

Amend **Section 621 - Traffic Control Signs** to read as follows:

"SECTION 621 - TRAFFIC CONTROL SIGNS

621.01 Description. This work includes furnishing and installing sign posts and foundations, reflector markers, object markers, signs, sign panels, sign structures, route markers, construction signs and milepost markers; removing, storing, and installing sign panels, and sign supports; and incidental work necessary to complete the work.

621.02 Materials. Concrete for sign structures shall be of the class specified in the contract and shall conform to Section 601 - Structural Concrete. Other materials shall conform to the following:

Zinc Paints	708.02
Dark Green Enamel Paint	708.03
Paint Thinner	708.04
Signs	712.20
Reflector Marker	712.21
Flexible Delineator Post	712.51
Sign Posts	713.11
Fasteners for Signs	713.12
Ground Mounted Destination Sign Supports	713.13

Retroreflective sheeting type shall conform to ASTM Designation D 4956-89 or as amended according to Subsection 712.20.

621.03 Construction Requirements.

(A) Destination Sign Supports. Submit shop drawings for acceptance before assembling according to Section 501 - Steel Structures.

Welding shall be continuous and shall conform to Section 501 - Steel Structures.

The weld metal at transverse joints shall extend to the sleeve, making the sleeve an integral part of the joint. Make the longitudinal welds by the submerged arc process. Ground flush the welds except fillet welds with the base material.

Hot-dip zinc-coat the exposed surfaces including the inner portion of the tubular posts and arms after fabrication. Hot-dip zinc-coat the upper 10 inches of anchor bolts. Zinc-coating shall be according to Section 501 - Steel Structures.

Paint the ground mounted destination and expressway sign supports and overhead expressway sign posts, crossarms and panel frames at the work site after proper preparation of the zinc-coated surfaces according to Section 501 - Steel Structures. The exception is that painting shall include one prime coat of zinc-dust zinc-oxide primer followed by two coats of dark green enamel paint as specified.

The aluminum sign supports shall conform to Section 713.14(B) - Aluminum Supports.

(B) Sign Supports. Install permanent signs on posts as specified in the contract. Set the posts plumb at the required locations.

(1) Sign Posts. Use flange channel posts or 12 or 14 gauge square tube posts of the size specified in the plans for:

- (a) Regulatory, warning, and construction signs,
- (b) Bikeway signs,
- (c) School area signs,
- (d) Route marker assemblies,
- (e) Civil Defense signs, or
- (f) Conventional motorist services signs.

(2) Reflector Marker, Milepost Marker, And Type II Object Marker Posts. Reflector marker, milepost marker, and Type II object marker posts shall be either metal posts or flexible delineator posts as specified in the contract. Zinc-coat the metal posts. The metal post shall be 1.12 pounds per foot flanged channel posts or 1-1/2 inch, 12 or 14 gauge square tube posts.

(3) Destination Sign Posts. Destination sign posts shall be zinc-coated steel posts, flanged channel posts, or 12 or 14 gauge square tube posts of the size specified in the contract.

(C) Destination Signs. The Contractor shall be responsible for submitting shop drawings pertinent to the fabrication of destination signs.

Assemble and check the panels in the shop for straightness, alignment, and dimensions. Correct the variations according to the contract.

Install the sign panels carefully and securely according to the contract. Replace chipped or bent signs at no cost to the State.

(D) Reflector Marker. Make the reflector marker according to the dimensions and notes shown in the contract:

(1) Reflector markers RM-1, RM-2, and RM-3 shall be either:

(a) Type III or IV retroreflective sheeting markers,

(b) Glass sphere reflector markers with 4 inch by 5 inch reflector units, or

(c) Plastic prismatic reflector markers with 3 inch diameter reflector units.

(2) Reflector marker RM-4 shall be a Type III or IV retroreflective sheeting marker.

(E) Type II Object Marker. Make Type II object markers according to the dimensions and notes shown in the contract. Reflective sheeting material shall conform to Subsection 712.20(C)(4) - Type III or IV Retroreflective Sheeting.

(F) Splicing of Sheet Reflecting Material. When using reflecting material as a background or signs with sheet aluminum backing, the Engineer will not allow splicing on legends. The reflecting material shall be of one piece whenever the sign dimensions are 4 feet by 6 feet or less.

(G) Removal of Existing Signs. Remove, clean, and store the existing regulatory, warning, expressway, destination and directional signs and markers that the Contractor will not incorporate in the completed project at a location as ordered by the Engineer. The Engineer will decide which items are for disposal or storage.

(H) Shop Drawings for Refurbishing Each Sign Panel. Submit shop drawings for refurbishing each sign panel indicated on the plans for acceptance at least 10 working days before doing the work.

Complete each sign panel and in place within one working day. Exception to this requirement will be contingent upon safety considerations, equipment, and provisions for the protection of the public and with the acceptance of the Engineer.

(I) Labeling of Signs. Label the back of each new sign installed with the following information:

- (1)** Route Number,
- (2)** Mile Post (same as the existing sign), and
- (3)** Date (date the Contractor installs the sign).

The labeling shall be 1 inch high numbers using a black permanent felt-tipped marker.

(J) Construction Signs. Erect construction signs at the beginning of project and at the end of project at the location indicated by the Engineer. These signs shall remain for the duration of the highway project. Maintain these signs. Place these signs besides the required traffic control signs called for in Section 645 - Traffic Control.

The construction signs shall be new and become the property of the Contractor.

621.04 Method of Measurement. The Engineer will measure for the signs, reflectorized delineators, markers and destination ('D' designation) sign posts per each.

The Engineer will measure for the destination sign panels per square foot of sign face.

The Engineer will not measure for removing, cleaning, stacking, and delivering of existing signs, markers, and posts that will not be incorporated in the completed highway.

621.05 Basis of Payment. The Engineer will pay for the accepted regulatory and warning signs and markers at the contract unit price per each complete in place. The price includes full compensation for excavating and backfilling, furnishing and installing materials, labeling, and furnishing equipment, tools, labor and incidentals necessary to complete the work.

The Engineer will pay for the accepted construction signs at the contract unit price per each complete in place. The price includes full compensation for Object Marker, Type II on each sign post, sign panels, posts, nuts, bolts, washers, base support, brackets and necessary hardware, labor, tools, equipment and incidentals necessary for the installation, maintenance, removal, cleaning, delivering, and storing of the signs with posts.

The Engineer will pay for the accepted destination sign posts ('D' designation) at the contract unit price per each complete in place.

The Engineer will pay for the accepted installation of the Street Name Sign on Regulatory and Warning Sign and on Route Marker Assembly at the contract unit price per each complete in place. The price includes full compensation for furnishing and installing the street name sign including accessories such as the street name sign mounting assembly, nuts, bolts, washers, and furnishing labor, tools, equipment, materials, and incidentals necessary to complete the work.

The Engineer will pay for the accepted destination sign panels at the contract unit price per square foot complete in place. The price includes full compensation for furnishing and installing a complete sign panel, including enameling, cut-outs, post fasteners, sign framing, stiffeners, clamp assemblies, mountings and supports for attachment of exit number panels to expressway sign panels, labeling, and necessary hardware, and furnishing equipment, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will make payment under:

Pay Item	Pay Unit
Regulatory and Warning Sign _____	Each
Construction Sign _____	Each
Street Name Sign on _____	Each
Type _____ Route Marker Assembly	Each
Mile Post Marker _____	Each

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Reflector Marker _____	Each
Object Marker, Type II	Each
Breakaway Sign Post (W6x9) and Foundation for Destination Sign	Each
Panel for _____	Square Foot

The Engineer will not pay for removing, cleaning, stacking, and delivering the existing signs, markers, and posts that are not incorporated in the completed project separately. The Engineer will consider them incidental to the various contract items.

When the Engineer accepts an alternate design, the total amount paid includes full compensation for furnishing and installing materials and furnishing equipment, tools, labor, and incidentals necessary to complete the work. The Engineer will not make payment for additional materials, equipment, tools, labor and other incidentals that might become necessary to complete the installation due to the alternate design."

END OF SECTION