

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

**"SECTION 621 - TRAFFIC CONTROL SIGNS**

**621.01 Description.** This work includes furnishing and installing reflector markers, object markers, signs, sign panels, route markers, construction signs, milepost markers, route marker assemblies, 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

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

**621.03 Construction Requirements.**

**(A) 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.

**(B) Destination Sign.** 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.

**(C) 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.
- (3) Reflector marker RM-9 shall be either:

(a) Nine 3 inch round amber plastic prismatic reflectors fastened with blind rivets to a yellow Type III or IV retroreflective sheeting marker, or

(b) A yellow Type III or IV retroreflective sheeting marker of the dimensions shown in the contract.

**(D) 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.

**(E) 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.

**(F) Removal of Existing Signs.** Remove, clean, and store the existing regulatory, warning, destination 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.

**(G) 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.

**(H) 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 following per each:

- (1) signs, reflectorized delineators, destination sign, and markers per each.
- (2) bi-directional milepost markers per each complete in place.

The Engineer will not measure for the following for payment:

- (1) 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, destination signs, reflector markers, object markers, milepost markers, and route marker assemblies 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 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 installation of the street name signs on regulatory and warning signs 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 make payment under:

Pay Item	Pay Unit
Regulatory and Warning Sign _____	Each
Construction Sign _____	Each
Destination Sign _____	Each
Street Name Sign _____	Each

Type_____ Route Marker Assembly _____	Each
Mile Post Marker _____	Each
Reflector Marker _____	Each
Object Marker, Type II _____	Each

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**