

**DESCRIPTION**

This work shall consist of furnishing and installing Northeast Extreme Tee Beam (NEXT Beam) units for structures in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

The requirements of the PCCM shall apply except as modified herein:

The corrosion inhibitor shall conform to 711-13 CALCIUM NITRITE BASED CORROSION INHIBITORS.

Epoxy Bar reinforcement shall conform to Material specification, Section 709-04.

Concrete strength ( $f_c'$ ) shall be 70 MPa and conform to Section 718-06.

The minimum concrete strength ( $f_c'$ ) at the time of prestressing strand release shall be 55 MPa.

A minimum of 60 days shall be required between casting and erection.

Low Relaxation Prestressing steel shall conform to Section 709-06 and the Prestressed Concrete Construction Manual (PCCM), Section 4.

**Fabrication**

An automated corrosion inhibitor dispensing system shall be required. The dispensing system shall meet the following requirements:

- Delivery accuracy of  $\pm 3\%$  (by weight or volume)
- Program Quantity (liter)
- System Interlocks
- Print requirements:

Calibration of the delivery system shall be in accordance with procedures approved by the Director, Materials Bureau.

**Fabrication Tolerances**

In addition to tolerances specified in Section 600, of New York State Prestressed Concrete Construction Manual and PCI, Design Handbook of Precast and Prestressed Concrete, tolerances shall also reference PCI Publication MNL-116, 4th Edition; Appendix B; Product B-4, Double Tee (Untopped and Pretopped).

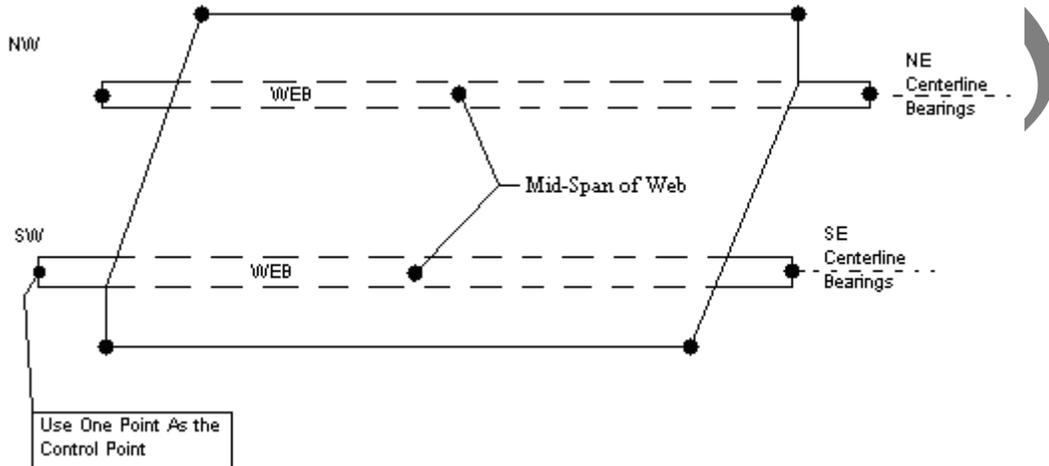
Warpage data shall be sent to the Standards Unit of Main Office Structures.

**CONSTRUCTION DETAILS**

The applicable requirements of Section 700, Construction Details, of New York State Prestressed Concrete Construction Manual shall apply.

**Casting Cell**

Figure 1 depicts the casting bed arrangement based on the local system of coordinates.



**Figure 1**

The Survey shall occur by placing a rivet in each corner to monitor relative differences in order to monitor warpage. Each point shall be surveyed four (4) times:

- Survey 1: Before De-Tensioning
- Survey 2: After De-Tensioning
- Survey 3: Before Shipping
- Survey 4: At Job Site (Prior to Erection)

**METHOD OF MEASUREMENT**

Section 563-4.02 shall apply. This work will be measured as the number of square meters of the plan area of the pre-casted NEXT Beam satisfactorily furnished and installed. Plan area is defined as the area bounded by the centerline of bearings and the outer edges of each prestressed unit.

**BASIS OF PAYMENT**

Section 563-5 shall apply.