

COLORADO  
 DEPARTMENT OF TRANSPORTATION  
 SPECIAL PROVISIONS  
 US50 OVERLAY WEST OF TEXAS CREEK

The 2019 Standard Specifications for Road and Bridge Construction controls construction of this project. The following special provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications and plans.

PROJECT SPECIAL PROVISIONS

		<b>Page</b>
Index Pages	(1/6/2020)	1a-2a, 3
Notice to Bidders	(12/19/2019)	4
Commencement and Completion of Work (Floating Start Date)	(12/19/2019)	5
Revision of Section 102 – Project Plans and Other Data	(12/19/2019)	6
Revision of Section 102 – Asbestos and Lead Testing Report	(12/19/2019)	7
Revision of Section 107 – Stormwater Construction Permit	(12/19/2019)	8
Revision of Section 202 – Clean Culvert	(12/19/2019)	9-10
Revision of Section 202 – Removal of Guardrail	(12/19/2019)	11
Revision of Section 202 – Removal of Pavement Marking (Asphalt or Cement Grooving)	(12/19/2019)	12
Revision of Section 202 – Removal of Asphalt Mat (Planing)	(12/19/2019)	13-15
Revision of Section 202 – Reclaimed Asphalt Pavement Millings	(12/19/2019)	16
Revision of Section 202 – Removal of Asphalt Mat (Planing) (Special)	(12/19/2019)	17-20
Revision of Section 202 – Removal of Portions of Present Structure (Class 2 and 3)	(12/19/2019)	21-24
Revision of Section 202 – Sandblasting Reinforcing Steel	(12/19/2019)	25
Revision of Section 210 – Adjust Guardrail	(1/6/2020)	26a-27a
Section 240 – Protection of Migratory Birds Work Performed by a CDOT Biologist	(12/19/2019)	28-31
Revision of Section 250 – Environmental, Health and Safety Management	(12/19/2019)	32
Revision of Section 403 – Hot Mix Asphalt	(12/19/2019)	33-36
Revision of Section 403 – Ticket Collection for Hot Mix Asphalt	(12/19/2019)	37
Revision of Section 518 – Sawing and Sealing Bridge Joint	(12/19/2019)	38
Revision of Section 518 – Bridge Compression Joint Sealer	(12/19/2019)	39-41
Section 522 – Environmental Stain (Galvanized)	(12/19/2019)	42-43
Revision of Section 601 – Galvanic Anodes	(12/19/2019)	44-46
Revision of Section 601 – Concrete Class DR	(12/19/2019)	47-50

-2-  
COLORADO  
DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISIONS  
PROJECT DESCRIPTION

PROJECT SPECIAL PROVISIONS

		<b>Page</b>
Revision of Section 606 – Guardrail	(1/6/2020)	51a-53a
Revision of Section 620 – Field Facilities	(12/19/2019)	54-57
Revision of Section 626 – Public Information Services (Tier III)	(12/19/2019)	58-63
Revision of Sections 627 – Modified Epoxy Pavement Marking Acceptance	(12/19/2019)	64
Revision of Sections 627 and 713 – Preformed Thermoplastic Pavement Marking	(12/19/2019)	65-66
Revision of Section 630 – Portable Message Sign Panel	(12/19/2019)	67-68
Revision of Section 630 – Impact Attenuator (Temporary)	(12/19/2019)	69-70
Revision of Section 630 – Mobile Attenuator	(12/19/2019)	71
Force Account Items	(12/19/2019)	72-73
Traffic Control Plan – General	(12/19/2019)	74-80
Utilities	(12/19/2019)	81-82
Revision of Section 203 - Rock Fall Removal	(1/6/2020)	82Aa

REVISION OF SECTION 210  
ADJUST GUARDRAIL

Section 210 of the Standard Specifications is hereby revised for this project as follows:

Subsection 210.01 shall include the following:

This work consists of modification to the components and height of the existing guardrail at the locations designated on the plans.

Subsection 210.05 shall include the following:

Where designated on the plans and as directed by the Engineer, adjust existing Type 3 Guardrail as noted and achieving a height of 28 inches to 30 inches.

All Type 3 Guardrail being adjusted shall have the existing wood or steel 8" blocks replaced with FHWA approved black synthetic blocks. Additionally, the entire length of the adjusted guardrail shall have the w-beam rail and new blocks connected to the posts at the higher post bolt hole (i.e., raising the rail 3 inches). Existing guardrail height shall then be checked along the entire length of each rail section that has been adjusted, and the guardrail/post either embedded further or pulled up to achieve the required 28 inch to 30-inch final height. Existing hardware may be reused if in good and serviceable condition. Existing hardware that is not in serviceable condition shall be replaced. All exposed steel parts and hardware shall be COR-TEN rustic weathering steel A588 or equivalent materials.

Existing retroreflector tabs shall be disposed of by the contractor entirely and replaced. New retroreflector tabs shall be installed on all adjusted guardrail per M-606-1 (Sheet 2 Note 15). New retroreflective tabs installed with adjusted guardrail shall be COR-TEN rustic weathering steel. Back-to-back (double) tabs shall be installed on all sections of guardrail on outside curves.

No existing wood post guardrail is intended to be reset.

Where any steel post needs to be further raised after the 3-inch adjustment using the post holes, the contractor shall ensure the void under the post is satisfactorily removed as approved by the Engineer.

Damaged posts or w-beam sections shall be brought to the attention of the Engineer and shall be replaced as needed with COR-TEN rustic weathering steel A588 or equivalent materials.

Adjust Guardrail shall be conducted during allowed lane closures. All guardrail lengths shall be fully connected and functional during non-working time periods.

Subsection 210.12 shall include the following:

As all adjusted guardrail on the project requires new synthetic blocks, retroreflector, and other work, the measured quantity shall be the length from splice-to-splice connecting to the adjoining transitions or end anchorages. Pay length will terminate at the point where adjoining guardrail is removed, replaced, allowed to remain in place (e.g., certain 3G transitions on the project) or otherwise paid under other project pay items.

-2-  
REVISION OF SECTION 210  
ADJUST GUARDRAIL

Where the Contractor finds existing w-beam guardrail or posts to be damaged and unserviceable for adjustment, the Engineer shall be informed and will pre-approve installation of new posts and/or w-beam. These replaced components shall be COR-TEN rustic weathering steel A588 or equivalent materials. The cost of all installation of these materials shall be included in the linear foot cost of adjust guardrail. The material cost of the new/replacement installed posts and/or w-beam rail will be paid based on certified invoices provided by the Contractor. The Engineer will pay only the invoice cost the Contractor paid for the post or w-beam materials and will not add any loading or other additional payment.

Subsection 210.13 shall include the following:

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Adjust Guardrail	LF
Guardrail (Materials)	F/A

With the exception of posts and w-beam rail, cost of all other additional or replacement hardware, including use of COR-TEN rustic weathering steel on all exposed steel materials, will not be measured and paid for separately but shall be included in the work.

Reflector tabs and all ancillary hardware shall be included in the cost of the work.

END OF SPECIFICATION

## REVISION OF SECTION 606 GUARDRAIL

Section 606 of the Standard Specification is hereby revised for this project as follows:

Subsection 606.01 shall include the following:

This work consists of installation of guardrail in accordance with the project plans, drawings and specifications. Newly installed guardrail shall meet MASH standards, except for (1) required transitions from NCHRP 350 standard to MASH, (2) nonflared end anchorages, if MFLEAT is not on CDOT's approved list by the time of installation, (3) replaced Precast Type 7 Barrier, or (4) as directed by the Engineer.

New retroreflector tabs shall be installed on all guardrail per M-606-1 (Sheet 2 Note 15). Back-to-back (double) tabs shall be installed on all sections of guardrail on outside curves.

This work also consists of installing new Guardrail Type 7 (Precast) section as shown in the plans to replace damaged sections. Quantity of replaced Type 7 (Precast) actually replaced will only be as needed to replace damaged portions of existing barrier at location(s) noted on the plans. The limits and quantity will be field verified by the Engineer prior to installation.

In subsection 606.02 delete the fifth paragraph and replace with the following:

Prior to beginning work on each run of guardrail, the Contractor shall set a meeting on site with the Engineer, or lead guardrail inspector if designated, within a lane closure to walk the length of the rail and confirm the applicability and appropriateness of the work shown in the plans and tabulations. Specific emphasis will be on ensuring the end anchorage selected is correct. Except for Phase 1 guardrail and end anchorages (i.e., these should be put on order immediately after Notice to Proceed), the Contractor shall hold these meetings prior to acquisition of guardrail. Because of the expected lead time in acquiring the guardrail and completing the Environmental Stain process, these meetings shall be held as early as feasible and before milling operations begin. If the Contractor reasonably acquires guardrail or end sections for Phase 1 work immediately after Notice to Proceed and later finds those materials to be unable to be installed in any of the guardrail work phases, then the Contractor shall deliver the materials, in full, to the Region Maintenance facility noted in the Section 202 revision for salvaging guardrail, and the Contractor will be paid in accordance with Section 606.05.

The Contractor shall furnish steel posts and FHWA approved synthetic material blocks for guardrail and end sections as shown on the plans. Posts and guardrail shall be galvanized steel. Posts for end section shall be metal posts.

All exposed steel components of new w-beam (i.e., Type 3) guardrail systems, end anchorages, transitions and any other ancillary or associated parts shall meet the color and other requirements of Section 522 of the specifications.

At newly installed end anchorages, the Contractor shall carefully mill and pave to attempt to achieve the dimensions and requirements noted in the Guardrail Details for HMA apron. The Contractor shall only extend, lengthen or otherwise enlarge the existing apron where it can be achieved without encroaching on vegetated areas. This work is anticipated to require some minor grading in some locations, but in most cases can be milled and overlaid with the principal project milling and paving operations. Two (2) ton of HMA at each end anchorage shall be paid as HMA (Patching) (Asphalt) TON to reimburse the Contractor for the extra effort. This tonnage will be, therefore, reduced from the other HMA tonnage pay item on the project and will not be paid twice.

-2-  
REVISION OF SECTION 606  
GUARDRAIL

The Contractor shall plan guardrail removal and installation such that no gap in rail or end anchorage will be present over a weekend, unless approved by the Engineer in unusual or extraordinary circumstances. Missing end anchorages or gaps of no more than 25 feet may be delineated with half spaced drums and allowed during non-work shift on weekdays only or if daily (i.e., including weekend) work is ongoing and approved by the Engineer.

End Anchorage (Nonflared) shall be Road Systems, Inc. (RSI) MSKT.

End Anchorage (Flared) shall be Road Systems, Inc. (RSI) MFLEAT.

The Contractor shall consult with the Engineer within 10 days after Award, and prior to ordering and end anchorages, to ensure the MFLEAT has been added to CDOT's Approved Products List. If it is not approved, the Engineer may direct the use of FLEAT-350 as an alternative, or replace the pay item with End Anchorage (Nonflared). If replaced with nonflared, that pay item will be used. If replaced with FLEAT-350, the End Anchorage (Flared) EACH pay item will be used.

Where the plans call for Type 3 "No Block", installation shall be per standard detail D-606-2. Guardrail Type 7 (Precast) shall conform to M-606-14.

Subsection 606.03 shall include the following:

Guardrail installation required for Phase 1 and Phase 2 require either rapid, high productivity installation during the limited window that the pavement is maintaining a milled surface or low production operations and risk where only minimal length sections of removed guardrail may be left unattended during non-working hours. The Guardrail Phasing plans and Tabulation of Guardrail provide additional information about these requirements.

The Contractor shall immediately upon Notice to Proceed for this project acquire the guardrail, end anchorages and other required elements to complete the installation of guardrail noted as Phase 1 on the Tabulation of Guardrail.

Where the plans call for Type 3 "No Block", installation shall be per standard detail D-606-2. Guardrail Type 7 (Precast) shall conform to M-606-14.

Subsection 606.05 shall include the following:

HMA (Patching) (Asphalt) TON related to guardrail end anchorage installation will be paid as described in the Guardrail Details and Subsection 606.02.

In the event the Contractor acquires bid items immediately after Notice to Proceed for Phase 1 guardrail work, and those materials cannot be incorporated into Phase 1 or other phase guardrail work due to field conditions found later, the Contractor will be paid bid price for the item once delivered to CDOT.

-3-  
REVISION OF SECTION 606  
GUARDRAIL

Mobilization (without Autopay) (Guardrail) Lump Sum shall be full reimbursement for all coordination, scheduling, extra work shifts, night work or any other effort required as the Contractor completes the Phase 1 and Phase 2 guardrail work. Traffic Control will be paid for using Contract 630 pay items; however, the Mobilization (without Autopay) (Guardrail) Lump Sum item will pay for all other costs, including but not limited to Phase 0 work or any other special effort, special insurance or risk management within the work site, overhead for special materials, costs required for accelerated delivery to meet Phasing requirements, etc. The Contractor is encouraged to work with the Engineer and propose more efficient methods, but the cost of any such improved methods shall not be paid separately but shall be considered included in the Lump Sum cost. Other methods must be pre-approved by the Engineer in writing prior to implementation.

Subsection 606.06 shall include the following:

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Guardrail Type 3 (31 Inch Midwest Guardrail System)	Linear Foot
Guardrail Type 7 (Precast)	Linear Foot
Mobilization (without Auto Pay) (Guardrail)	Lump Sum

Reflector tabs and all ancillary hardware shall be included in the cost of the work.

It is assumed that 7ft posts will be required, per M-606-1, at multiple locations where existing terrain meets the criteria of the standard. The cost for the 7ft posts where required will be included in the cost of the work.

END OF SPECIFICATION

REVISION OF SECTION 203  
ROCK FALL REMOVAL

Section 203 of the Standard Specifications is hereby revised for this project to include the following:

**MATERIALS**

Subsection 203.02 shall include the following:

(g) *Rock Fall*. Rock fall includes all fallen rock and debris on the roadway and shoulder.

**CONSTRUCTION REQUIREMENTS**

Subsection 203.04 shall include the following:

**Rock Fall Removal.** All fallen rock and debris encountered on the roadway and shoulder shall be removed using a front end loader and either deposited safely outside of the clear zone at a location approved by the Engineer, or transported off site using a dump truck. Rock fall removal shall not be disposed of into the Arkansas River.

**METHOD OF MEASUREMENT**

Subsection 203.11 shall include the following:

- (g) Truck (Dump). The quantity measured for dump trucks will be the number of hours that the truck is actually used on-site as directed. An additional 2 hours will be paid per each usage for transport time and any work/dump fees will be included in the cost of the work.
- (h) Front End Loader (Rubber Tire). The quantity measured for front end loader will be the number of hours that the equipment is actually used on-site as directed.

Time involved in moving onto or off the project will not be measured and paid for. Time will be paid for moving front end loaders and dump trucks from one location on the project to another, if directed; but time will not be allowed for moves which are made for the convenience of the Contractor.

**BASIS OF PAYMENT**

Subsection 203.12 shall include the following:

<b>Pay Item</b>	<b>Pay Unit</b>
Truck (Dump)	Hour
Front End Loader (Rubber Tire)	Hour

END OF SPECIFICATION