



March 12, 2026

Document Change Announcement

*2016 Standard Supplementary Specifications
Guide Rail Updates
DCA2026SS-04*

Subject: Revisions to

Section 510 Guide Rail, Subsection 510.03 Methods of Construction
Section 510 Guide Rail, Subsection 510.04 Measurement
Section 510 Guide Rail, Subsection 510.05 Payment

Description of Change:

This DCA clarifies installation and material standards for beam guide blockouts, resetting of beam guide rail, and guide rail post installations within rock.

Notice to New Jersey Turnpike Authority Staff and Design Consultants

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <https://www.njta.gov/business-hub/professional-services/document-change-announcements/>

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NOTE: All text herein are REVISIONS, as indicated by the tracked changes, to the latest version of the 2016 Standard Supplementary Specifications.

SECTION 510 – GUIDE RAIL

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510.03 Methods of Construction

Prior to installing posts, the location of underground electrical conduits and other utilities, which may conflict with the posts, shall be determined. The Contractor must contact New Jersey One Call on-line (www.nj1-call.org) or by dialing 811 or (800) 272-1000 for a utility mark-out in accordance with Subsection 106.18. Post spacing may be adjusted by 6 inches, as approved by the Engineer, to eliminate such conflicts. The Contractor's attention is directed to Subsection 106.18, pertaining to utilities. Test pits, as directed, shall be made as specified in Section 522.

Remove trees and shrubs as specified in Subsection 201.03 along the entire length of the beam guide rail to be installed, extending a minimum of 4 feet behind the guide rail post.

The rail elements shall be constructed with the top edge in a straight line or smooth curve parallel to or concentric with the roadway. Where a vertical transition is required, the top edge of rail elements shall form the chords of a smooth vertical curve. The top of rail element height for all new guide rail installations shall be 31 inches. New guide rail shall be constructed with an allowable tolerance of +1 inch to -1 inch for the top of rail element height. The absolute tolerance for the top of rail element height for 31-inch-tall guide rail is +1 inch to -3 inches for rehabilitation projects.

Attach the beam guide rail element to the blockout at every post. No punching, drilling, reaming, or cutting of the rail elements will be permitted in the field unless specifically approved by the Engineer. Neither torchcutting nor welding of rail elements will be permitted. All new material shall be furnished, except where resetting or salvaging is called for. Damaged galvanized surfaces shall be repaired in accordance with Subsection 403.16. Repair damage to the pre-stained galvanized coating, if applicable, according to Subsection 915.01. Galvanized and pre-stained galvanized coatings damaged during installation of the beam guide rail, anchorages, connections, and treatments as shown on the Plans shall be repaired at the Contractor's expense.

The installation shall be made in such a manner that no unprotected end is exposed to approaching traffic.

(A) Beam Guide Rail

Within the same working day, replace all existing beam guide rail that is removed. Where possible, install new beam guide rail exposed to approaching traffic before the removal of the existing system.

If it is suspected that utility conduit is present, the Engineer may require tests to ensure the integrity of the conduit if it is suspected that the conduit may have been damaged during installation of the guide rail. The tests may include, but are not limited to:

1. Tests for continuity.
2. Tests for ground.
3. Tests for insulation resistance between circuit wires and from circuit wires to ground.

Locate and repair damage to the utility conduit due to construction operations.

Drive beam guide rail posts to the required position. Ensure that posts are driven plumb, properly spaced, and to the line and grade shown: If rock is encountered that prevents the driving of guide rail post to the full embedment depth, the post shall be installed in accordance with the details for Guide Rail Post Installation in Rock as shown on the standard drawings. Guide Rail Post Installation in Rock shall remove the rock from the post installation hole with a core drill and the length of the installed guide rail post may be reduced. Where rock is encountered within 18-inches of the final grade (Case 1) the hole for post installation may use an elongated hole that can be achieved by coring three partially overlapping 8-inch diameter holes or alternatively a single larger 21-inch diameter hole may be drilled; the cored rock shall be removed (and legally disposed of off-site) and the cavity backfilled with aggregate. Where rock is encountered more than 18-inches below final grade (Case 2) the hole for

[post installation may use a single 8-inch diameter hole; the cored rock shall be removed \(and disposed of off-site\) and the cavity backfilled with aggregate. Restoration of the ground disturbed for rock coring and aggregate backfill shall reuse the excavated non-rock material that is placed in lifts and compacted prior to driving of the guide rail post to its required position.](#)

[An unsupported guide rail span may be installed as per the standard drawings in lieu of the post installation in rock if the unsupported span would avoid the encountered rock entirely, as approved by the Engineer.](#)

[Install blockouts and elements as detailed on the standard drawings.](#)

Install the required connections and attachment types as shown on the Plans. [Mount bridge beam guide rail posts as shown on the Plans.](#)

Repair damage to the galvanized coating according to Subsection 403.16.

Repair damage to the pre-stained galvanized coating, if applicable, according to Subsection 915.01.

Install guide rail delineators in accordance with the standard drawings and Subsection 915.06.

(B) Parapet Connections

Parapet connections of the types required shall consist of terminal connector, back-up plate(s), rail element(s), posts, and blockouts. Bolt holes through the parapets shall be core drilled through existing parapets or formed through new parapets using non-corrosive sleeves for each bolt.

(C) Rub Rail

When rub rail is required, bolt rub rail consisting of a steel channel or a bent plate to the beam guide rail posts.

(D) Terminals and Anchorages

Install tangent guide rail terminals according to the manufacturer's recommendations and Subsection 915.07. At least 10 days before beginning the work, submit the manufacturer's recommendations to the Engineer.

Install buried end terminals and anchorages in accordance with the standard drawings and Subsection 915.07.

Excavate for post holes and foundation tubes as specified in Subsection 206.03. Backfill and compact using the directed method as specified in Subsection 206.03.

Excavate cut slope as specified in Subsection 206.03 within the limits of the buried guide rail end terminal. Drive beam guide rail posts for buried guide rail terminal to the required position. Ensure that posts are driven plumb, properly spaced, and to the line and grade shown. Attach the beam guide rail element to the blockout at every post. Attach the beam guide rail element and plate to the terminal posts. Backfill with excavated material as specified in Subsection 206.03.

(E) Reset Beam Guide Rail

Reset Beam Guide Rail consists of using salvaged material to construct the specified item.

The salvaged material shall be carefully loaded at the location specified and transported to the area where it is to be installed. Available salvaged material shall consist of beam guide rail elements, posts, blockouts, nuts, bolts, washers, and plates, unless otherwise specified. Salvaged material may include pre-stained beam guide rail elements, posts, and other metal components. Any salvaged material damaged due to carelessness, shall be replaced without additional compensation.

[Salvaged material from existing beam guide rail identified on the Plans to be reset, that is determined by the Engineer to be in an unsatisfactory state of repair at the time of work, shall be rejected and replaced with new beam guide rail materials and compensated for accordingly.](#)

In areas designated on the plans, salvaged beam guide rail shall be reset using recycled/synthetic blockouts in place of the existing steel or wooden blockouts. The Contractor shall supply new hardware as required for the installation of the salvaged beam guide rail on new recycled/synthetic blockouts. For galvanized steel beam guide rail elements and galvanized posts, the bolt holes for the recycled/synthetic blockouts shall be treated in accordance with Subsection 403.16. Posts damaged during the drilling of bolt holes shall be replaced at the Contractor's expense.

Work will also entail installing guide rail delineators in accordance with Paragraph 510.03(A).

(F) Removal of Beam Guide Rail

Removal of Beam Guide Rail shall consist of dismantling, removing and disposal of guide rail elements, posts, blockouts and hardware. Work shall include cutting existing anchor bolts flush with concrete surfaces and refilling and patching post holes with material similar to that of the adjoining area.

After removing beam guide rail, backfill the post holes and compact the area to the elevation of the adjacent surface. Materials and debris shall be disposed of in accordance with all applicable Federal, State and Local laws.

(G) Beam Guide Rail Post, ____' Long

Beam Guide Rail Post, ____' Long shall consist of the installation of various lengths of new rail posts in excess of 6 feet long as specified in Paragraph 510.03(A), including the recycled/synthetic blockout and required hardware for mounting to the beam guide rail element.

(H) Beam Guide Rail Element

Beam Guide Rail Element shall consist of the installation of new rail element on existing beam guide rail blockouts in accordance with Paragraph 510.03(A) and shall include the required hardware for mounting the beam guide rail element to the existing blockout.

Work will also entail installing guide rail delineators in accordance with Paragraph 510.03(A).

(I) Beam Guide Rail Blockout

Beam Guide Rail Blockout shall consist of the installation of new blockouts between existing beam guide rail element and beam guide rail posts in accordance with Paragraph 510.03(A) and shall include the required hardware for mounting to the beam guide rail element and the beam guide rail posts.

Where beam guide rail is attached to a structure, attach the blockout to the structure. Reset the beam guide rail, as specified in Paragraph 510.03(E) to provide a smooth transition to the existing structure.

510.04 Measurement

"Beam Guide Rail", "Beam Guide Rail, Pre-Stained", "Beam Guide Rail, Dual-Faced" and "Beam Guide Rail, Dual-Faced, Pre-Stained" each refer to complete systems that include the element, blockout, posts, delineators, and all associated hardware without modification for rail height transitions and unsupported spans. Beam Guide Rail will be measured by the length in place along the face of rail between centers of end posts, excluding the pay limits for parapet connections, anchorages, and end terminals. Dual- faced rail items will be measured by the linear foot along the face of one rail excluding the pay limits for anchorages and end terminals.

Beam Guide Rail Elements, that are in addition to those included under the various guide rail items, and will be measured by the linear foot along the face of the rail measured from centers of end posts.

Rub Rail will be measured by the linear foot along the face of the rail measured from centers of end posts.

Beam Guide Rail Blockouts, that are in addition to those included under the various beam guide rail items, will be measured by the number of each installed to the limits as indicated on the plans.

Beam Guide Rail Anchorages, Parapet Connections, Beam Guide Rail Buried End Terminals, and Tangent Guide Rail Terminals, and Beam Guide Rail Blockouts will be measured by the number of each installed to the limits as indicated on the plans. Anchorages and parapet connections for dual faced beam guide will be measured by the number installed for each face of rail.

Beam Guide Rail Posts and Beam Guide Rail Posts, ____' Long, that are in addition to those included under the various guide rail items, will be measured by the number of each post of the indicated length installed.

Beam Guide Rail Posts, Installed in Rock will be measured by the number of each post installed to the limits as indicated on the plans. No separate measurement shall be made for the rock excavation, aggregate backfill, or adjustment of post length for rock installation.

Reset Beam Guide Rail will be measured as specified above for Beam Guide Rail.

Removal of Beam Guide Rail will be measured by length of existing beam guide rail removed, as shown on the plans, and as directed by the Engineer.

No separate measurement will be made for the guide rail delineators or for the hardware used to attach the delineators to the face of the beam guide rail element.

No separate measurement will be made for new hardware as needed for resetting beam guide rail.

No separate measurement will be made for the end section (rounded or buffer) associated with the beam guide rail and anchorages as shown on the Plans.

510.05 Payment

Payment will be made under:

<i>PAY ITEM</i>	<i>PAY UNIT</i>
BEAM GUIDE RAIL.....	LINEAR FOOT
BEAM GUIDE RAIL, PRE-STAINED	LINEAR FOOT
BEAM GUIDE RAIL, DUAL-FACED	LINEAR FOOT
BEAM GUIDE RAIL, DUAL-FACED, PRE-STAINED	LINEAR FOOT
BEAM GUIDE RAIL ELEMENT	LINEAR FOOT
BEAM GUIDE RAIL ELEMENT, PRE-STAINED	LINEAR FOOT
RESET BEAM GUIDE RAIL	LINEAR FOOT
RESET BEAM GUIDE RAIL, DUAL FACED	LINEAR FOOT
BEAM GUIDE RAIL BLOCKOUT	EACH
BEAM GUIDE RAIL ANCHORAGE	EACH
BEAM GUIDE RAIL ANCHORAGE, PRE-STAINED.....	EACH
PARAPET CONNECTION, TYPE A.....	EACH
PARAPET CONNECTION, TYPE A, PRE-STAINED	EACH
PARAPET CONNECTION, TYPE B	EACH
PARAPET CONNECTION, TYPE B, PRE-STAINED	EACH
BEAM GUIDE RAIL BURIED END TERMINAL.....	EACH
BEAM GUIDE RAIL BURIED END TERMINAL, PRE-STAINED	EACH
TANGENT GUIDE RAIL TERMINAL	EACH
TANGENT GUIDE RAIL TERMINAL, PRE-STAINED.....	EACH
BEAM GUIDE RAIL POST.....	EACH
BEAM GUIDE RAIL POST, PRE-STAINED	EACH
BEAM GUIDE RAIL POST, ____ ' LONG	EACH
BEAM GUIDE RAIL POST, ____ ' LONG, PRE-STAINED.....	EACH
<u>BEAM GUIDE RAIL POST, INSTALLED IN ROCK</u>	<u>EACH</u>
REMOVAL OF BEAM GUIDE RAIL	LINEAR FOOT
RUB RAIL	LINEAR FOOT
RUB RAIL, PRE-STAINED	LINEAR FOOT

Test Pits will be paid for in accordance with Section 522. Separate payment will not be made for other excavation and backfill.

No separate payment will be made for the guide rail delineators or for the hardware used to attach the delineators to the face of the beam guide rail element.

No separate payment will be made for new hardware as needed for resetting beam guide rail.

No separate payment will be made for the end section (rounded or buffer) associated with the beam guide rail and anchorages as shown on the Plans.