

## **HIGHWAY SIGNING.**

**(REV 9-28-15) (1-18)**

ARTICLE 700-1 is expanded by the following new Subarticles:

**700-1.6 Work Documents:** Provide all labor, materials, and equipment necessary to install, maintain, or repair highway signs. Work documents will be issued by the Engineer for sign work indicating the sign type, location, pay item(s) for major parts, and whether the work is routine or priority.

**700-1.7 Routine Work:** Routine work includes the replacement, removal, or repair of damaged signs, miscellaneous repairs, or new installations of sign panels, posts, or foundations. The cost of routine work will include all incidentals necessary to complete the work as identified by the pay items listed on the work document.

Schedule and complete routine single post and overhead work within seven calendar days after the issuance of the work document by the Engineer. Schedule and complete routine multi-post sign work within 14 calendar days after issuance of the work document, by the Engineer. The completion of routine work will not be affected by the issuance of priority work.

**700-1.8 Priority Work:** Priority work consists of work considered critical to the safety of the traveling public. Provide the Engineer with the name and telephone number of the responsible person who will respond to the site of priority work within one hour of notification. Complete priority work within 24 hours of issuance of the work document by the Engineer. The Engineer may approve the use of emergency treatments or actions such as the use of barricades, temporary signs, etc. until the needed repairs or replacement of damaged or missing signs can be made.

The response to priority work will be paid under Necessary Maintenance Service and includes all labor, equipment (truck, hand tools, etc.), and round trip expenses necessary to respond to and complete the priority work.

Major parts required to complete the priority work will be listed on the work document for each site and paid for separately, as identified by the pay items.

**700-1.9 Responsibilities:** A request for 45 calendar day's procurement time for the manufacture of sign panels and supports may be made within 48 hours after issuance of the work document. The Engineer may authorize additional procurement time based on the item(s) being manufactured.

Coordinate with the utility companies in accordance's with Subarticle 7-11.6 and Chapter 556 F. S. for the location of all underground utilities prior to beginning work on sign installations where digging work is required.

Equipment must be inspected by the Engineer before being placed in service. Properly maintain and operate safety devices at all times while the equipment is in use. The Engineer will notify the Contractor immediately if the equipment is deficient in safety devices. Remove the equipment from service until the deficiency is corrected to the satisfaction of the Engineer. At least one of the trucks responding to each work site will have as a minimum, an inventory of certified signs and supports (i.e., STOP, YIELD, WRONG WAY, DO NOT ENTER, NO RIGHT TURN, NO LEFT TURN, ONE WAY, etc.), as directed by the Engineer.

**700-1.10 Overlay Existing Sign Panels:** Use 0.040 inch thick aluminum sheeting for overlays larger than three square feet placed on a sign panel. Replace hex head bolts on the sign surface using stainless steel flat head machine screws with nuts and lock washers to give a flat

surface for the overlay panel. Install the overlay panels starting at the edge away from traffic. Place each panel against the sign using a clamp at the top to hold the panel in place. Drill 1/8-inch holes one inch inside all of the panel edges every 6 to 8 inches and install 1/4 to 3/8 inch length pop rivets. Field measurement of length, height and radius of all existing panels designated for overlay will be required. Place the remaining panels using the same procedure with the overlap in the direction away from the traffic and with rivets along the overlap on 12-inch centers.

**700-1.11 Salvageable Materials:** Unless otherwise directed, by the Engineer, all salvaged material will remain the property of the Department. Completely dismantle and deliver all salvaged materials to storage sites identified by the Engineer. Dispose of materials that the Engineer determines have no salvage value, at no additional cost to the Department.

**700-1.12 Remove and dispose of all existing supports and footings:** When existing ground-mounted signs are to be modified, relocated, or removed. Fill all holes that result from removing footings with acceptable material, as approved by the Engineer, and compact as specified in Subarticle 700-7.1 to match the existing ground surface. Sod or seed and mulch areas disturbed by either signing work or equipment, as directed by the Engineer. The cost for the above work will be included in the contract unit price for the item to which it is incidental.

SUBARTICLE 700-2.1 is expanded by the following:

Meet the requirements of the current Department's Design Standards for highway sign design and placement. For multi-post installations, determine the number, length, and size of sign supports based on the Department's 'Multi-Post Sign Program'. The computer program may be downloaded from the Department's Structures website at <http://www.dot.state.fl.us/structures/proglib.shtm>. Submit the results of the computer run with any necessary field data, to the Engineer prior to fabrication of the support(s). Meet the requirements of Design Standards, Index No. 11200, as amended for all supports.

ARTICLE 700-2.4 is expanded by the following:

Payment will be made under the items specified in the Bid Price Proposal. Payment for the single post sign items will be full compensation to furnish and install each sign assembly including the sign panel, post, any foundation or breakaway device, all hardware, and labor necessary to complete the installation. Payment for the multi-post sign items will be full compensation to furnish and install each multi-post sign assembly including the sign panel, post, any foundation or breakaway device, all hardware, and labor necessary to complete the installation.

Payment for removing, relocating, or repairing an existing sign assembly including panels, support assemblies, all hardware, and labor necessary to complete the operation. When a sign assembly is removed or relocated the cost of backfilling, compacting, and transportation of the removed or relocated assembly for storage or disposal or installation shall be included in the cost of the pay item to which it is incidental. Repairs will include, straightening of panels and supports, tightening or replacement of bolts, nuts, washers, and fasteners. Any required replacement of panels and supports will be paid for separately.

Payment for the installation of existing signs on breakaway support assembly items will be full compensation for the installation of a single or multi-post existing sign on a new breakaway support base and foundation, all hardware, and labor necessary to complete the installation. Payment for the installation or overlay of sign panel items will be full compensation for all labor, materials, equipment, and incidentals necessary to furnish, install, overlay, relocate, replace, or remove sign panels. The furnish and install item includes the sign panel or overlay and materials required for installation. The install item includes the materials required for the installation when the sign panel is furnished by the Department. The overlay item includes the sign panel and the materials required for the installation. The relocate item includes the removal of the sign panel and the reinstallation at the location specified. The replace item includes the new sign panel, the removal of the existing sign panel, and the installation of the new sign panel. The remove item includes the removal of the existing sign panel.

Payment for the sign support repair items will be full compensation for all labor, equipment, materials, and incidentals necessary to repair sign supports as specified including any breakaway devices necessary. The weight in pounds will be the actual length of replaced material, measured in place, times the pounds per foot shown in the section designation in the Base Connection Data Table provided in Design Standards, Index No. 11200, as amended. Industry standard weights may be used for items not included in the Design Standards, as determined by the Engineer.

Payment for the necessary maintenance service item will be full compensation for providing all labor and equipment necessary to respond to each site within two hours of notification and complete priority sign repair work within 24 hours of the issuance of the work document. This item will be used with one or more pay items necessary to complete the priority work.

ARTICLE 700-3.5 is expanded by the following:

Payment will be made under the items specified in the Bid Price Proposal. Payment for the single post Highlighted sign items will be full compensation to furnish and install each sign assembly including the highlighted sign panel, post, any foundation or breakaway device, all hardware, and labor necessary to complete the installation.

Payment for removing, relocating, or repairing an existing highlighted sign assembly including highlighted panels, support assemblies, all hardware, and labor necessary to complete the operation. When a highlighted sign assembly is removed or relocated the cost of backfilling, compacting, and transportation of the removed or relocated assembly for storage or disposal or installation shall be included in the cost of the pay item to which it is incidental. Repairs will include, straightening of panels and supports, tightening or replacement of bolts, nuts, washers, and fasteners. Any required replacement of panels and supports will be paid for separately.

Payment for the necessary maintenance service item will be full compensation for providing all labor and equipment necessary to respond to each site within two hours of notification and complete priority sign repair work within 24 hours of the issuance of the work document. This item will be used with one or more pay items necessary to complete the priority work.

ARTICLE 700-4.25 is expanded by the following:

Payment for Dynamic Message Signs items will be full compensation for providing all labor, equipment, materials, and incidentals necessary to furnish and install, provide routine maintenance, or major repairs for Dynamic Message Signs as specified.

Payment for the necessary maintenance service item will be full compensation for providing all labor and equipment necessary to respond to each site within two hours of notification and complete priority sign repair work within 24 hours of the issuance of the work document. This item will be used with one or more pay items necessary to complete the priority work.

ARTICLE 700-5.5 is expanded by the following:

Payment for Electronic Display Sign items will be full compensation for providing all labor, equipment, materials, and incidentals necessary to furnish and install, provide routine maintenance, or major repairs for Electronic Display Sign as specified.

Payment for the sign support repair items will be full compensation for all labor, equipment, materials, and incidentals necessary to repair sign supports as specified including any breakaway devices necessary. The weight in pounds will be the actual length of replaced material, measured in place, times the pounds per foot shown in the section designation in the Base Connection Data Table provided in Design Standards, Index No. 11200, as amended. Industry standard weights may be used for items not included in the Design Standards, as determined by the Engineer.

Payment for the necessary maintenance service item will be full compensation for providing all labor and equipment necessary to respond to each site within two hours of notification and complete priority sign repair work within 24 hours of the issuance of the work document. This item will be used with one or more pay items necessary to complete the priority work.