ENMIENDA NÚM. 1

SUBASTA FORMAL 23J-18128
PARA LA ADQUISICIÓN DE MATERIALES Y RÓTULOS PARA IDENTIFICAR ZONAS ESCOLARES PARA EL DEPARTAMENTO DE TRANSPORTACIÓN Y OBRAS PÚBLICAS DEL GOBIERNO DE PUERTO RICO

ASUNTO: VARIOS

Se notifica a los licitadores interesados en participar en la Subasta de referencia la siguiente enmienda:

I. Se adjunta **Tabla de Cotizar Enmendada I**, la cual tendrá que ser utilizada por los licitadores para presentar su oferta.

II. Se les notifica a los licitadores que la entrega de los materiales se realizará en las facilidades de la **Oficina de Regulación del Tránsito ubicada en la antigua escuela Efraín Sánchez Hidalgo en la Ave. José de Diego, Bo. Monacillos en Río Piedras, al lado de FEDECOOP.**

III. Se sustituye del inciso 4, el Anejo IV de la sección VII del Pliego de la Subasta el "***Specification 723 Traffic Signals Materials***" por ***"Specification 613 - Traffic Signs"***, la cual deberá ser utilizada por los licitadores para presentar su oferta. Adjunto a esta Enmienda se encuentra la ***especificación*** correcta.

IV. Se añaden los incisos 5 al 7 a la **sección VII del Pliego de la Subasta 23J-18128**, que leen como sigue:

> **"5. El Contratista Agraciado tendrá el deber de honrar al Gobierno la garantía del manufacturero o fabricante, si alguna, independientemente de si se compra o no a través de un distribuidor. 6. La oferta deberá detallar claramente que incluye y que no incluye la garantía, presentando los costos de transporte, si alguno. A la vez, tiene que estar certificada en casos de productos, por el fabricante local o del exterior y también por su representante o distribuidor, garantizándole a la entidad gubernamental su reemplazo de partes o productos, servicios y mano de obra.**

7. Los Licitadores presentarán con su oferta una descripción precisa y detallada de las garantías ofertadas. No se aceptará que los licitadores, incluyan descripciones genéricas o ambiguas en los términos de entrega o las garantías de sus productos y servicios. En ese sentido, todo licitador debe incluir, de forma clara y detallada, el periodo específico o los términos aplicables a cada garantía, sus limitaciones y condiciones, los pasos requeridos para reclamar la garantía, una descripción clara de qué entidad proveerá el servicio de reemplazo, subsanación, corrección o reparación del producto o el servicio y los términos de entrega del producto o servicio. Cualquier oferta que no cumpla con lo antes expresado, se tendrá por no sometida y la misma no podrá ser favorecida en la adjudicación de la subasta o propuesta."

Todos los demás términos, condiciones y especificaciones permanecen sin alterar.

Lcda. Hilda M. Rivera Colón
Administradora Auxiliar
Área de Adquisiciones

Joel González Fontánez
Oficial de Licitación Interino

Emitido hoy, 6 de julio de 2023
En San Juan, Puerto Rico

JUNTA DE SUBASTAS
ASG
GOBIERNO DE PUERTO RICO

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TABLA DE OFERTAR ENMENDADA I
SUBASTA FORMAL 23J-18128

PARA LA ADQUISICIÓN DE MATERIALES Y RÓTULOS PARA IDENTIFICAR ZONAS ESCOLARES PARA EL DEPARTAMENTO DE TRANSPORTACIÓN Y OBRAS PÚBLICAS DEL GOBIERNO DE PUERTO RICO

Partida	Descripción	Unidad	Cantidad	Precio Unitario	Precio Total	Ley % de Preferencia(si aplica)	Garantía	Tiempo de Entrega
	ADQUISICIÓN Y ENTREGA DE MATERIALES PARA HACER RÓTULOS PARA IDENTIFICAR ZONAS ESCOLARES							
1	Small Traffic Sign (Diamond grade) Height 48", Width 24", S5-1, (15 MPH)	EA	100					
2	Small Traffic Sign (Diamond grade) Height 48", Width 24", S5-1, (25 MPH)	EA	100					
3	Small Traffic Sign (Diamond grade) Height 36", Width 36", S1-1, (Escuela Adelante)	EA	800					
4	Small Traffic Sign (Diamond grade) Height 12", Width 30", W16-9P, (Auxiliar)	EA	400					
5	Small Traffic Sign (Diamond grade) Height 12", Width 24", W16-7P (Auxiliar)	EA	400					
6	Small Traffic Sign (Diamond grade) Height 48", Width 36", S5-2 (Termina Zona)	EA	200					
7	Soporte Tipo "U Channel" de 12 pies de largo y 3lb/pie.	EA	991					
8	Tornillos Galvanizados 5/16" X 2 1/2"	EA	4,045					
9	Tornillos Galvanizados 5/16" X 1 1/2"	EA	4,048					
10	Tuercas Galvanizadas 5/16"	EA	4,046					
11	Aranderas de Presión Galvanizadas 5/16"	EA	4,045					
12	Aranderas de Planas Galvanizadas 5/16"	EA	8,090					
			TOTAL	$	-			

SPECIFICATION 613 – TRAFFIC SIGNS

613-1 DESCRIPTION

613-1.01 Scope

a. This work shall consist of furnishing and erecting traffic signs, including overhead sign structures, in accordance with these specifications and in conformity with the locations and details shown on the plans or as directed by the Engineer.

b. Traffic signs and sign supports details not shown on the plans shall conform to the "Manual de Señales de Tránsito para las Vías Públicas de Puerto Rico", hereinafter referred to as the MST of the Department of Transportation and Public Works (DTPW), the "Manual de Dispositivos Uniformes para el Control del Tránsito en las Vías Públicas de Puerto Rico" (MDUCT) of the DTPW, and the standard drawings of the Highway Authority which provide details for the fabrication and erection of traffic signs and sign supports.

c. The designation Roadside Traffic Signs applies to all signs erected on the slopes, medians, gores, or sidewalks which do not extend over the traveled roadway. The designation Overhead Traffic Signs applies to signs erected partially or completely over the traveled way, including signs mounted on bridges.

d. Reflectorization of sign backgrounds and/or legends shall be as called for in the MST. Overhead signs shall be illuminated when so called for in the plans.

613-2 MATERIALS

613-2.01 Sign Panels - Sign panels shall be made from aluminum sheets or extrusions conforming to the followings requirements:

a. Sign Sheets – ASTM B 209: 6061-T6, 5052-H36, 5052-H38, 5086-H34, 5153-H36.

b. Extruded Panels – ASTM B 221: 6063-T6.

c. Stiffness of panels shall be as specified in the "Manual de Señales de Tránsito para las Vías Públicas de Puerto Rico (MST)".

613-2.02 Reflective Sheeting - Reflective sheeting for all signs shall be of the high intensity type consisting of spherical lens elements adhered to a synthetic resin and encapsulated by a flexible, transparent, weatherproof plastic having a smooth outer surface. The sheeting shall have a pre-coated adhesive backing protected by a removable cover. The sheeting shall conform to the requirements of AASHTO M 268 modified and supplemented as follows:

a. Color requirements - The colors specified shall be matched visually and be within the tolerance limits shown on the FHWA Color Tolerance Charts.

b. Reflective Intensity - The reflective sheeting shall have minimum reflective intensity values at 0.2° and 0.5° divergence as shown in Table 613-1, expressed as candlepower per foot candle per square foot (candelas per lux per square meter) of material.

The brightness of the reflective sheeting when totally wet shall not be less than 90 percent of the dry values in Table 613-1.

TABLE 613-1

Divergence Angle (°)	Incidence Angle (°)	Silver White	Yellow	Red	Orange	Green	Blue
0.2	-4	250	170	45	100	45	20
0.2	+30	140	100	25	60	25	11
0.5	-4	95	62	15	30	15	7.5
0.5	+30	65	45	10	25	10	5

c. Specular Gloss -The reflective sheeting shall have an 85 degree specular gloss of not less than 50 when tested as per ASTM D-23.

d. Processing - Color processing shall be restricted to sheeting with heat activated Class 2 adhesive, unless otherwise recommended by the manufacturer, and except for reflective sheeting used on construction signs, barricades, drums and other temporary maintenance of traffic devices where pressure sensitive adhesive (Class 1) may be used.

e. Durability - Processed and applied in accordance with recommended procedures, the reflective material shall be weather resistant and, following cleaning, shall show no appreciable discoloration, cracking, blistering or dimensional change and shall not have less than 70 percent of the specified minimum reflective intensity values (Table 613-1) when subjected to accelerated weathering for 2200 hours in accordance with ASTM Standard G23-69, using a Type E or EH Weatherometer.

f. Colorfastness - One of the specimens prepared and subjected to the accelerated weathering test specified above shall be used to test for colorfastness. Wet out the specimen with a mild detergent and water solution and compare it with a similarly treated unexposed specimen under natural (North sky) daylight or artificial daylight having a color temperature of 7500 K. The colorfastness shall be evaluated as follows:

Excellent - No appreciable change in color

Good - Perceptible but no appreciable change in color

Fair - Appreciable change in color

Appreciable change in color means a change that is immediately noticeable in comparing the exposed specimen with the original comparison specimen. If closer inspection or a change of angle of light is required to make apparent a

slight change in color, the change is not appreciable. The reflective material must show "good" colorfastness or better.

g. Fungus Resistance - The reflective material shall be tested for fungus resistance as per paragraph 14.2 of AASHTO M 268.

h. Cleaning Capability - The reflective sheeting surface shall be capable of being readily cleaned and refurbished by cleaning and clear overcoating in accordance with the manufacturer's recommendations.

i. Certification - The Contractor shall present to the Authority certification from the manufacturer of the reflective sheeting that the reflective sheeting used in the traffic signs furnished and erected under the contract meets all the specification requirements.

613-2.03 Legends - Letters, numerals, arrows, symbols, borders, and other features of the sign message shall be of the type, size, and series shown on the plans or as specified by the Engineer. Completed letters, numerals and other units shall be formed to provide continuous stroke width with smooth edges and shall present a flat surface free of warp, blisters, wrinkles, burrs and splinters. Legends shall conform to the MST, the MDUCT and the FHWA standard alphabet, and shall be applied by one of the following methods.

a. Screen Process - The legend shall be applied on the reflective sheeting or opaque background by the direct or reverse screen process. Messages and borders of a color darker than the background shall be applied by direct process. Messages and borders of a color lighter than the sign background shall be produced by the reverse screen process. Opaque or transparent colors, inks and paints used in the screen process shall be of the type and quality recommended by the manufacturer of the reflective sheeting. Signs after screening shall be air-dried or baked in accordance with the manufacturer's recommendations to provide a smooth hard

finish. Any signs on which blisters appear during the drying process shall be rejected.

b. Direct Applied Characters - The letters, numerals, symbols, borders and other features of the legend shall be cut from high intensity reflective sheeting meeting the requirements of Section 612-2.02 above, of the colors specified in the MST, and applied to the reflective sheeting of the sign panel in accordance with the instructions of the manufacturer of the reflective sheeting.

c. Clear Coating - All reflective sheeting signs prepared by screening with transparent process colors shall be clear coated using a coating recommended by the sheeting manufacturer. Faces screened with only black opaque do not need to be coated.

613-2.04 Sign Supports - When no specific design or design criteria is shown on the plans, the design of the sign supports shall follow the AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaires and Traffic Signals", except that:

a. Ice load need not be considered.

b. Wind loads of 120 mph for roadside signs and 130 mph for overhead sign structures shall be used.

613-2.05 Roadside Sign Posts - Posts used for supporting roadside signs may be either galvanized steel or aluminum alloy at the Contractor's option unless otherwise provided on the plans.

a. Size and shape of posts shall be as indicated on the standard drawings or shown on the plans.

b. Steel posts shall conform to the requirements of AASHTO M 183 (ASTM A 36) - Structural Steel. AASHTO M 161, M 188, M 222 and M 223 - Grade 50 may also be used for posts and slip-impact bases. All steel posts shall be

galvanized in accordance with AASHTO M 111 (ASTM A 123) after fabrication (punching, drilling, etc.).

c. Aluminum posts shall be of aluminum alloy conforming to ASTM B 221, Alloys 6061-T6, 6351-T5, 6063-T6 or 6005-T5, or ASTM B 308, Alloy 6061 - T6.

d. The lengths of posts to be installed shall be computed by the Contractor for each specific sign location based on the sign dimensions, footing requirements and the required vertical and lateral clearances specified in the MST and the standard drawings, or as shown on the plans. For signs to be erected on two or more posts on a cut or file slope, the length of each post shall be varied as required to conform to the site conditions but maintaining the required footing depth and height and lateral clearances.

e. Sign posts supports for small signs (as described in the Standard Drawings may be any support listed in the latest Federal Highway Administration (FHWA) approved listing at the time of bid opening. Only hot dip galvanized and aluminum posts are accepted. The approved list is available at the Materials Testing Office and the Bids and Estimates Office.

613-2.06 Fittings - Assembly and stringer bars, stiffeners, wind beams, screws, washers, clamps, bolts, nuts and other fasteners and fittings shall be of galvanized steel or aluminum alloy as shown on the standard drawings and plans or as specified by the Engineer. Structural steel assembly bars shall conform to the same requirements as for steel posts included in paragraph 613-2.05 b. above. Galvanizing of steel hardware shall be in accordance with AASHTO M 232 (ASTM A 153). High strength steel bolts, nuts and washers shall conform to AASHTO M 164 (ASTM A 325), Aluminum alloy structural members shall conform to the same requirements as for aluminum posts included in paragraph 613-2.05c. above.

613-2.07 Overhead Sign Structures - Materials for overhead sign structures shall be as follows:

a. When the plans include a detailed structural design, the materials to be used shall be as indicated on the plans.

b. When the plans include only a general layout and elevations, the Contractor shall develop a detailed design and shop drawings for the structure in accordance with the design criteria, location, dimensions, clearances and foundations specified on the plans. When no specific design criteria is provided on the plans, the provisions of paragraph 613-2.04 above shall apply. The design computations and shop drawings shall be submitted to the Authority for review and approval.

c. Unless otherwise specified on the plans, galvanized structural steel used for overhead steel structures and structural aluminum alloy used for overhead aluminum structures shall conform to the same requirements as specified for these materials in Articles 2.05 and 2.06 above.

613-2.08 Concrete - Portland Cement concrete for foundations and bases of sign posts and overhead sign structures shall conform to the applicable requirements of Specification 601 - Structural Concrete, for the classes of concrete specified in the standard drawings and project plans. When not specified, Class A shall be used for overhead sign structures and Class B for roadside signs.

613-2.09 Reinforcing Steel - Shall conform to the requirements of Specification 602 - Reinforcing Steel.

613-2.10 Illumination Materials

a. Materials for the illumination of overhead signs shall comply with the applicable requirements of Specification 612 - Highway Lighting System, and Specification 714 - Highway Lighting Materials.

b. Unless otherwise specified on the plans the following materials shall be used:

1. Underground electrical conduits shall be PVC DB-120. All exposed conduits shall be rigid galvanized steel except at horizontal mounting supports for sign panels where weatherproof flexible conduit may be used.

2. Power feed conductors from the handhole to fuses shall be not less than No. 10 AWG Stranded XLP (RHH) for use at 90° C. Their ratings shall be selected as required to carry the connected load.

3. Wire from the sign protection fuses to the sign ballast shall be not less than No. 10 AWG Stranded XLP (RHH) for use at 90°C.

4. Grounding electrode conductor at the sign structure columns and power source poles shall be not less than No. 8 bare copper wire. Grounding conductor equipment shall have a current rating in accordance with overcurrent device ahead of equipment as per Article 250 N.E.C. and TW insulation. Ground shall be a 5/8" copper rod 2.5 meters long.

5. Wire from ballasts to sign luminaire units and between lamps holders shall be as recommended by the ballast manufacturer for leads greater than 12 meters.

6. Sign luminaire bodies shall be fabricated of either diecast or extruded aluminum shapes. The aluminum body shall have a removable molded clear acrylic plastic cover. Neoprene sponge rubber gasketing shall be used between the aluminum body and the plastic cover to form a waterproof and dustproof seal. The remainder of the aluminum

housing shall also be of weatherproof and dustproof construction. Retrodispersion and prefocused alzak specular aluminum paracylindrical reflectors shall be utilized to furnish light control. Sign luminaires shall be 175-watt clear mercury vapor, ANSI Code H-39 22 KB, or 250-watt clear mercury vapor, ANSI Code H-37-5KB, equipped for use on 120/240 V. multiple circuit, and with a minimum average rated life of 24,000 hours.

7. Photoelectric controls shall consist of a photoelectric unit and contactors located as shown on the plans. Fuses shall also be included in the outdoor lighting contactors enclosure. A switch to permit manual control of the lighting circuit shall be provided. The cabinet enclosure shall be installed at a height of approximately two meters above the sign structure base.

613-2.11 Certification - The manufacturer of the completed signs shall certify that all signs furnished conform to these specifications and the Contractor shall replace or repair without cost all signs that fail to meet these requirements.

613-3 CONSTRUCTION REQUIREMENTS

613-3.01 Fabrication of Sign Panels

a. Fabrication of sign panels shall be accomplished in a uniform and precise manner. All cutting, punching and drilling of holes shall be completed prior to final surface preparation and application of the reflective sheeting. The surface of all sign panels shall be flat and free of buckles, warp, dents, cockles, burrs, and any other defects resulting from fabrication.

b. Prior to the application of reflective sheeting, the sign blank shall be cleaned and degreased in an inhibited alkaline cleaner or in a vapor degreaser consisting of a saturated vapor

of trichloroethylene. If an inhibited alkaline cleaner is used, the sign shall either be immersed in a tank containing alkaline solutions, controlled and titrated to the solution manufacturer's specifications, or be sprayed with the same solution. Treatment time shall depend upon the amount of soil present and the gauge of the metal. The alkaline cleaner shall be rinsed off with clean running water. After degreasing, the aluminum sheet shall be treated in a proprietary alcoholic phosphoric solution. Then the aluminum sheet shall be thoroughly rinsed again with clean running cold water and dried with warm or forced air. However, the sign blank may be degreased and prepared in accordance with the recommendations of the reflective sheeting manufacturer, particularly if the above method is incompatible with the sheeting.

c. All individual signs up to 48" x 96" shall be fabricated from a single sign panel with no splices. Larger signs may have splices but with closure strips provided as shown on the plans. Only vertical splices will be allowed and a minimum number of panels approximately equal in size shall be used. In no case shall a panel section be less than 24" in width.

d. The back side of aluminum panels and splice bars shall have a uniform dull finish.

613-3.02 Fabrication of Reflectorized Sign Faces

a. Reflective sheeting shall be applied to the prepared sign panels with mechanical equipment and in the manner specified by the manufacturer of the sheeting. The face of the panel shall be completely covered by the sheeting. Fastening of the reflectorized sign panels to the support structure shall include the use of any special fittings recommended by the reflective sheeting manufacturer to prevent damage to the sheeting.

b. Whenever a sign face comprises two or more pieces of reflective sheeting, they must be carefully matched for

color at the time of sign fabrication to provide uniform appearance and brilliance, both at day and at night. Corresponding edges of reflective sheeting shall lie adjacent on the finished sign. Non-conformance may result in non-uniform shading and an undesirable contrast between adjacent widths of applied sheeting which will not be acceptable.

c. Reflective sheeting splices and sign edges shall be sealed with materials supplied by and in the manner specified by the sheeting manufacturer.

d. Any damage to the reflective sheeting appearing in the completed sign shall be cause for rejection. Patched sheeting will not be accepted.

e. The sign legend shall be applied by the painted screen process or by direct application of cut out characters as required to meet the reflectorization conditions for each sign specified in the MST.

613-3.03 Footings

a. The excavation and backfill for the footings of sign post and support structures shall be performed in accordance with Specification 206 - Excavation for Structures.

b. The construction of concrete footings shall be in accordance with the details and dimensions shown on the standard drawings or the project plans, or as designed by the Contractor and approved by the Authority, and in conformance with the applicable requirements of Specification 601 - Structural Concrete.

613-3.04 Erection of Signs and Sign Supports

a. Signs and sign support structures shall be erected at the locations shown on the plans, or selected by the Engineer,

and in accordance with the details shown on the standard drawings, the MST, the MDUCT and the project plans.

b. Fabrication and erection of steel sign support structures shall conform to the applicable requirements of Specification 616 - Steel Structures.

c. Signs supports and stub posts shall be erected at a true vertical. Where two or more posts are required to support a sign, the posts shall be oriented and positioned so that no twist or warp will be imparted to the sign panels.

d. All posts, except for parking and stopping regulation signs (R7 series) in which arrows are used to indicate the extent of restricted zones, shall be erected so that the signs are mounted approximately at right angles to the direction of, and facing, the traffic that they are intended to serve.

e. To eliminate mirror reflection from the sign faces, the sign edge furthest from the travel lanes shall be rotated 3 degrees away from the direction of approaching traffic. At curved alignments the angle of placement shall be determined by the estimated course of approaching traffic rather than by the roadway edge at the point where the sign is to be located. Sign faces are normally vertical but on grades it may be desirable to tilt a sign forward or backward from the vertical to improve the viewing angle. For parking and stopping regulation signs (R7 series), the signs shall be set at an angle of not less than 30 degrees nor more than 45 degrees with a line parallel to the flow of traffic so as to be visible to approaching traffic. Overhead signs shall have the top edge rotated 3 degrees from the vertical towards the approaching traffic.

f. Breakaway features for sign supports requiring such features shall be fabricated and erected in accordance with the details specified in the standard drawings or as shown on the plans. The Contractor shall be responsible for providing a bolt tension calibrating device and for applying the proper

torque to obtain the required residual bolt tension as specified in the standard models or project plans as soon as the sign support structure is erected. A written certificate to this effect shall be submitted by the Contractor for each sign structure completed.

613-3.05 Sign Illumination

a. External illumination for overhead signs requiring such illumination shall be provided as shown on the plans or required by special provisions. The Contractor shall submit design computations and shop drawings of each proposed illumination installation for review and approval by the Authority. The installation of the illumination shall be performed in accordance with the applicable requirement of Specification 612 - Highway Lighting System, and Article 613-2.10 of this specification.

b. Lighting design levels shall be as follows unless otherwise specified on the plans:

1. Luminance - 14 to 28 foot-lamberts. The maximum permissible variation in luminance between any one-square foot area on the sign face and the one-square foot areas adjacent to it is a 2:1 ratio.

2. Illumination - 20 to 40 foot-candles. The uniformity ratio (maximum/minimum) of illumination shall not exceed 6:1. A ratio of 4:1 is preferable.

c. All electric wiring, both above and below ground, shall be installed in electrical conduit, except when tubular type sign supports can provide a raceway. All metal parts shall be grounded.

d. The electrical control equipment shall include:

1. Dual element fuses of the proper rating installed in lighting contactors cabinets on sign

support structures as shown on the plans or as specified. The sign circuit fuses shall be connected to the line side of the ballast.

2. Contactor and fuse cabinets for sign structures and the service entrance cabinets shall be constructed of 10 gage sheet steel, hot-dipped, galvanized after fabrication. Each cabinet shall be rainproof and have a top hinged door provided with a latching device for use with padlock. Each door shall be constructed with a "lock-open" type hinge slot.

e. All sign luminaires shall be bottom mounted. Lamp ballasts shall be of the back-mounted type with attached pipe bracket which extends to the front of the sign to support the luminaire. Ballast shall be of the high power factor and regulated type.

f. The electric power shall be 120/240 V. supplied from the highway lighting system or P.R. Electric Power Authority distribution lines as shown on the plans.

g. Photoelectric controls shall be capable of switching multiple lighting systems directly, shall be controlled by a photocell multiple relay and have 60 amps. rating, 120/240 V., 2-poles with dual element fuses.

h. Additional miscellaneous and incidental materials required to complete the illumination installation, that are not mentioned on the plans or in the Special Provisions, shall be furnished and placed by the Contractor. Such materials shall be of good quality and suitable for the use intended, and shall comply with applicable N.E.M.A. and N.E.C. standards.

613-3.06 Field Inspection

a. All materials and workmanship will be inspected in the field unless it has been previously inspected. Immediately

prior to erection, all material shall be inspected for damage which is attributable to improper transportation, handling or storage procedure and any damaged material shall be repaired or replaced by the Contractor at his expense.

b. An inspection of the completely erected signs shall be made in the daylight for proper location, line and grade of signs and sign supports, appearance and visibility. The signs shall also be inspected at night by the Engineer to check for orientation, specular reflection and possible defects that may be more conspicuous at night.

c. All apparent defects disclosed by the day and night inspections shall be corrected by the Contractor, at his expense, to the satisfaction of the Engineer.

613-4 METHOD OF MEASUREMENT

613-4.01 Roadside traffic signs will be measured for payment by the unit with each individual sign assembly, whether consisting of a single sign or multiple signs, counted as a unit. The sign assemblies are designated by identification code numbers on the plans and contract schedule.

613-4.02 Overhead traffic sign will also be measured for payment by the unit with each individual sign assembly counted as a unit and identified by a code number in the plans and contract schedule.

613-4.03 For the purpose of payment each sign assembly unit shall consist of all the signs mounted on a single structure which may consist of one or more posts, an overhead structure or a bridge mounting. The unit includes all the components necessary to complete the assembly as called for in the plans and specifications including excavation, backfill, footings, supports, breakaway features, sign panels, brackets, hardware, sign illumination and any other special feature indicated. The sign illumination included in the unit measurement shall comprise all equipment and materials

required to complete the illumination from the electric power source (highway lighting system or PREPA lines) to the sign luminaires.

613-5 BASIS OF PAYMENT

613-5.01 The contract unit price for each sign assembly shall be full compensation for the design, shop drawings, fabricating, furnishing and erecting the complete sign assembly and support structure including excavation, backfill, concrete footings, reinforcing steel, posts, structural members, brackets, fittings, hardware, sign panels, sign facings, breakaway features, sign illumination system and all other materials, equipment and labor necessary to complete each unit in accordance with the plans and specifications.

613-5.02 Payment will made under:

Pay Item	Pay Unit
Traffic Sign Assembly Code Number _____.....	Each