Operation

- 1 (Furnish & Install Ground Mount) max wind load area 30 ft<sup>2</sup>
- 2 (Furnish & Install Barrier Mount, Index 11871) max wind load area 20 ft<sup>2</sup>
- 3 (Furnish & Install Bridge Mount, Index 11870) max load area per index
- 4 (Install) furnished by FDOT or local agency
- 5 (Relocate) B=0; relocated within project
- 6 (Remove) B=0
- 7 (Furnish & Install, Custom with Wind load area >30 ft<sup>2</sup>) plan details required for custom post, B=5
- 8 (Repair) for Maintenance use only

B= Combined sheeting area of all panels on post; NOT wind load area

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-20 ft<sup>2</sup>)
- 3 (21-30 ft<sup>2</sup>)
- 4 (31+ ft<sup>2</sup>)
- 8 (In-Street Flexible Post) A=1

**700- 2- AB Multi Post Sign, per assembly**

*Sign assembly includes sign panel(s), post(s) and foundation*

A= Operation

- 1 (Furnish & Install, Ground Mount)
- 4 (Install)
- 5 (Relocate)
- 6 (Remove) dispose, unless otherwise indicated in plans
- 8 (Repair) for Maintenance use only

B= Combined sheeting area of all panels on assembly

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-20 ft<sup>2</sup>)
- 3 (21-30 ft<sup>2</sup>)
- 4 (31-50 ft<sup>2</sup>)
- 5 (51-100 ft<sup>2</sup>)

- 6 (101-200 ft<sup>2</sup>)
- 7 (201-300 ft<sup>2</sup>)
- 8 (301-400 ft<sup>2</sup>)

**700- 3-ABB Sign Panel, per each**

*A panel includes a complete message with border. DO NOT combine all panels on a structure. Panels are paid separately for new overhead, span wire, and mast arm installations, or when adding a panel to an existing sign assembly. For replace operations, use "Remove" with "F&I" or "Install", as needed; new panels must meet current sheeting requirements.*

A= Operation

- 1 (Furnish & Install, Ground Mount) add panel to existing sign assembly or new/existing sign structure
- 2 (Furnish & Install, Overhead Mount) span wire, mast arm or other overhead structure paid separately
- 3 (Furnish & Install, Bridge Mount) add panel to existing sign assembly or new/existing sign structure, bridge mount per Index 11870
- 4 (Install) furnished by FDOT or local agency, for installation on existing sign assembly or new/existing sign structure
- 5 (Relocate) panel only; does not include post/structure
- 6 (Remove) panel only; does not include post/structure
- 7 (Wash) for maintenance use only

BB= Panel Size, square feet

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-20 ft<sup>2</sup>)
- 3 (21-30 ft<sup>2</sup>)
- 4 (31-50 ft<sup>2</sup>)
- 5 (51-100 ft<sup>2</sup>)
- 6 (101-200 ft<sup>2</sup>)
- 7 (201-300 ft<sup>2</sup>)
- 8 (301-400 ft<sup>2</sup>)
- 9 (401-500 ft<sup>2</sup>)
- 10 (501-600 ft<sup>2</sup>)
- 11 (601 ft<sup>2</sup> and greater)

**700- 4-ABC Overhead Static Sign Structure, per Each**

*The structure includes the foundation. Sign panels are paid separately. DO NOT USE this pay item for Walk-in DMS signs.*

A= Operation

- 1 (Furnish & Install)
- 6 (Remove)

B= Type

- 1 (Cantilever)
  - 2 (Span) NOT FOR SPAN WIRE
  - 3 (Monotube) complete design in plans required
  - 4 (Bridge Mount) complete design in plans required
- For Span Wire mount, see Section 634 specs and pay items.

C= Structure Cantilever or Span length

- 1 (Up to 20 ft) cantilever or bridge mount only
- 2 (21-30 ft)
- 3 (31-40 ft)
- 4 (41-50 ft)
- 5 (51-100 ft) span only
- 6 (101-150 ft) span only
- 7 (151-200 ft) span only
- 8 (201-250 ft) span only

**700- 5- AB Internally Illuminated Sign, per Each**

*Internally Illuminated signs include street name signs. The support structure (span wire or mast arm) is paid separately.*

A= Operation

- 2 (Furnish & Install, Overhead Mount) includes span wire and mast arm installation
- 4 (Install) furnished by FDOT or local agency
- 5 (Relocate) B=0
- 6 (Remove) B=0

B= Size, square feet

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-18 ft<sup>2</sup>) max 18 ft<sup>2</sup> for internal illumination, per spec

**700- 6- AB Highlighted Sign, per Assembly**

*Highlighted sign (LED border lights) includes the LEDs, static sign, support structure, foundation, cabinet, solar panel, and hardware.*

A= Operation

- 1 (Furnish & Install, Ground Mount- AC Powered) max wind load 30 ft<sup>2</sup>
- 2 (Furnish & Install, Ground Mount- Solar Powered) max wind load 30 ft<sup>2</sup>
- 4 (Install) furnished by FDOT or local agency
- 5 (Relocate) B=0
- 6 (Remove) B=0

B=Size, square feet

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-20 ft<sup>2</sup>)

**700- 7-ABC Embedded Dynamic Message Sign, per Each**

*Includes the embedded sign only; static signs and support structure are paid separately.*

A= Operation

- 1 (Furnish & Install, with UPS)
- 2 (Furnish & Install, without UPS)
- 4 (Install) BC=00
- 5 (Relocate) BC=00
- 6 (Remove) BC=00
- 7 (Preventative Maintenance) BC=00
- 8 (Diagnostic and Miscellaneous Repair) BC=00

B= Color

- 1 (Monochrome)
- 2 (Tri-Color)

3 (Full Color)

C= Size, square feet

1 (Up to 12 ft<sup>2</sup>) embedded

2 (12-20 ft<sup>2</sup>) embedded

**700- 8-ABC Front Access Dynamic Message Sign, per Each**

*Includes the front access sign; support structure paid separately.*

A= Operation

1 (Furnish & Install, with UPS)

2 (Furnish & Install, without UPS)

4 (Install) BC=00

5 (Relocate) BC=00

6 (Remove) BC=00

7 (Preventative Maintenance) BC=00

8 (Diagnostic and Miscellaneous Repair) BC=00

B= Color

1 (Monochrome)

2 (Tri-Color)

3 (Full Color)

C= Size, square feet

1 (Up to 12 ft<sup>2</sup>)

2 (12-20 ft<sup>2</sup>)

3 (21-30 ft<sup>2</sup>)

4 (31-50 ft<sup>2</sup>)

5 (51-100 ft<sup>2</sup>)

6 (101-200 ft<sup>2</sup>)

**700- 9-ABC Walk-In Dynamic Message Sign, per Each**

*Includes the sign; support structure paid separately under 700-10-ABC.*

A= Operation

1 (Furnish & Install, with UPS)

2 (Furnish & Install, without UPS)

4 (Install) BC=00

5 (Relocate) BC=00

6 (Remove) BC=00

7 (Preventative Maintenance) BC=00

8 (Diagnostic and Miscellaneous Repair) BC=00

B= Color

1 (Monochrome)

2 (Tri-Color)

3 (Full Color)

C= Size, square feet

7 (201-300 ft<sup>2</sup>) walk-in

**700- 10-ABC Dynamic Message Sign Support Structure, per Each**

*Includes the support structure and foundation; sign paid separately.*

A= Operation

- 1 (Furnish & Install)
- 4 (Relocate Sign) includes removal and foundation for new location BC=00
- 6 (Remove) BC=00

B= Support Structure

- 1 (Span) mid-span or full span; NOT SPAN WIRE
- 2 (Cantilever)
- 3 (Pedestal or Single Post) C=0
- 4 (Multi-post) C=0

C= Structure Cantilever or Span length

- 1 (Up to 20 ft) cantilever or bridge mount only
- 2 (21-30 ft)
- 3 (31-40 ft)
- 4 (41-50 ft)
- 5 (51-100 ft) span only
- 6 (101-150 ft) span only
- 7 (151-200 ft) span only
- 8 (201-250 ft) span only

**700- 11- ABC Electronic Display Sign, per Assembly**

*Includes the sign, support structure, foundation, cabinet, and hardware. Electronic Display Signs may include flashing beacons. Includes a solar panel, when noted in the plans.*

*If sign beacons are needed, include pay item 700-12-AB.*

A= Operation

- 1 (Furnish & Install, Ground Mount- AC Powered) includes single or multi post support structure; B=1-6
- 2 (Furnish & Install, Ground Mount- Solar Powered) includes single or multi post support structure; B=1-6
- 3 (Furnish & Install, Overhead Mount) span wire, mast arm, or other structure
- 4 (Install) Dept or local agency furnished Sign; details needed for support structure, whether existing, included with sign, or provided by contractor
- 5 (Relocate Sign) to a new location; C=0
- 6 (Remove, Ground Mount) B=0, includes support and foundation
- 7 (Remove, Overhead Mount) B=0
- 8 (Preventative Maintenance) BC=00
- 9 (Diagnostic and Misc Repair) BC=00

B=Sign Type

- 1 (Electronic Warning Sign)
- 2 (Electronic Regulatory Sign)
- 3 (Electronic Speed Feedback Sign)
- 4 (Electronic Warning Sign with Flashing Beacon)
- 5 (Electronic Regulatory Sign with Flashing Beacon)
- 6 (Electronic Speed Feedback Sign with Flashing Beacon)
- 9 (Blank-Out Sign)

C= Size, square feet total area, static panel + electronic panel

- 1 (Up to 12 ft<sup>2</sup>)
- 2 (12-20 ft<sup>2</sup>)
- 3 (21-30 ft<sup>2</sup>)

**700- 12- AB Sign Beacon, per assembly**

*Intended for adding beacon(s) to static or electronic signs; sign assemblies are paid separately. Includes the cabinet, controller, and housing. Signal cable is paid separately. Includes a solar panel, when noted in the plans.*

A= Operation

- 1 (Furnish & Install, Ground Mount- AC Powered) sign paid separately
- 2 (Furnish & Install, Ground Mount- Solar Powered) sign paid separately
- 3 (Furnish & Install, Overhead Mount) span wire, mast arm, or other paid separately
- 4 (Install) furnished by FDOT or local agency
- 5 (Relocate)
- 6 (Remove, Ground Mount)
- 7 (Remove, Overhead Mount)
- 8 (Replace beacon) LED module

B= Number of beacon(s) per sign

- 1 (one beacon)
- 2 (two beacons)

**Update Plans and Pay Item Notes:** For applicable projects, update the tabulation sheets and Proposal Summary of Quantities (Trns•port report) in the plans.

**Specifications:** Specifications will be available with the January 2014 workbook.

If you have any questions, please contact Melissa Hollis, [Melissa.Hollis@dot.state.fl.us](mailto:Melissa.Hollis@dot.state.fl.us) or 850-414-4182.