

**2019 SIGNIFICANT CHANGES  
TO  
CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION**

Beginning with the 2019 Standard Specifications book, page size is formatted to 8.5"x11" for ease of printing. This allows users to print themselves, and decreases the thickness of the book as more content fits on each page. Previous versions were 6"x9" page size.

Page numbering is now specific to each Division of the book. For example, in the 2019 book, Division 100 is numbered 1-1 through 1-119. Division 200 is numbered 2-1 through 2-89. If kept in a three-ring binder, this allows users to swap out a single Division if that content has changed in the future. Unchanged Divisions can be kept in the binder and will not need to be reprinted, as page numbering will not be affected.

The following are significant content changes from the 2017 Standard Specifications. These changes were previously adopted by CDOT's Specification Committee as standard special provisions and have been applicable to projects put under construction since their adoption.

<b>Specification Section</b>	<b>What was Changed (by Subsection Number)</b>
102 – Examination of Plans, Specifications, Special Provisions, and Site of Work	102.05: Added utility mapping to information that may be available to bidders, and responsibility.
103 – <i>Consideration of Proposals</i>	103.01: Revised subsection to include registering with the B2GNow software system, in order to be eligible for contracting with CDOT as the low responsible bidder.
105 – <i>Conformity to the Contract of Portland Cement Concrete Pavement</i>	105.06(a): Revised information that clarifies changes in processes for each element.
105 – <i>Cooperation by Contractor</i>	105.10: Deleted requirement that the Contractor will be supplied with a minimum of six sets of contract documents.
105 – <i>Cooperation with Utilities</i>	105.11: Added information regarding depiction of existing known utilities and Quality Level (A-D), pursuant to the most recent version of the ASCE Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02).
105 – <i>Disputes and Claims for Contract Adjustments</i>	105.22, 105.23, 105.24: Replaced subsections to further define requirements for Dispute Resolution, Dispute Review Board, and Claims for Unresolved Disputes.
105 and 412 – <i>Pavement Smoothness</i>	105.07: Revised entire subsection to combine HMA and PCCP requirements into one. Contractor smoothness QA for pay added to PCCP projects. Added requirements for traffic circles. Revised requirements for project phasing. Clarified bridge smoothness.
	105.08: Deleted subsection related to Portland Cement Concrete Pavement. Covered in 105.07.
	412.17: Edited to reference subsection 105.07.
	412.18(3): Edited to reference subsection 105.07.

Specification Section	What was Changed (by Subsection Number)
105, 412, and 601 – <i>Flexural Strength of Portland Cement Concrete Pavement</i>	105.06(f), 412.24(a), 601.05: Revised procedure for low flexural strength evaluation of concrete pavement test results.
106 – <i>Supplier List</i>	106.01: Edited requirements for submitting a Form 1425 prior to beginning any work.
106 and 601 – <i>Concrete Test Reports</i>	106.06(a), 106.06(b), 601.17(c): Added requirements for the Contractor to distribute test results to the concrete suppliers.
107 – <i>Laws to be Observed</i>	107.01: Added statement about failing to comply with all contractual obligations.
107 – <i>Water Quality Control</i>	<p>107.25: The Colorado Department of Public Health and Environment issued a new Colorado Discharge Permit System-Stormwater Construction Permit (COR400000), which became effective on April 1<sup>st</sup>, 2019.</p> <p>Revisions reflect the changes necessary to stay in compliance with the new permit. Other changes were made to better reflect industry standards for control measures (formerly called BMPs).</p>
108 – <i>Subletting of Contract</i>	108.01: Added statement on failure to comply. Added requirement for B2GNow software registration for all firms that the Contractor sublets a portion of the Contract.
108 – <i>Project Schedule</i>	108.03: Subsection replaced to refine definitions and project schedule requirements.
108 – <i>Determination and Extension of Contract Time</i>	108.08: Revision made to clarify the standard construction operation restrictions and update the term “Specified Completion Date”.
	108.08(d): Revisions made to identify methods for demonstrating a delay in a time extension request and to align with the updated specification subsection 108.03 <i>Project Schedule</i> .
108 – <i>Failure to Complete Work on Time</i>	108.09: Schedule of Liquidated Damages updated per FHWA.
206 – <i>Removability Modulus</i>	206.02(a): Corrected equation for Removability Modulus, RM.
206 – <i>Shoring</i>	206.09, 206.10, 206.11: Subsections replaced to add to construction requirements, method of measurement, and basis of payment.
206 and 703 – <i>Structure Backfill (Flow-Fill)</i>	206.02(a): Added structure backfill material requirements.
	206.03: Added construction requirements for use of flash fill and flow-fill.
	703.08: Added Class 3 structure backfill material requirements.
208 – <i>Erosion Control</i>	208: The Colorado Department of Public Health and Environment issued a new Colorado Discharge Permit System-Stormwater Construction Permit (COR400000), which became effective on April 1 <sup>st</sup> , 2019.

Specification Section	What was Changed (by Subsection Number)
	Revisions reflect the changes necessary to stay in compliance with the new permit. Other changes were made to better reflect industry standards for control measures (formerly called BMPs).
213 – <i>Mulching</i>	213.02(f): Revised the material requirements for Spray-on Mulch Blanket (Type 1), including reinforcing biodegradable fibers.
250 – <i>Environmental, Health, and Safety Management</i>	250.03: Updated date of CDOT’s Asbestos-Contaminated Soil Management Standard Operating Procedure. Added construction requirements for when regulated asbestos contaminated soil (RACS) is present or suspected. Revised Monitoring Technician (MT) requirements.
	250.07: Revised Asbestos-Containing Material Management to Regulated Asbestos Contaminated Soils (RACS) Management.
412 – <i>Dowel Bars for Joints</i>	412.13(b)2: Revised the dowel bar acceptance method for when dowel baskets are used and the shipping braces are not cut. Uncut baskets interfere with the MIT scan.
502 – <i>Piling</i>	502: Replaced entire section to meet current design and construction standards that are in line with AASHTO and FHWA guidelines.
503 and 601 – <i>Drilled Shafts</i>	503: Replaced entire section to meet current design and construction standards for excavation and testing.
	601.02: Revised the Class BZ concrete requirements.
504 – <i>Concrete Panel Facing MSE Walls</i>	504: Edits throughout the section pertaining to shop drawings, soil reinforcement, geomembrane and joints, certification, hybrid systems, and leveling pads.
508, 614, and 710 – <i>Treated Timber</i>	508.03: Revised material requirement for treated timber.
	508.04: Revised requirements for certificate of inspection.
	614.02: Revised material requirements for sign posts.
	710.07: Revised material requirements for wood fence posts.
	710.08: Revised material requirements for wood guardrail posts.
518 – <i>Polyester Concrete End Dam</i>	518.06: Replaced Elastomeric Concrete End Dam material requirements with Polyester Concrete End Dam requirements.
	518.11: Replaced Elastomeric Concrete End Dam construction requirements with Polyester Concrete End Dam requirements.
601 – <i>Class G Concrete</i>	601.02: Added Class G concrete classification requirements.
	601.16: Added curing requirement for Class G concrete.

Specification Section	What was Changed (by Subsection Number)
	601.17: Added Class G reference for when a non-standard concrete is used for the water to cementitious material content (w/cm) ratio.
601 – <i>Cold Weather Placement and Curing of Bridge Decks</i>	601.16(f): Adds clarification for what is required for cold weather concrete deck placements and curing. Maturity meters are required to monitor deck strength for determining when bridge deck curing can be removed in cold weather.
601 – <i>Self Consolidating Concrete</i>	601.02: Adds requirements for concrete class modification option to self consolidating concrete (SCC).
	601.05: Adds construction requirements for proportioning for SCC.
	601.09: Adds requirements for design and construction of forms when SCC is used.
	601.10: Adds statement that vibration shall not be used to consolidate concrete when SCC is used.
	601.12: Adds placement requirement for when SCC is used.
	601.17: Adds acceptance and pay factors for when SCC is used.
601, 701, and 711 – <i>Structural Concrete</i>	601: Updated sulfate resistance requirements with new cement types. Added slag cement as an option.
	701.05: Added slag cement material requirements.
	711.03: Added ASTM requirements for coloring agents and corrosion inhibitors.
606 – <i>Guardrail</i>	606: Replaced entire section. Includes Type 9 Guardrail – Single Slope Concrete Barrier.
612 – <i>Flexible Delineators</i>	612: Revised material requirements for flexible posts/delineators.
614 – <i>Accessible Pedestrian Signal</i>	614: Added material and construction requirements for the accessible pedestrian signal (APS).
614 – <i>Mask Signs</i>	614.09: Removable aluminum panel for mask sign legend shall be furnished with retro-reflective sheeting.
618 – <i>Prestressed Concrete</i>	618: Replaced entire section due to the large number of revisions. This was in response to numerous comments from field personnel and prestressed concrete fabrication representatives.
703 – <i>Classification for Aggregate Base Course</i>	703.03: Revised Table 703-2, Classification for Aggregate Base Course.
706 – <i>Concrete and Clay Pipe</i>	706.02: Replaced subsection to add requirements for precast reinforced concrete end sections for reinforced concrete pipe.

**Standard Special Provisions incorporated into the 2019 Standard Specifications**

- Revision of Sections 102 – Examination of Plans, Specifications, Special Provisions, and Site of Work
- Revision of Section 103 – Consideration of Proposals
- Revision of Section 105 – Conformity to the Contract of Portland Cement Concrete Pavement
- Revision of Section 105 – Cooperation by Contractor
- Revision of Section 105 – Cooperation with Utilities
- Revision of Section 105 – Disputes and Claims for Contract Adjustments
- Revision of Sections 105 and 412 – Pavement Smoothness
- Revision of Section 105, 412, and 601 – Flexural Strength of Portland Concrete Cement Pavement
- Revision of Section 106 – Supplier List
- Revision of Sections 106 and 601 – Concrete Test Reports
- Revision of Section 107 – Laws to be Observed
- Revision of Section 107 – Water Quality Control
- Revision of Section 108 – Determination and Extension of Contract Time
- Revision of Section 108 – Failure to Complete Work on Time
- Revision of Section 108 – Project Schedule
- Revision of Section 108 – Subletting of Contract
- Revision of Section 206 – Removability Modulus
- Revision of Section 206 – Shoring
- Revision of Section 206 and 703 – Structure Backfill (Flow-Fill)
- Revision of Section 208 – Erosion Control
- Revision of Section 213 – Mulching
- Revision of Section 250 – Environmental, Health and Safety Management
- Revision of Section 412 – Dowel Bars for Joints
- Revision of Section 502 – Piling
- Revision of Section 503 and 601 – Drilled Shafts
- Revision of Section 504 – Concrete Panel Facing MSE Walls
- Revision of Sections 508, 614, and 710 – Treated Timber
- Revision of Section 518 – Polyester Concrete End Dam
- Revision of Section 601 – Class G Concrete
- Revision of Section 601 – Cold Weather Placement and Curing of Bridge Decks
- Revision of Section 601 – Self Consolidating Concrete
- Revision of Sections 601, 701, and 711 – Structural Concrete
- Revision of Section 606 – Guardrail

- Revision of Section 612 – Flexible Delineators
- Revision of Section 614 – Accessible Pedestrian Signal
- Revision of Section 614 – Mask Signs
- Revision of Section 618 – Prestressed Concrete
- Revision of Section 703 – Classification for Aggregate Base Course
- Revision of Section 706 – Concrete and Clay Pipe