

**ITEM 010790**

**Item 0107901 - TEMPORARY PRE-CAST CONCRETE BARRIER CURB**

**Item 0107902 - RELOCATED TEMPORARY PRE-CAST CONCRETE BARRIER CURB**

**DESCRIPTION**

Work under this item shall consist of furnishing, installing, relocating and removing temporary pre-cast concrete barrier curb and delineator used to separate traffic from opposing traffic or the work area. The pre-cast concrete barrier curb shall conform to the dimensions shown on the details and become property of the Contractor upon completion of the project.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for barrier curb in accordance with the contract general requirements.

**MATERIALS**

The materials used for this work shall conform to the requirements of section 8.22 of The State of Connecticut Department of Transportation Standard Specification for Roads, Bridges and Incidental Construction, Form 816, 2004.

Manufacturer identification and date of manufacture shall be permanently marked on the barrier curb in the location shown on the plan. When used barrier curb is furnished, the Contractor shall provide documentation stating the source of the material, the project it will be used on, the casting date, and certification that the barrier conforms to all City requirements. The delineator shall be fabricated of aluminum, steel, plastic, or of a material approved by the Engineer. The reflective sheeting shall be encapsulated lens sheeting. Delineator fastening hardware or adhesive shall be suitable for the purpose intended.

**CONSTRUCTION METHODS**

Concrete barrier units shall be pre-cast in a plant approved by the Engineer. Forms for pre-cast concrete barrier units shall be of substantial construction, lined so as to

produce a smooth, dense surface with a uniform appearance. Form oil shall be a non-staining type. Air holes on exposed surfaces shall be filled immediately after removal of the forms to the satisfaction of the Engineer. Concrete shall not be deposited into forms when the ambient temperature is below 40 degree F or above 100 degrees F, unless adequate heating or cooling procedures have been previously approved by the Engineer. The concrete temperature shall be 60 to 90 degrees F at the time of placement. At no time will truck-mixed cement or transit-mixed cement be allowed.

Production during the winter season, from November 15 to March 15 inclusive, will be permitted only on beds located in a completely enclosed structure of suitable size and dimension that provides a controlled atmosphere for the protection of the casting operation and the product. Outside concrete operations will not be permitted during rainfall unless the operation is completely under cover.

The concrete shall be vibrated internally, or externally, or both, as ordered by the Engineer. Vibrating shall be done with care in such a manner as to avoid displacement of reinforcing steel, forms, or their components. There shall be no interruption in the pouring of any unit. Concrete shall be carefully placed in the forms and vibrated sufficiently to produce a surface free from imperfections such as honeycombing, segregation, cracking, or checking. Any deficiencies noted in the units may be cause for rejection.

Temporary pre-cast concrete barrier units shall be placed as shown on the plans or as directed by the Engineer, on a firm even surface so as to produce a smooth continuous barrier curb. Connection rods shall be provided. Nuts at the connection rod shall be turned until the washer is drawn up against the connection loop. The loops must not be bent.

The temporary concrete barrier shall be maintained by the Contractor during all stages of construction. Any damaged material shall be removed and replaced by the Contractor at the Contractor's expense.

The Contractor shall relocate the concrete barrier and its appurtenances to locations within the project limits as shown on the plans or as ordered by the Engineer. When the temporary barrier is no longer required it shall be removed completely from the project and remain as property of the Contractor.

The delineator shall be installed in the center on top of the barrier at the locations designated on the plans. They may be fastened by adhesive or hardware and must be maintained in good condition at all times.

DE-7 delineators shall be used when the barriers are on the right side of traffic or dividing traffic in the same direction. DE-7A delineators shall be used when the barriers are on the left side of traffic. DE-7B delineators shall be used when the barriers divide opposing traffic lanes. DE-7C delineators shall be used with the yellow side on the left side of traffic when traffic is alternated.

**METHOD OF MEASUREMENT**

This item will be measured for payment along the center line of the top of the concrete barrier and will be the actual number of linear feet of temporary concrete barrier furnished, installed and accepted. Relocated temporary concrete barrier shall be measured along the center line of the top of the concrete barrier each time the barrier has been satisfactorily relocated as directed by the Engineer, including to and from the storage area. Storage of concrete barrier curb will not be measured for payment.

**BASIS OF PAYMENT**

This work will be paid for at the contract unit price per linear foot of "TEMPORARY PRE-CAST CONCRETE BARRIER CURB", complete in place, which price shall include all furnishings, transportation, initial installation, final removal, storage materials, reinforcing steel, connecting rods, delineator, equipment, tools, and labor incidental thereto. Each temporary pre-cast concrete barrier curb will be paid for once regardless of the number of times it is used on the project. Any temporary pre-cast concrete barrier curbs that become lost, damaged, or defaced shall be replaced by the Contractor at no cost to the City.

The relocation of the temporary pre-cast concrete barrier curb will be paid for at the contact unit price per linear foot for "RELOCATE TEMPORARY PRE-CAST CONCRETE BARRIER CURB", which price shall include all transportation, materials, equipment, tools and labor incidental thereto.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0107901	Temporary Pre-cast Concrete Barrier Curb	LF
0107902	Relocated Temporary Pre-cast Concrete Barrier Curb	LF