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Revision of Section 202 Removal of Guardrail

Revise Section 202 of the Standard Specifications for this project as follows:

Description

This work consists of removing existing concrete guardrail per these specifications and in conformity with the lines and details shown on the plans or as approved by the Engineer. This work shall include but not be limited to:

- Saw cutting.
- Removal of concrete.
- Removal of reinforcing steel not designated in the plans to remain.
- Straightening existing reinforcing steel to remain.
- Sandblasting or hand cleaning reinforcing steel including epoxy repair.
- Disposal of removed materials and debris.

Construction Requirements

At least 10 working days before beginning removal, the Contractor shall submit a method statement to the Engineer with details of the removal operations including the means, methods, sequence of removal, tools, and equipment to be used.

The Contractor's Method Statement shall also include proposed methods used to:

- Determine the locations and limits of deteriorating concrete.
- Prevent debris from falling to the ground or waterways below the structure.
- Protect the traveling public using the structure, and adjacent to the structure, from airborne debris generated by the removal operations.

The Engineer must accept all removal operations, methods, and equipment before the work begins.

Remove the existing concrete as shown on the plans or as directed by the Engineer. The Contractor shall saw cut along the removal limits before removal. The Engineer must approve all removal operations before removal occurs. Concrete sawing shall be done to a true line, with a vertical face, unless otherwise specified. Feathered edges will not be acceptable. The depth of the saw cut shall be approximately 3/4-inch.

The Contractor shall take all steps necessary to minimize spalling on the face of the existing concrete adjacent to the removal boundaries. Do not use pneumatic hammers heavier than nominal 15-pound class for removals adjacent to the removal boundaries. Use hand tools such as hammers and chisels to remove particles of loose, unbonded concrete. Sandblast exposed concrete surfaces within the removal limits to remove all final fractured or loose particles. Repair in kind any damage caused by the Contractor to any portion of the

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structure not intended for repair at the Contractor’s expense using means and methods approved by the Engineer with no allowance for contract time extension.

The Contractor shall take all steps necessary to prevent cutting or otherwise damaging reinforcing steel intended to remain in place. Repair or replace any reinforcing bars damaged by the Contractor’s operation at the Contractor’s expense using means and methods approved by the Engineer with no allowance for contract time extension.

Following the removal of the concrete, all exposed non-epoxy reinforcing steel to remain in place shall be straightened as required and thoroughly cleaned to sound metal by sandblasting per Revision of Section 202 Sandblasting. Do not sandblast epoxy coated reinforcing steel, if present, clean with hand tools. Repaint epoxy coating on reinforcing steel, if damaged, with epoxy paint before placement of the concrete.

The Contractor is responsible for disposing of all removed material and debris.

Method of Measurement

Removal of Guardrail will be measured by the actual quantity removed and accepted, by the linear foot.

Basis of Payment

The accepted quantities of Removal of Guardrail will be paid at the contract unit price.

Payment will be made under:

Pay Item	Pay Unit
Removal of Guardrail Type 4	Linear Foot
Removal of Guardrail Type 7	Linear Foot

Payment for Removal of Guardrail will be total compensation for all labor, materials, tools, equipment, and incidentals required to complete the item including but not limited to:

- Saw cutting.
- Removal of concrete to the required depth.
- Removal of reinforcing steel not designated in the plans to remain.
- Straightening existing reinforcing steel to remain.
- Sandblasting or hand cleaning reinforcing steel including epoxy repair.
- Disposal of removed materials and debris.

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Instructions to Designers (delete instructions and symbols from final draft):

Use this project special provision to remove Guardrail Type 4 or Guardrail Type 7 from structures (typically at the median).

Include Revision of Section 202 Sandblasting Reinforcing Steel in specification package.

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<u>Date</u>	<u>Author</u>	<u>Description of Change</u>
1/14/19	BPM Cons.	Initial Website Issue
11.1.21	M. Kayen	Revisions to grammar, format as per CDOT Style Guide (4.22.21)
04.06.2023	M. Kayen	Revisions to make spec online accessibility-compliant. 5.22.23 Additional accessibility work.