# **SECTION 32 17 13**

### **CONCRETE WHEELSTOPS IN PARKING AREAS**

## **PART 1 GENERAL**

### 1.01 SECTION INCLUDES

A. Precast concrete wheelstops and anchorage.

## 1.02 REFERENCE STANDARDS

- A. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2015.
- B. ASTM C150/C150M Standard Specification for Portland Cement; 2012.
- C. ASTM C260/C260M Standard Specification for Air-Entraining Admixtures for Concrete; 2010a.
- D. ASTM C330/C330M Standard Specification for Lightweight Aggregates for Structural Concrete; 2014.

## 1.03 SUBMITTALS

- A. See Section 01 30 00 Administration of Contracts and Project Procedures, for submittal procedures.
- B. Product Data: Provide unit configuration, dimensions.

### **PART 2 PRODUCTS**

### 2.01 MATERIALS

- A. Parking Wheelstops: Precast concrete, conforming to the following:
  - 1. Cement: ASTM C150, Portland Type I Normal; white color.
  - 2. Concrete Materials: ASTM C330/C330M aggregate, water, and sand.
  - 3. Reinforcing Steel: ASTM A615/A615M, deformed steel bars; unfinished, strength and size commensurate with precast unit design.
  - 4. Air Entrainment Admixture: ASTM C260/C260M.
  - 5. Concrete Mix: Minimum 5,000 psi (34 MPa) compressive strength after 28 days, air entrained to 5 to 7 percent.
  - 6. Use rigid molds, constructed to maintain precast units uniform in shape, size and finish. Maintain consistent quality during manufacture.
  - 7. Embed reinforcing steel, and drill or sleeve for two dowels.
  - 8. Cure units to develop concrete quality, and to minimize appearance blemishes such as non-uniformity, staining, or surface cracking.
  - 9. Minor patching in the manufacturing plant is acceptable, providing appearance of units is not impaired.

## PART 3 EXECUTION

## 3.01 INSTALLATION

- A. Install units without damage to shape or finish. Replace or repair damaged units.
- B. Install units in alignment with adjacent work.

#### **END OF SECTION**