



Precast Concrete Traffic Barrier Fabricated at Project-Specific Off-Site Plant Locations

Inspection Guidance Document

Materials and Tests Division

Overview

This document serves as a guide to assist in verifying acceptable quality and workmanship of precast concrete traffic barrier fabricated at project specific off-site plant locations. This document is applicable to Item 512 portable traffic barrier retained by TxDOT and Item 514 permanent traffic barrier.

Material Producer List

Fabricators of project-specific precast concrete traffic barrier produced at off-site locations are not listed on TxDOT's Material Producer List (MPL) titled "Concrete Traffic Barrier Fabrication Plants (Multi-Project)." Only multi-project fabrication plants of precast traffic barrier are qualified per DMS-7350, "Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Traffic Barrier" and listed on the MPL.

Fabricator Approval Stamps

Project specific concrete traffic barrier received at a project site produced at off-site locations are not required to be stamped with an approval stamp. This is a requirement of DMS-7350 which does not apply to project-specific fabricators located off-site.

These fabricators may choose to stamp their approved traffic barrier with an approval stamp if desired.

Concrete

The fabricator is required to use a concrete mix design that complies with Item 421 and the Contract Plans. All other pertinent requirements of Item 421 along with any project specific requirements must be met.

Reinforcing Steel

The reinforcing steel must meet the requirements of Item 440.

Connection Hardware

Steel connection hardware must comply with the Buy America requirements in Section 6.1.1 of the Standard Specifications. The Type X connection hardware must meet the details in the Contract plans. The Type J (J-J Hooks) and Type Q (Quick-Bolt) connection hardware must meet the details in the Contract plans and the connection manufacturer's shop drawings.

Product Inspection

Visually inspect concrete barrier for the following:

- Cracks,
- Concrete spalls,
- Surface defects such as unconsolidated concrete (honeycomb), and
- Inadequate/improper concrete repairs. Reference TxDOT's Concrete Repair Manual for recommended repair procedures.

Workmanship, Defects, and Breakage

The following evaluation criteria may be used to assess damage or defects to each member.

#	Damage/Discrepancy	Evaluation Criteria
1	Cracks	Repair cracks (including plastic shrinkage cracks) that do not extend beyond the nearest plane of reinforcement if not numerous or extensive in accordance with TxDOT's Concrete Repair Manual.
2	Unconsolidated Concrete (Honeycomb)	Repair in accordance with TxDOT's Concrete Repair Manual
3	Spalls	Repair in accordance with TxDOT's Concrete Repair Manual

Product Dimensional Tolerances

Ensure that concrete traffic barrier meet the dimensional tolerances stated in Table 1 of the pertinent Item (512 or 514).