

SPECIAL PROVISIONS FOR ON-CALL CONTRACTING FOR FORMED STEEL BEAM GUARDRAIL REPAIR

Statewide IMN-000-T(69)0--0E-00

> Effective Date October 17, 2023

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

In addition to the requirements of Section 2505 of the Standard Specifications, the following shall apply.

230022.01 DESCRIPTION.

A. General.

- 1. This specification covers repair of formed steel beam guardrail installations.
- 2. Definitions:
 - **a.** Installation: a combination of formed steel beam guardrail components protecting an individual roadside obstacle
 - b. Components include:
 - Post: a wood or steel guardrail post
 - Bolted End Anchor: Thrie-Beam Terminal Connector attaching to bridge end post and connecting to a Thrie-Beam Guardrail
 - Barrier Transition Section: Asymmetric Transition Section connecting a Thrie-Beam Guardrail to a W-Beam guardrail
 - Thrie-Beam Guardrail
 - W-Beam Guardrail
 - W-Beam Guardrail End Anchor
- **3.** The contract documents will list county, route, location milepost, direction of travel, and the type of each installation for work covered by this contract.
- **4.** The Engineer reserves the right to make repairs with Iowa DOT forces. However, repairs that have been submitted to the Contractor will not be made by DOT forces, unless such repairs are not completed within 28 calendar days following notification by the Engineer.

B. Requests for Repair.

- 1. The Engineer will furnish the Contractor a list of individuals approved to initiate repairs. Requests for repairs will be initiated by either a fax or e-mail to the Contractor. Requests for repair will include the following: route number, milepost location, direction of travel, a description of the repair and an estimate of the components needed to complete each repair. Provide the Engineer with an e-mail address and fax number which will be used to initiate requests for repairs.
- 2. For repairs not completed within 14 calendar days following notification by the Engineer, the Contractor will be charged the liquidated damage amount shown on the proposal for each day. Damages will begin to accrue on day 15.

230022.02 MATERIALS.

- **A.** Apply Article 2505.02 of the Standard Specifications.
- B. Replace damaged materials with new materials.
 - **1.** Existing damaged Symmetric Barrier Transition Sections shall be replaced in their entirety with an Asymmetric Barrier Transition per appropriate Standard Road Plan.
 - 2. Existing damaged W-Beam End Anchors designated as RE-52, FLEAT, SKT, or ET-Plus shall be removed. A new W-Beam End Anchor meeting the requirements of Section 4155.02 of the Standard Specification shall be installed.

230022.03 CONSTRUCTION.

A. General.

- **1.** Schedule repairs upon notification by the Engineer. Provide Engineer at least 24 hours' notice of when proposed work will begin.
- 2. Routine repairs include:
 - Remove damaged steel beam guardrail,
 - · Remove damaged guardrail posts,
 - Guardrail posts
 - W-Beam Guardrail
 - Thrie-Beam Guardrail
 - Bolted End Anchor
 - Barrier Transition Section
 - W-Beam End Anchor, and
 - Repair W-Beam End Anchor
- **3.** Notify Engineer if non-routine repairs are needed. Non-routine repairs shall have Engineer's approval before repair work may begin.
- **4.** Adjust beam guardrail height as necessary to meet Article 2505.02 of the Standard Specifications.
- **5.** Remove and dispose of damaged materials. Leave work site in a safe and orderly condition at completion of work.
- **6.** Maintain a log of repairs. Provide Engineer a copy of log at the end of the contract period, and at any time upon request. Log shall include:

- Date and time of notification by Engineer to perform repairs,
- Department personnel requesting repair,
- Route number.
- · Milepost location of requested repair,
- Direction of travel,
- · Date and time repairs were completed,
- Number of posts removed
- Number of posts replaced
- Linear Feet of damaged beam guardrail removed
- Linear Feet of W-Beam Guardrail placed,
- Linear Feet of Thrie-Beam Guardrail placed,
- Number of Bolted End Anchors placed,
- · Number of end anchors placed, and
- Number of end anchors repaired.
- 7. Repairs may be performed either without a lane closure; or with a lane closure except for periods listed in the contract documents. Remove lane closures following completion of work. Traffic control for lane closures and shoulder closures shall be according to the Standard Road Plans included in the contract documents.
- **8.** Mobilization shall be per Developmental Specifications for On-Call Contracting for High Tension Cable Guardrail Repair, with the exception of checking tension.

230022.04 METHOD OF MEASUREMENT.

A. Remove Damaged Steel Beam Guardrail.

Linear feet.

B. Remove Damaged Posts.

By count for each post removed.

C. Guardrail Posts.

By count for each type of post placed.

D. W-Beam Guardrail.

By linear foot.

E. Thrie-Beam Guardrail.

By linear foot.

F. Bolted End Anchor.

By count.

G. Barrier Transition Section.

By count.

H. W-Beam End Anchor.

By count.

I. Repair W-Beam End Anchor.

By count.

230022.05 BASIS OF PAYMENT.

Article 1109.14, C, 4, b, of the Standard Specifications will not apply to items on this contract.

A. Remove Damaged Steel Beam Guardrail.

- Per linear foot for removal of guardrail, including steel beam guardrail, end anchors, and terminal devices.
- 2. Payment is full compensation for removing beam guardrail.
- 3. Payment for nested steel beam guardrail will be included in the contract unit price.
- **4.** Disposal of damaged materials, vegetation removal, snow removal, and site cleanup are incidental to item.

B. Remove Damaged Posts.

- **1.** Each.
- 2. Payment is full compensation for removal of posts, blockouts and hardware.
- 3. Disposal of damaged materials, vegetation removal, snow removal, and site cleanup are incidental to item.

C. Guardrail Posts.

- **1.** Each.
- 2. Payment is full compensation for placing guardrail posts of the type specified.
- 3. Spacer blocks are incidental.

D. W-Beam Guardrail.

- 1. Per linear foot.
- 2. Payment is full compensation for placing W-Beam Guardrail.
- **3.** Object markers, delineators, guardrail markers, barrier markers, offset brackets, and remaining hardware are incidental.

E. Thrie-Beam Guardrail.

- **1.** Per linear foot.
- 2. Payment is full compensation for placing Thrie-Beam Guardrail.
- **3.** Object markers, delineators, guardrail markers, barrier markers, offset brackets, and remaining hardware are incidental.

F. Bolted End Anchor.

- 1. Each.
- 2. Payment is full compensation for placing Bolted End Anchor.
- 3. Spacer blocks and remaining hardware are incidental.

G. Barrier Transition Section.

- 1. Each.
- 2. Payment is full compensation for placing Barrier Transition Section.
- 3. Spacer blocks and remaining hardware are incidental.

H. W-Beam End Anchor.

- 1. Each for the type of end terminal constructed.
- 2. Payment for nested steel beam guardrail will be included in the contract unit price.
- **3.** Posts, spacer blocks, object markers, delineators, guardrail markers, offset brackets, and remaining hardware are incidental.

I. Repair W-Beam End Anchor.

- **1.** Each.
- 2. Payment for nested steel beam guardrail will be included in the contract unit price.
- **3.** Spacer blocks, object markers, delineators, guardrail markers, offset brackets, and remaining hardware are incidental.
- I. Non-routine repairs will be paid for according to Article 1109.03, B of the Standard Specifications.
- **J.** Traffic control for lane or shoulder closures will be paid for according to Article 1109.03, B of the Standard Specifications.