

STANDARD SPECIAL PROVISIONS

November 30, 2006

REVISION OF SECTION 101 FALSEWORK, FORMWORK AND SHORING

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects.

November 30, 2006

REVISION OF SECTION 101
FALSEWORK, FORMWORK AND SHORING

Section 101 of the Standard Specifications is hereby revised for this project as follows:

Add subsection 101.89 as follows:

101.89 Falsework. Falsework is temporary construction used to support structural elements of concrete, steel, masonry or other materials during their construction or erection until they become self-supporting. Falsework may also be used to provide temporary support to elements of a structure during demolition or reconstruction.

Add subsection 101.90 as follows:

101.90 Formwork. Formwork is the temporary structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens.

Add subsection 101.91 as follows:

101.91 Shoring. Shoring is temporary construction that is used to support the earth adjacent to excavation or embankment.

January 21, 2009

REVISION OF SECTIONS 101,107, AND 208
WATER QUALITY CONTROL (WITHOUT CDPS-SCP)

NOTICE

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Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects not having a Colorado Discharge Permit System (CDPS) Stormwater Construction Permit (SCP), unless omitted by the Stormwater Administrator.

Sections 101, 107, and 208 of the Standard Specifications are hereby revised for this project as follows:

Add subsections 101.92 and 101.93 which shall include the following:

101.92 Stormwater Management Plan (SWMP). The Stormwater Management Plan comprises those contract documents containing the requirements necessary to protect and identify sensitive environments (state waters, wetlands, habitat and existing vegetation), minimize the amount of disturbed soil, control and minimize erosion and sedimentation during and after project construction, minimize runoff from offsite areas from flowing across the site, slow down the runoff, and reduce pollutants in stormwater runoff.

101.93 Best Management Practices (BMPs) for Stormwater Pollution Prevention. BMPs prevent or reduce the pollutants in stormwater discharges from the construction site.

Delete subsection 107.25(b)5, and replace it with the following:

5. At least ten days prior to the beginning of construction the Contractor shall identify and describe all potential pollutant sources, including materials and activities, and evaluate them for the potential to contribute pollutants to stormwater discharges associated with construction activities. At a minimum each of the following shall be evaluated for the potential for contributing pollutants to stormwater discharges, and identified in the SWMP if found to have such potential: all exposed and stored soils; vehicle tracking of sediments; management of contaminated soils; vehicle and equipment maintenance and fueling; outdoor storage activities (building materials, fertilizers, chemicals, etc.); significant dust or particle generating processes; routine maintenance involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.; on-site waste management practices (waste piles, dumpsters, etc.); dedicated asphalt and concrete batch plants; concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment; non-industrial waste sources that may be significant, such as worker trash and portable toilets; loading and unloading operations; and other areas or procedures where potential spills can occur.

The Contractor shall record the location and add descriptions of potential pollutants to the SWMP.

The Contractor shall provide a Spill Prevention, Control, and Countermeasure Plan (SPCC) for any petroleum product, chemicals, solvents, or other hazardous materials in use, or in storage, at the work site. Work shall not be started until the plan has been submitted to and approved by the Engineer.

Subsection 107.25(b) shall include the following:

21. The Contractor shall certify in writing that construction equipment has been cleaned prior to site arrival. Vehicles shall be free of soil and debris capable of transporting noxious weed seeds or roots onto the site. Vehicle cleaning may occur on site, in approved areas, where wash water can be properly contained.
22. At the end of each day the Contractor shall collect all trash and dispose of it in appropriate containers. Containers shall be emptied as needed.

Subsection 208.01, second paragraph, shall include the following:

When a provision of Section 208 or an order by the Engineer requires that an action be immediate or taken immediately, it shall be understood that the Contractor shall at once begin effecting completion of the action and pursue it to completion in a manner acceptable to the Engineer.

Subsection 208.02(k) shall include the following:

When approved by the Engineer a fabricated concrete washout structure may be used. Fabricated concrete washouts are pre-manufactured watertight containers designed to contain liquid and solid waste from concrete washout. Above ground systems designed for washout and hauling may also be used. After use the structure must be removed from the project site and disposed of at the Contractor's expense. Insubstantial structures, such as children's wading pools or swimming pools are not acceptable, and will be rejected by the Engineer.

Subsection 208.03 shall include the following:

Prior to construction the Contractor shall implement erosion control measures in accordance with the approved schedule.

Prior to construction the Contractor shall evaluate the project site for water draining into or through it. If such drainage is identified, if possible BMPs shall be used to prevent stormwater from running on-site and becoming contaminated with sediment or other pollutants via a temporary pipe or other conveyance to prevent water contamination. Run-on water that cannot be diverted shall be treated as construction runoff and adequate BMPs shall be employed.

The Contractor shall evaluate any non-stormwater coming onto the site, such as springs, seeps, and landscape irrigation return flow. If such flow is identified, BMPs shall be used to protect off-site water from running on-site and becoming contaminated with sediment or other pollutants.

The Contractor shall review existing inlets and culverts to determine if inlet protection is needed due to water flow patterns. Prior to construction commencing, inlets and culverts needing protection shall be protected.

When additional BMPs are required, the Contractor shall implement the additional BMPs and record and describe them on the SWMP site map. Additional BMPs will be measured and paid for in accordance with subsections 208.07 and 208.08.

Delete subsection 208.03(c), and replace with the following:

(c) *Implementation, Maintenance, and Revision of the SWMP.* The Contractor shall be responsible for oversight of the implementation, maintenance, and revision of the SWMP for the duration of the project. The Contractor shall read, be familiar with, and use the information provided in CDOT's *Erosion Control and Stormwater Quality Guide*.

The Contractor's responsibilities shall be as follows:

- (1) Directly supervise the installation, construction, and maintenance of all erosion control measures specified in the Contract and coordinate the construction of erosion control measures with all other construction operations.

- (2) Direct the implementation of suitable temporary erosion and sediment control features as necessary to correct unforeseen conditions or emergency situations. Direct the dismantling of those features when their purpose has been fulfilled unless the Engineer directs that the features be left in place.
- (3) Upon the Engineer's request, implement necessary actions to reduce anticipated or presently existing water quality or erosion problems resulting from construction activities. The criteria by which the Engineer initiates this action may be based on water quality data derived from monitoring operations or by any anticipated conditions (e.g., predicted storms) which the Engineer believes could lead to unsuitable water quality situations.
- (4) Make available, upon the Engineer's request, all labor, material, and equipment judged appropriate by the Engineer to install and maintain suitable erosion and sediment control features.
- (5) Develop and implement a plan for saw cutting containment to be approved by the Engineer.

When included in the Contract, the Contractor shall assign to the project an employee to serve in the capacity of the Erosion Control Supervisor (ECS). The ECS shall be a person other than the Superintendent, unless otherwise approved by the Engineer. The ECS shall be experienced in all aspects of construction and have satisfactorily completed an ECS training program authorized by the Department. Proof that this requirement has been met shall be submitted to the Engineer at least ten working days prior to the beginning of any construction work. The ECS shall be the person responsible for ensuring that the responsibilities listed in (1) through (5) above are fulfilled.

Spills, leaks or overflows that result in the discharge of pollutants shall be documented and maintained by the Contractor. The Contractor shall record the time and date, weather conditions, reasons for spill, etc. Some spills may need to be reported to the Water Quality Control Division immediately.

Add subsection 208.03(d) which shall include the following:

(d) *Documentation Available on the Project.* The following Contract documents and references shall be made available for reference at the CDOT field office during construction.

- (1) SWMP Plan Sheets, if applicable to the project
- (2) SWMP site map and project plan title sheet, if applicable to the project
- (3) List of potential pollutants as described in subsection 107.25
- (4) Spill Prevention, Control and Countermeasure Plan
- (5) Form 105s relating to water quality

Subsection 208.04 shall include the following:

Stabilized construction entrances shall be used at all vehicle exit and entrance points to the site to prevent sediment exiting the project site onto paved public roads. Access shall be provided only at a stabilized construction entrance.

Perimeter control shall be established as the first BMP to be implemented on the SWMP. Perimeter control plan shall be approved by the Engineer prior to installation. The Contractor shall describe and record perimeter control on SWMP.

Newly constructed inlets and culverts shall be protected throughout construction and immediately upon completion. When riprap is called for at the outlet of a culvert, it shall be installed within 24 hours upon completion of each culvert. The Contractor shall remove sediment, millings, debris and other pollutants from within the project drainage system, prior to use, at no additional cost to the project.

In subsection 208.04(d), first paragraph, delete the second sentence and replace with the following:

When required by the plans, a soil retention blanket shall be used in combination with the final seed and mulch.

In subsection 208.04(d), first paragraph, delete the third sentence and replace with the following:

Temporary stabilization is defined as the covering of disturbed areas with seed, mulch with a tackifier, soil roughening, soil binder, or a combination thereof.

In subsection 208.04(d), after the first paragraph, add the following:

During the summer and winter when seeding is not allowed, temporary stabilization shall be placed. Temporary stabilization shall consist of: surface roughening via scarifying surface to 2-4 inches variation of surface or vertical tracking, 1.5 tons of certified weed free forage hay or straw mulching per acre mechanically crimped into the soil in combination with an organic mulch tackifier, soil binder, cellulose fiber mulch with tackifier, or a combination thereof as approved. Surface roughening shall not be used alone.

In subsection 208.04(d), second paragraph, delete the fourth sentence and replace with the following:

If approved by the Engineer, slopes from the edge of pavement to the point of slope selection may be left unseeded until paving has been completed but shall be temporarily stabilized as approved by Engineer.

In subsection 208.04(d), third paragraph, delete the second and third sentences and replace with the following:

Areas shall be permanently stabilized within 48 hours after completion. Disturbed areas where work is temporarily halted shall be temporarily stabilized immediately after the activity ceased.

Temporary stabilization shall consist of: surface roughening via scarifying surface to 2-4 inches variation of surface or vertical tracking, 1.5 tons of certified weed free forage hay or straw mulching per acre, mechanically crimped into the soil in combination with an organic mulch tackifier, soil binder, cellulose fiber mulch with tackifier, or a combination thereof as approved.

In subsection 208.04(e) delete the first paragraph and replace with the following:

Erosion and sediment control practices and other protective measures identified in the SWMP as BMPs for Stormwater Pollution Prevention shall be maintained in effective operating condition. BMPs shall be continuously maintained in accordance with good engineering, hydraulic and pollution control practices, including removal of collected sediment when silt depth is 50 percent or more of the height of the erosion control device. Removal and disposal of sediment shall be in accordance with 208.04(f). Where necessary, the Contractor shall use appropriate size equipment with operator to remove the sediment. The Contractor shall obtain the Engineer's approval of proposed equipment and methods for removal and disposal of sediment prior to performing the work.

Maintenance of Erosion and Sediment Control devices shall include replacement of such devices upon the end of their useful service life as recommended by the Contractor or the Engineer, and approved by the Engineer. Maintenance of Rock Check Dams, and Stabilized Construction Entrances shall be limited to removal and disposal of sediment. Devices damaged due to the Contractor's negligence shall be replaced at Contractor's expense.

Complete site assessment shall be performed as part of comprehensive inspection and maintenance procedures, to assess the adequacy of BMPs at the site and the necessity of changes to those BMPs to ensure continued effective performance. Where site assessment results in the determination that new or replacement BMPs are necessary, the BMPs shall be installed to ensure continuous implementation. When identified, BMPs shall be added, modified or replaced as soon as possible, immediately in most cases.

Where BMPs have failed, they shall be repaired or replaced as soon as possible, immediately in most cases, to minimize the discharge of pollutants.

New or replacement BMPs will be measured and paid for in accordance with subsections 208.07 and 208.08.

Subsection 208.04(f) shall include the following:

Whenever sediment is transported onto the highway, the road shall be cleaned. Street washing will not be allowed. Storm drain inlet protection shall be in place prior to shoveling, sweeping, or vacuuming. Sweeping shall be completed with a pickup broom or equipment capable of collecting sediment. Street washing and kick brooms shall not be used. Street cleaning will not be paid for separately, but shall be included in the work.

Add subsection 208.04(g) which shall include the following:

- (g) *Saw Cutting Debris.* Material from saw cutting operations shall be cleaned from the roadway surface as soon as possible, immediately in most cases, after operations. Particles shall be picked up with a pick up broom or vacuum. Sweeping and street washing will not be allowed. Street cleaning will not be paid for separately, but shall be included in the work.

Subsection 208.05 (j) shall include the following:

The Contractor shall protect all storm drain facilities adjacent to locations where pavement cutting operations involving wheel cutting, saw cutting, sand blasting or abrasive water jet blasting are to take place.

In subsection 208.05(l) delete the first sentence and replace with the following:

The Contractor shall maintain the erosion logs during construction to prevent sediment from passing over or under the logs or from sediment accumulation greater than 50 percent of the original exposed height of each erosion log.

Subsection 208.05(n) shall include the following:

Washout areas shall be checked by the Contractor and maintained as required. On site permanent disposal of concrete washout waste is not allowed.

In subsection 208.05(n), first paragraph, delete the second sentence and replace with the following:

At least ten days prior to start of concrete operations, the Contractor shall submit in writing a method statement outlining the design, site location and installation of a concrete structure that will contain washout from concrete placement operations.

Subsection 208.05(n) shall include the following:

(11) The use of earthen, in ground concrete washout sites shall be less than one year.

In subsection 208.05(n) delete the last paragraph and replace it with the following:

All liquid and solid wastes, including contaminated sediment and soils generated from concrete washout shall be hauled away from the site. Removal shall be included in the price of the concrete washout structure.

Subsection 208.05 shall include the following:

(q) *Detention Pond*. Permanent detention ponds shown in the construction plans may be used as temporary BMPs if:

- (1) the pond is designated as a construction BMP in the SWMP,
- (2) the pond is designed and implemented for use as a BMP during construction in accordance with good engineering, hydrologic, and pollution control practices, and
- (3) the pond is inspected and maintained
- (4) All silt shall be removed and the pond returned to the design grade and contour prior to project acceptance.

Add subsections 208.051 through 208.055 immediately following subsection 208.05 which shall include the following:

208.051 Materials Handling and Spill Prevention. The Contractor shall clearly describe and record on the SWMP, all practices implemented at the site to minimize impacts from procedures or significant material that could contribute pollutants to runoff. Areas or procedures where potential spills can occur shall have spill procedures and responses specified in subsection 107.25.

(a) Bulk storage structures for petroleum products and any other chemicals shall have secondary containment or equivalent adequate protection so as to contain all spills and prevent any spilled material from entering state waters. If secondary containment is used

and results in accumulation of stormwater within the containment, a plan shall be implemented to properly manage and dispose of accumulated stormwater.

- (b) The Contractor shall inspect equipment and vehicles daily to ensure petroleum, oils, and lubricants (POL) are not leaking onto the soil or pavement. Absorbent material or containers approved by the Engineer shall be used to prevent leaking POL from reaching the soil or pavement. The Contractor shall have onsite approved absorbent material or containers of sufficient capacity to contain any POL leak that can reasonably be foreseen. All materials resulting from POL leakage control and cleanup shall become the property of the Contractor and shall be removed from the site. The cost for control, cleanup and removal of by-products resulting from POL leaks will not be paid for separately, but shall be included in the work.
- (c) A Spill Prevention, Control and Countermeasure Plan shall be developed and implemented to establish operating procedures and the necessary employee training to minimize the accidental releases of pollutants that can contaminate stormwater runoff.

The Spill Prevention, Control, and Countermeasure Plan shall contain the following information:

- (5) Identification of the spill cleanup coordinators
- (6) Location of cleanup kits
- (7) Quantities of chemicals and locations stored on site.
- (8) Label system for chemicals and Materials Safety Data Sheets (MSDS) for products
- (9) Notification and clean up procedures to be implemented in the event of a spill for spills which do not enter state waters or are under reporting limits of the chemical of concern (diesel fuel, hydraulic fluid, motor oil, used hydraulic fluid and motor oil, tack oil).
- (10) Significant spill procedures for spills of any size that enter state waters or have the potential to do so. CDOT's Erosion Control and Stormwater Quality Guide (current edition) contains Spill notification contacts and phone numbers required in the SPCC.

Subsection 208.052 Stockpile Management. Material stockpiles shall be located away from sensitive areas and shall be confined so that no potential pollutants will enter state waters or conveyances to state waters (e.g., ditches). Locations shall be approved by the Engineer.

Erodible stockpiles (including topsoil) shall be contained with acceptable BMPs at the toe (or just beyond toe) throughout construction. BMPs shall be approved by the Engineer.

There shall be no stockpiling or side casting of waste materials including but not limited to paint chips, asphalt, and concrete that result from project activities within 50 horizontal feet of the ordinary high water line of any state waters.

208.053 Grading and Slope Stabilization. The Contractor shall limit construction activities to those areas within the limits of disturbance to toe of slope and top of cut and as otherwise shown on the plans and cross-sections. Construction activities, in addition to the Contract work, shall include the on-site parking of vehicles or equipment, on-site staging, use of on-site batch plants, use of haul roads

or work access, and any other action which would disturb existing conditions. Off road staging areas must be pre-approved by the Engineer, unless otherwise designated in the Contract. Disturbances beyond these limits shall be restored to the original condition by the Contractor at the Contractor's expense. The Contractor shall tabulate additional disturbances not identified in the SWMP and indicate locations and quantities on the SWMP and report to the Engineer.

The Contractor shall pursue and stabilize all disturbances to completion. The Contractor shall provide a stabilization schedule showing dates when areas are to be completed and stabilized. The Contractor shall maintain revisions to the schedule and obtain approval for schedule changes in accordance with subsection 108.03.

208.054 Surface Roughening and Vehicle Tracking. Disturbed surfaces shall be left in a roughened condition at the end of each shift by equipment vertical tracking, scarifying, or disking the surface on contour to create a 2 to 4 inch minimum variation in soil surface. Deep sands or soils that are primarily rock need not be roughened. Surface roughening will not be paid for separately, but shall be included in the work.

Subsection 208.06 shall include the following:

Failure to implement the Stormwater Management Plan puts the project in automatic violation of CDOT Specifications. Penalties may be assessed to the Contractor by the appropriate agencies. All fines assessed to the Department for the Contractor's failure to implement the SWMP shall be deducted from moneys due the Contractor in accordance with subsection 107.25(c) 2.

In subsection 208.06, delete items (3), (7) and (8) and replace with the following:

- (3) Failure of the Contractor to implement necessary actions required by the Engineer as required by subsection 208.03 (c).
- (7) Failure to immediately stabilize disturbed areas as required by subsections 208.04(d) and 208.054.
- (8) Failure to replace or perform maintenance on an erosion control feature within 48 hours after notice from the Engineer to replace or perform maintenance as required by subsection 208.04(e).

In subsection 208.06 add items (11) and (12) which shall include the following:

- (11) Failure to perform permanent stabilization as required by subsection 208.04 (d).
- (12) Failure to remove unnecessary BMPs.

In subsection 208.06, second paragraph, delete the first three sentences and replace with the following:

The Engineer will immediately notify the Contractor in writing of each incident of failure to perform erosion control items (1) through (12) above. The Contractor will be allowed 48 hours but correction shall be made as soon as possible from the date of notification to correct the failure. The Contractor will be charged liquidated damages in the amount of \$875 for each calendar day after the 48 hour period has expired, that one or more of the incidents of failure, items (1) through (12) above, remains uncorrected.

Add subsection 208.061 immediately following subsection 208.06 which shall include the following:

208.061 Items to Be Accomplished prior to Final Acceptance. After all concrete operations are complete, all washout areas shall be reclaimed in accordance with subsection 208.05(n) at the Contractor's expense.

BMPs shall be removed when 70% of pre-existing vegetative cover has been re-established within the disturbed project limits. The Contractor shall remove approved BMPs; cost of BMP removal will be included in the BMP.

In subsection 208.07 delete the seventh paragraph and replace with the following:

Excavation required for removal of accumulated sediment from traps, basins, areas adjacent to silt fences and erosion bales, and other clean out excavation of accumulated sediment, and the disposal of such sediment, will be measured by the number of hours that equipment, labor, or both are used for sediment removal.

In subsection 208.08 delete the pay item *Sediment Removal and Disposal* and the pay item for *Erosion Control Supervisor (Lump Sum)*, and replace them with the following:

Pay Item	Pay Unit
Removal and Disposal of Sediment (Labor)	Hour
Removal and Disposal of Sediment (Equipment)	Hour
Erosion Control Supervisor	Hour
Erosion Control Supervisor	Day

Subsection 208.08 shall include the following:

Payment for *Removal and Disposal of Sediment (Equipment)* will be full compensation for use of the equipment, including the operator.

Payment for *Erosion Control Supervisor* will be full compensation for the erosion control supervisor and all materials and equipment necessary for the erosion control supervisor to perform the work.

Payment will be made for erosion and sediment control devices replaced as approved by the Engineer.

In subsection 208.08, the third paragraph shall include the following:

Removal and Disposal of Sediment from the stabilized construction entrance will be measured and paid for separately.

August 1, 2005

REVISION OF SECTION 104
VALUE ENGINEERING CHANGE PROPOSALS

NOTICE

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Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision in all projects.

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REVISION OF SECTION 104
VALUE ENGINEERING CHANGE PROPOSALS

Section 104 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 104.07 and replace with the following:

104.07 Value Engineering Change Proposals by the Contractor. The Contractor is encouraged to develop and offer proposals for improved construction techniques, alternative materials and other innovations. Proposals must provide a project comparable to the CDOT's original design either at lower cost or improved quality, or both. No proposals will be accepted that lowers the quality of the intended project. Bid prices shall not be based on the anticipated approval of a Value Engineering Change Proposal (VECP). Proposals shall be submitted only by the successful bidder after contract award. If a VECP is rejected, the work shall be completed in accordance with the Contract at contract bid prices. Any delay to the project due to a VECP submittal and review shall be considered within the Contractor's control and will be non-excusable with the exception of those delays that are approved as part of the VECP.

Proposals shall be categorized as VECP (Category A) or VECP (Category B).

VECP (Category A)s will be all proposals that involve the design and construction of a structure including but not limited to a bridge, retaining wall, concrete box culvert, or building. A VECP (Category A) will also include any proposal that would result in a change of original bid items that totals over \$250,000. Alternatives investigated and not selected in the project Structural Selection Reports may be presented in a VECP, if significant benefits can be demonstrated to the Engineer. In addition, any design criteria and constraints listed in the Structural Selection Report can not be modified or relaxed as part of a VECP unless significant and previously unknown benefits can be proven to the Engineer. Experimental or demonstration-type design concepts, products, structures, or elements that have not been pre-approved by CDOT, in writing, for general use will be considered a VECP (Category A). Category A proposals will also result in a realized and shared cost savings to CDOT. Cost savings generated to the Contract as a result of VECP offered by the Contractor and accepted by the CDOT shall be shared between the Contractor and the CDOT.

All other VECPs that do not meet the previous requirements will be classified as a VECP (Category B).

Net cost savings on VECPs that are less than \$25,000 can be kept by the Contractor. Net cost savings greater than \$25,000 shall be split equally between the Contractor and CDOT as defined in the Basis of Payment section of this specification.

Both VECP (Category A) and VECP (Category B) will produce savings to the CDOT or provide improved project quality without impairing essential functions and characteristics of the facility. Essential functions include but are not limited to: service life, requirements for planned future development, prior commitments to governmental agencies or the public, corridor

requirements, economy of operation, ease of maintenance, desired appearance, safety, and impacts to the traveling public or to the environment during and after construction.

The Contractor may submit either a full VECP or a preliminary Conceptual VECP, followed by a full proposal. These proposals are subject to rejection at any time if they do not meet the criteria outlined in this subsection.

- (a) *Submittal of Conceptual Proposal.* For a VECP (Category A) that requires a significant amount of design or other development resources, the Contractor may submit an abbreviated Conceptual Proposal for preliminary evaluation. The Engineer will evaluate the information provided. The Contractor will then be advised in writing if any conditions or parameters of the Conceptual Proposal are found to be grounds for rejection. Preliminary review of a conceptual proposal reduces the Contractor's risk of subsequent rejection but does not commit the CDOT to eventual approval of the full VECP. The following information shall be submitted for each Conceptual Proposal:

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VALUE ENGINEERING CHANGE PROPOSALS

- (1) Statement that the proposal is submitted as a Conceptual VECP
- (2) General description of the difference between the existing Contract and the proposed change, and the advantages and disadvantages of each, including effects on service life, requirements for planned future development, prior commitments to governmental agencies or the public, corridor requirements, economy of operation, ease of maintenance, desired appearance, safety, and impacts to the traveling public or to the environment during and after construction. The Contractor shall request in writing the necessary information from the Engineer.
- (3) One set of conceptual plans and a description of proposed changes to the Contract specifications
- (4) Estimate of the anticipated cost savings or increase
- (5) Statement specifying the following:
 - (i) when a response to the conceptual proposal from the CDOT is required to avoid delays to the existing contract prosecution
 - (ii) the amount of time necessary to develop the full Proposal
 - (iii) the date by which a Contract Modification Order must be executed to obtain maximum benefit from the Proposal

(iv) the Proposal's impact on time for completing the Contract

(b) *Submittal of Full Value Engineering Change Proposal.* The following materials and information shall be submitted for both a Category A and VECP (Category B):

- (1) A statement that the proposal is submitted as a VECP:
- (2) A description of the difference between the existing Contract and the proposed change, and the advantages and disadvantages of each, including effects on service life, requirements for planned future development, prior commitments to governmental agencies or the public, corridor requirements, economy of operation, ease and cost of maintenance, desired appearance, safety, and impacts to the traveling public or to the environment during and after construction. . The Contractor shall request in writing the necessary information from the Engineer.
- (3) A complete set of plans and specifications showing the proposed revisions relative to the original Contract. This portion of the submittal shall include design notes and construction details. The proposed plans and specifications shall be signed and sealed by the Contractor's Engineer.
- (4) A cost comparison, summarizing all of the items that the proposed VECP replaces, reduces, eliminates, adds, or otherwise changes from the original Contract work, including all impacts to traffic control, detours and all other changes. The cost comparison shall not include cost savings resulting from purportedly decreased inspection or testing requirements, or CDOT overhead; All costs and proposed unit prices shall be documented by the Contractor.
- (5) A statement specifying the date by which a Contract Modification Order must be executed to obtain the maximum cost reduction during the remainder of the Contract and the date when a response from the CDOT is required to avoid delays to the prosecution of the Contract.

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- (6) A statement detailing the effect the Proposal will have on the time for completing the Contract.
- (7) A description of any previous use or testing of the proposed changes and the conditions and results. If the Proposal was previously submitted on another CDOT project, the proposal shall indicate the date, Contract number, and the action taken by the CDOT.
- (8) An estimate of any effects the VECP will have on other costs to the CDOT.

- (9) A statement of life cycle costs, when appropriate. Life cycle costs will not be considered as part of cost savings but shall be calculated for additional support of the Proposal. A discount rate of four percent shall be used for life cycle calculations.

(c) *Evaluation.* VECP will be evaluated by CDOT in accordance with the CDOT Construction Manual.

Additional information needed to evaluate Proposals shall be provided in a timely manner. Untimely submittal of additional information will result in rejection of the Proposal. Where design changes are proposed, the additional information shall include results of field investigations and surveys, design and computations, and changed plan sheets required to develop the design changes.

1. The Engineer will determine if a Proposal qualifies for consideration and evaluation. The Engineer may reject any Proposal that requires excessive time or costs for review, evaluation, or investigation. The Engineer may reject proposals that are not consistent with the CDOT's design and criteria for the project.
2. VECP, whether or not approved by the CDOT, apply only to the ongoing Contracts referenced in the Proposal and become the property of the CDOT. Proposals shall contain no restrictions imposed by the Contractor on their use or disclosure. The CDOT has the right to use, duplicate and disclose in whole or in part any data necessary for the utilization of the Proposal. The CDOT retains the right to utilize any accepted Proposal or part thereof on other projects without obligation to the Contractor. This provision is subject to rights provided by law with respect to patented materials or processes.
3. If the CDOT is already considering revisions to the Contract or has approved changes in the Contract that are subsequently proposed in a VECP, the Engineer will reject the Proposal and may proceed to implement these changes without obligation to the Contractor.
4. The Contractor shall have no claim against the CDOT for additional costs or delays resulting from the rejection or untimely acceptance of a VECP. These costs include but are not limited to: development costs, loss of anticipated profits, increased material or labor costs, or untimely response.
5. Proposals will be rejected if equivalent options are already provided in the Contract.
6. Proposals that only reduce or eliminate contract pay items will be rejected.
7. The cost savings and other benefits generated by the Proposal must be sufficient to warrant review and processing, as determined by the Engineer.
8. A proposal changing the type or thickness of the pavement structure will be rejected.

9. No VECP proposal can be used to alter incentive and disincentive rates and maximums on A+B projects.

August 1, 2005

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REVISION OF SECTION 104
VALUE ENGINEERING CHANGE PROPOSALS

10. Right of Way cannot be bought as part of a VECP to eliminate phasing on a project.
11. A VECP changing the design of a structure may be considered by the CDOT, if the design meets the following conditions:
 - (1) The design shall not involve detouring of traffic onto local roads or streets to an extent greater than the original plans, unless previously approved by the affected local agencies
 - (2) The design has the same roadway typical section as the original plans
 - (3) The design meets or exceeds the benefits of the construction-handling or traffic phasing scheme shown in the original plans
 - (4) The design meets or exceeds all environmental commitments and permit requirements of the original Contract.
 - (5) The design shall not increase environmental impacts beyond those of the original Contract.
 - (6) The design meets or exceeds the vertical and horizontal clearances and hydraulic requirements shown in the original plans
 - (7) The design has the same or greater flexibility as the original design to accommodate future widening
 - (8) The design shall not change the location of the centerline of the substructure elements, without demonstrating substantial benefits over the original plans
 - (9) The design shall not change the grade or elevation of the final riding surface, without demonstrating substantial benefits over the original plans
 - (10) The design shall match corridor future development plans, architectural, aesthetic and pavement requirements, if applicable
 - (11) The design shall not adversely impact the CDOT's Bridge Inspection, maintenance or other long-term costs or operations.
 - (12) The design shall meet all CDOT design standards and policies
 - (13) The design shall include all additional costs and coordination necessary to relocate utilities
 - (14) Major structure designs provided by the Contractor shall include an independent plan review and design check by a Professional Engineer registered in the State of Colorado and employed by a firm other than the engineer-of-record. This design review will be performed at no additional cost to CDOT and shall be included in the Contractor's engineering costs.
 - (15) The Contractor shall provide CDOT with all design calculations, independent design check calculations, a rating package for each bridge prepared in

accordance with the current CDOT Bridge Rating Manual, and a record set of quantity calculations for each structure.

12. The Engineer will reject all or any portion of the design or construction work performed under an approved VECP if unsatisfactory results are obtained. The Engineer will direct the removal of such rejected work and require construction to proceed under the original Contract requirements without reimbursement for work performed under the proposal, or for its removal.

If a structure design VECP meets these and all other requirements, the CDOT may, at its sole option, accept or reject the proposal.

- (d) *Basis of Payment.* If the VECP is accepted, a Contract Modification Order will authorize the changes and payment. Reimbursement will be made as follows:

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REVISION OF SECTION 104
VALUE ENGINEERING CHANGE PROPOSALS

1. The changes will be incorporated into the Contract by changes in quantities of unit bid items, new agreed unit price items, lump sum or any combination, as appropriate, under the Contract. Unless there is a differing site condition as described in subsection 104.02, the Contractor shall not receive additional compensation for quantity overruns, design errors, supplemental surveys, geotechnical investigations, additional items or other increases in cost that were not foreseen in the accepted VECP, unless otherwise approved by the Engineer.

2. For all VECPs, the incentive payment shall be calculated as follows:

(gross cost of deleted work) - (gross cost of added work) = (gross savings)

(gross savings) - (Contractor's engineering costs) - (CDOT's engineering costs) = (net savings)

Any net savings less than \$25,000 can be kept by the contractor.

If the net savings are greater than \$25,000 then the amount over \$25,000 will be shared equally with CDOT and calculated as follows:

(net savings) - \$25,000 = shared savings

Contractor's total incentive = (shared savings) / 2 + \$25,000

The Contractor's engineering costs will be reimbursable only for outside consultant costs that are verified by certified billings. CDOT's engineering costs shall be actual consultant costs billed to CDOT and extraordinary in-house personnel labor costs. These labor costs will be calculated at the fixed amount of \$50.00 per hour per employee. Project personnel assigned to the field office or who work on the project on a regular basis shall not be included in CDOT's portion of the cost.

3. At the completion of the VECP design work, the Contractor shall furnish the CDOT any additional documentation such as surveys, geotechnical reports, documentation or calculations and shop drawings required to complete the work.

At the completion of the project, the Contractor shall furnish the CDOT with PE-stamped Record sets, and As-Constructed plans showing the VECP work.

(e) *Contractor Appeal Process.* Appeals can only be made on VECP (Category A)s. The Prime Contractor submitting the VECP may file a one-time appeal to the Region Transportation Director (RTD) on the denial of any VECP (Category A). The Contractor must have a valid reason for the appeal and the decision of the Region Transportation Director will be final.

January 17, 2008

REVISION OF SECTION 105
DISPUTES AND CLAIMS FOR
CONTRACT ADJUSTMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects. If a standing DRB is required for the project, add the following General Note to the Plans: "There shall be a Standing Disputes Review Board for this Project." A standing DRB should be called for on the following types of projects:

1. Large projects (greater than \$15 million)
2. Projects with complex construction
3. Projects with large complex structures
4. Projects with multi-phase construction
5. Projects with major impacts to traffic
6. Projects with other complicating factors that could easily lead to disputes

On projects that require a standing DRB, establish a planned force account item to cover the ongoing costs of the DRB.

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 105.21 and replace it with the following subsections 105.21, 105.22, and 105.23.

105.21 Dispute Resolution. Subsections 105.21, 105.22, and 105.23 detail the process through which the parties (CDOT and the Contractor) agree to resolve any issue that may result in a dispute. The intent of the process is to resolve issues early, efficiently, and as close to the project level as possible. Figure 105-1 at the end of subsection 105.23 outlines the process. Specified time frames may be extended by mutual agreement of the Engineer and the Contractor.

A dispute is a disagreement concerning contract price, time, interpretation of the Contract, or all three between the parties at the project level regarding or relating to the Contract. Disputes include, but are not limited to, any disagreement resulting from a delay, a change order, another written order, or an oral order from the Project Engineer, including any direction, instruction, interpretation, or determination by the Project Engineer, interpretations of the Contract provisions, plans, or specifications or the existence of alleged differing site conditions.

The term "merit" refers to the right of a party to recover on a claim or dispute, irrespective of quantum, based on the substance, elements, and grounds of that claim or dispute. The term "quantum" refers to the quantity or amount of compensation or time deserved when a claim or dispute is found to have merit.

Disputes from subcontractors, materials suppliers, or any other entity not party to the Contract shall be submitted through the Contractor. Review of a pass-through dispute does not create privity of Contract between CDOT and the subcontractor.

When an issue arises on the project that can not be resolved between the parties, either party may consider it a dispute and initiate the dispute resolution process as described in subsection 105.21(b).

If CDOT does not respond within the specified timelines, the Contractor may advance the dispute to the next level.

When the Project Engineer is a Consultant Project Engineer, actions, decisions, and determinations specified herein as made by the Project Engineer shall be made by the Resident Engineer.

A claim will not be accepted by CDOT until all remedies for dispute resolution provided for in subsections 105.21 and 105.22 have been exhausted. If CDOT contends that the Contractor has failed to follow the provisions of subsection 105.21 or 105.22, CDOT will notify the Contractor in writing and provide the Contractor with ten days in which to cure the alleged failure. After the CDOT notice, unless the Engineer grants an exception in writing, failure to comply with the requirements set forth in subsections 105.21, 105.22 and 105.23, shall bar the Contractor from any further administrative, equitable, or legal remedy.

(a) *Document Retention.* The Contractor shall keep full and complete records of the costs and additional time incurred for each dispute for a period of at least three years after the date of final payment or until dispute is resolved, whichever is more. The Contractor, subcontractors, and lower tier subcontractors shall provide adequate facilities, acceptable to the Engineer, for an audit during normal business hours. The Contractor shall permit the Engineer or Department auditor to examine and copy those records and all other records required by the Engineer to determine the facts or contentions involved in the dispute. CDOT and CDOT's attorneys and consultants will affirmatively act to protect the records and information from disclosure beyond those persons having a need to know the information for the purpose of making a decision regarding the claim, or for law enforcement purposes. The Contractor shall identify and segregate any documents or information that the Contractor considers particularly sensitive, such as confidential or proprietary information.

- (b) *Initial Dispute Resolution Process.* To initiate the dispute resolution process the Contractor shall provide a written notice of dispute to the Project Engineer upon the failure of the Parties to resolve the issue through negotiation. Disputes will not be considered unless the Contractor has first complied with specified issue resolution processes such as those specified in subsections 104.02, 106.05, 108.07(a), and 108.07(d).

The Contractor shall supplement the written notice of dispute within 15 days with a written Request for Equitable Adjustment (REA) providing the following:

- (13) The date of the dispute
- (14) The nature of the circumstances which caused the dispute
- (15) The Contract provisions and any other basis supporting the Contractor's position
- (16) The estimated dollar cost, if any, of the dispute with supporting documentation
- (17) An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption.

The Contractor shall submit as much of the above information as is reasonably available with the REA and then supplement the REA as additional information becomes available.

- (c) *Project Engineer Review.* Within 15 days after receipt of the REA, the Project Engineer will meet with the Contractor to discuss the merits of the dispute. Within seven days after this meeting, the Project Engineer will issue a written decision on the merits of the dispute.

The Project Engineer will either deny the merits of the dispute or notify the Contractor that the dispute has merit. This determination will include a summary of the relevant facts, Contract provisions supporting the determination, and an evaluation of all scheduling issues that may be involved.

If the dispute is determined to have merit, the Contractor and the Project Engineer will determine the adjustment in payment, schedule, or both within 30 days. When a satisfactory adjustment is determined, it shall be implemented in accordance with subsections 106.05, 108.07, 109.04, 109.05 or 109.10 and the dispute is resolved.

If the Contractor accepts the Project Engineer's denial of the merits of the dispute, the dispute is resolved and no further action will be taken. If the Contractor does not respond in seven days, it will be assumed he has accepted the denial. If the Contractor rejects the Project Engineer's denial of the merits of the dispute or a satisfactory adjustment of payment or schedule can not be agreed upon within 30 days, the Contractor may further pursue resolution of the dispute by providing written notice to the Resident Engineer within seven days, according to subsection 105.21(d).

- (d) *Resident Engineer Review.* Within seven days after receipt of the Contractor's written notice to the Resident Engineer of unsatisfactory resolution of the dispute, the Project Engineer and Resident Engineer will meet with the Contractor to discuss the dispute. Meetings shall continue weekly for a period of up to 30 days and shall include a Contractor's representative with decision authority above the project level.

If these meetings result in resolution of the dispute, the resolution will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If these meetings do not result in a resolution or the participants mutually agree that they have reached an impasse, the dispute shall be presented to the Dispute Review Board in accordance with subsection 105.22.

105.22 Dispute Review Board. A Dispute Review Board (DRB) is an independent third party that will provide specialized expertise in technical areas and administration of construction contracts. The DRB will assist in and facilitate the timely and equitable resolution of disputes between CDOT and the Contractor in an effort to avoid animosity and construction delays, and to resolve disputes as close to the project level as possible. The DRB shall be established and operate as provided herein and shall serve as an independent and impartial board.

There are two types of DRBs: the "On Demand DRB" and the "Standing DRB". The DRB shall be an "On Demand DRB" unless a "Standing DRB" is specified in the Contract. An On Demand DRB shall be established only when the Project Engineer initiates a DRB review in accordance with subsection 105.22(a). A Standing DRB, when specified in the Contract, shall be established at the beginning of the project.

- (a) *Initiation of Dispute Review Board Review.* When a dispute has not been resolved in accordance with subsection 105.21, the Project Engineer will initiate the DRB review process within 5 days after the period described in subsection 105.21(d).
- (b) *Formation of Dispute Review Board.* DRBs will be established in accordance with the following procedures:
1. CDOT, in conjunction with the Colorado Contractors Association, will maintain a non-exclusive statewide list of suggested DRB candidates experienced in construction processes and the interpretation of contract documents and the resolution of construction disputes. The Board members shall be experienced in highway and transportation projects. When a DRB is formed, the parties shall execute the agreement set forth in subsection 105.22(k). Either party may add candidates to the list at any time.
 2. If the dispute has a value of \$250,000 or less, the On Demand DRB shall have one member. The Contractor and CDOT shall select the DRB member and execute the agreement within 30 days of initiating the DRB process. If the parties do not agree on the DRB member, each shall select five candidates. Each party shall numerically rank their list using a scale of one to five with one being their first choice and five being their last choice. If common candidates are listed, but the parties cannot agree, that common candidate with the lowest combined numerical ranking shall be selected. If there is no common candidate, the lists shall be combined and each party shall eliminate three candidates from the list. Each party shall then numerically rank the remaining candidates, with No. 1 being the first choice. The candidate with the lowest combined numerical ranking shall be the DRB member.
 3. If the dispute has a value over \$250,000, the On Demand DRB shall have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson and execute the agreement within 45 days of initiating the DRB process.
 4. The Standing DRB shall always have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson, unless otherwise agreed to by the parties. The Contractor and CDOT shall submit their proposed Standing DRB members at the Preconstruction Conference.
 5. DRB members shall not have been involved in the administration of the project under consideration. DRB candidates shall disclose to the parties the following relationships:
 - (1) Prior employment with either party
 - (2) Prior or current financial interests or ties to either party
 - (3) Prior or current professional relationships with either party
 - (4) Anything else that might bring into question the impartiality or independence of the DRB memberIf either party objects to the selection of a potential DRB member based on the disclosures of the potential member, that potential member shall not be placed on the Board.
 6. There shall be no ex parte communications with the DRB at any time.
 7. The service of a Board member may be terminated only by written agreement of both parties.

If a Board member resigns, is unable to serve, or is terminated, a new Board member shall be selected within four weeks in the same manner as the Board member who was removed was originally selected.

(c) *Additional Responsibilities of the Standing Disputes Review Board*

1. General. Within 120 days after the establishment of the Board, the Board shall meet at a mutually agreeable location to:
 - (6) Obtain copies of the contract documents and Contractor's schedules for each of the Board members.
 - (7) Agree on the location of future meetings, which shall be reasonably close to the project site.
 - (8) Establish an address and telephone number for each Board member for the purposes of Board business.
2. Regular meetings. Regular meetings of the Board shall be held approximately every 120 to 180 days throughout the life of the Contract, except that this schedule may be modified to suit developments on the job as the work progresses. Regular meetings shall be attended by representatives of the Contractor and the Department.

3. The Board shall establish an agenda for each meeting which will cover all items that the Board considers necessary to keep it abreast of the project such as construction status, schedule, potential problems and solutions, status of past claims and disputes, and potential claims and disputes. Copies of each agenda shall be submitted to the Contractor and the Department at least seven days before the meeting date. Oral or written presentations or both shall be made by the Contractor and the Department as necessary to give the Board all the data the Board requires to perform its functions. The Board will prepare minutes of each meeting, circulate them to all participants for comments and approval, and issue revised minutes before the next meeting. As a part of each regular meeting, a field inspection trip of all active segments of the work at the project site may be made by the Board, the Contractor, and the Department.

(d) *Arranging a Dispute Review Board Hearing.* When the Project Engineer initiates the DRB review process, the Project Engineer will:

1. Arrange a hearing between CDOT, the Contractor, and the DRB (date, time, and location) and notify the Contractor at least 15 days before the hearing. Unless otherwise agreed to by both parties the DRB hearing will be held within 30 days after the DRB agreement is signed.
2. Ensure DRB members have copies of all documents previously prepared by the Contractor and CDOT pertaining to the dispute, the DRB request, the contract documents, and the special provisions at least two weeks before the hearing.

(e) *Pre-Hearing Submittal:* At least ten days prior to the hearing, CDOT and the Contractor shall each prepare and circulate to the DRB and the other party a pre-hearing position paper containing the following:

1. A joint statement of the dispute, and the scope of the desired decision. The joint statement shall summarize in a few sentences the nature of the dispute. If the parties are unable to agree on the wording of the joint statement, each party's position paper shall contain both statements, and identify the party authoring each statement.
2. The basis and justification for the party's position, with reference to contract language and other supporting documents for each element of the dispute. To minimize duplication and repetitiveness, the parties may identify a common set of documents that will be referred to by both parties and submit them in a separate package.
3. When the scope of the hearing includes quantum, the requesting party's position paper shall include full cost details, calculated in accordance with methods set forth in subsection 105.23(b).
4. A list of proposed attendees at the hearing. In the event of any disagreement, the DRB shall make the final determination as to who attends the hearing.
5. A list of any intended experts including their qualifications and a summary of what their presentation will include.

The number of copies, distribution requirements, and time for submittal shall be established by the DRB and communicated to the parties by the Chairperson.

(f) *Dispute Review Board Hearing.* The DRB shall preside over a hearing. The chairperson shall control the hearing and conduct it as follows:

1. An employee of CDOT presents a brief description of the project and the status of construction on the project.
2. The party that requested the DRB presents the dispute in detail as supported by previously submitted information and documentation.
3. The other party presents its position in detail.
4. Employees of each party are responsible for leading presentations at the DRB hearing.

5. Attorneys shall not participate in the hearing unless the DRB specifically addresses an issue to them or unless agreed to by both parties. Attorneys representing the parties are permitted to attend the hearing; provided their presence has been noted in the pre-hearing submittal.
 6. Either party may use experts. A party intending to offer an outside expert's analysis at the hearing shall disclose such intention in the pre-hearing position-paper. The expert's name and a general statement of the area of the dispute that will be covered by his presentation shall be included in the disclosure. The other party may present an outside expert to address or respond to those issues that may be raised by the disclosing party's outside expert.
 7. If both parties approve, the DRB may retain an outside expert. The DRB chairperson shall include the cost of the outside expert in the DRB's regular invoice. CDOT and the Contractor shall equally bear the cost of the services of the outside expert employed by the DRB.
 8. Upon completion of their presentations and rebuttals, both parties and the DRB will be provided the opportunity to exchange questions and answers. All questions shall be directed to the chairperson first. Attendees may respond only when board members request a response.
 9. The DRB shall hear only those disputes identified in the written request for the DRB and the information contained in the pre-hearing submittals. The board shall not hear or address other disputes. If either party attempts to discuss a dispute other than those to be heard by the DRB or attempts to submit new information, the chairperson shall inform such party that the board shall not hear the issue and shall not accept any additional information.
 10. If either party fails to timely deliver a position paper, the DRB may reschedule the hearing one time. On the final date and time established for the hearing, the DRB shall proceed with the hearing using the information that has been submitted.
 11. If a party fails to appear at the hearing, the DRB shall proceed as if all parties were in attendance.
- (g) *Dispute Review Board Recommendation.* The DRB shall issue a Recommendation in accordance with the following procedures:
1. The DRB shall not make a Recommendation on the dispute at the meeting. Prior to the closure of the hearing, the DRB members and the Contractor and CDOT together will discuss the time needed for analysis and review of the dispute and the issuance of the DRB's Recommendation. The maximum time shall be 30 days unless otherwise agreed to by both parties.
 2. After the meeting has been closed, the DRB shall prepare a written Recommendation signed by each member of the DRB. In the case of a three member DRB, where one member dissents, that member shall prepare a written dissent and sign it.
 3. The chairperson shall transmit the signed Recommendation and any supporting documents to both parties.
- (h) *Clarification and Reconsideration of Recommendation.* Either party may request clarification or reconsideration of a decision within ten days following receipt of the Recommendation. Within ten days after receiving the request, the DRB shall provide written clarification or reconsideration to both parties unless otherwise agreed to by both parties.

Requests for clarification or reconsideration shall be submitted in writing simultaneously to the DRB and to the other party.

The Board shall not accept requests for reconsideration that amount to a renewal of prior argument or additional argument based on facts available at the time of the hearing.

Only one request for clarification or reconsideration per dispute from each party will be allowed.

- (i) *Acceptance or Rejection of Recommendation.* CDOT and the Contractor shall submit their written acceptance or rejection of the Recommendation, in whole or in part, concurrently to the other party and to the DRB within 14 days after receipt of the Recommendation or following receipt of responses to requests for clarification or reconsideration.

If the parties accept the Recommendation or a discreet part thereof, it will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If either party rejects the Recommendation in whole or in part, it shall give written explanation to the other party within 14 days after receiving the Recommendation. When the Recommendation is rejected in whole or in part by either party, the other party may either abandon the dispute or pursue a formal claim in accordance with subsection 105.23.

- (j) *Admissibility of Recommendation.* Recommendations of a DRB issued in accordance with subsection 105.22 are admissible in subsequent proceedings but shall be prefaced with the following paragraph:

This Recommendation may be taken under consideration with the understanding that:

1. The DRB Recommendation was a proceeding based on presentations by the parties.
2. No fact or expert witnesses presented sworn testimony or were subject to cross-examination.
3. The parties to the DRB were not provided with the right to any discovery, such as production of documents or depositions.
4. There is no record of the DRB hearing other than the Recommendation.

- (k) *Cost and Payments.*

1. General Administrative Costs. The Contractor and the Department shall equally share the entire cost of the following to support the Board's operation:
 - (6) Copies of Contract and other relevant documentation
 - (7) Meeting space and facilities
 - (8) Secretarial Services
 - (9) Telephone
 - (10) Mail
 - (11) Reproduction
 - (12) Filing

2. The Department and the Contractor shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,200 per day if time spent on-site per meeting is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$800 per day if time spent on-site per meeting is less than or equal to four hours. The time spent traveling to and from each meeting shall be reimbursed at \$50 per hour if the travel distance is more than 50 miles. The agreed daily and travel time rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel of more than 50 miles and incidentals for each day, or portion thereof that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time, (such as time spent evaluating and preparing recommendations on specific issues presented to the DRB), has been specifically agreed to in advance by the Department and Contractor. Time away from the project that has been specifically agreed to in advance by the parties will be compensated at an agreed rate of \$125 per hour. The agreed amount of \$125 per hour shall include all incidentals. Members serving on more than one DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project.
3. Payments to Board Members and General Administrative Costs. Each Board member shall submit an invoice to the Contractor for fees and applicable expenses incurred each month following a month in which the Board members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department. The Contractor shall submit to the Department copies of all invoices. No markups by the Contractor will be allowed on any DRB costs. The Department will split the cost by authorizing 50% payment on the next progress payment. The Contractor shall make all payments in full to Board members within seven calendar days after receiving payment from the Department for this work.

(l) *Dispute Review Board Three Party Agreement.*

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT
COLORADO PROJECT NO.

THIS THREE PARTY AGREEMENT, made this ____day of _____, _____,by and between:
the Colorado Department of Transportation, hereinafter called the "Department"; and

_____,
hereinafter called the "Contractor"; and

_____,
_____,
and

_____,
hereinafter called the "Dispute Review Board" or "Board".

WHEREAS, the Department is now engaged in the construction of the
[Project Name]

and

WHEREAS, the Contract provides for the establishment of a Board in accordance with subsections
105.21 and 105.22 of the specifications.

NOW, THEREFORE, it is hereby agreed:

ARTICLE I
DESCRIPTION OF WORK AND SERVICES

The Department and the Contractor shall form a Board in accordance with this agreement and the
provisions of subsection 105.22.

ARTICLE II
COMMITMENT ON PART OF THE PARTIES HERETO

The parties hereto shall faithfully fulfill the requirements of subsection 105.22 and the requirements of
this agreement.

ARTICLE III
COMPENSATION

The parties shall share equally in the cost of the Board, including general administrative costs (meeting
space and facilities, secretarial services, telephone, mail, reproduction, filing) and the member's
individual fees.. Reimbursement of the Contractor's share of the Board expenses for any reason is
prohibited.

The Contractor shall make all payments in full to Board members. The Contractor will submit to the
Department an itemized statement for all such payments, and the Department will split the cost by
including 50 percent payment on the next progress payment. The Contractor and the Department will
agree to accept invoiced costs prior to payment by the Contractor.

DISPUTE REVIEW BOARD

Board members shall keep all fee records pertaining to this agreement available for inspection by representatives of the Department and the Contractor for a period of three years after the termination of the Board members' services.

Payment to each Board member shall be at the fee rates established in subsection 105.22 and agreed to by each Board member, the Contractor, and the Department. In addition, reimbursement will be made for applicable expenses.

Each Board member shall submit an invoice to the Contractor for fees incurred each month following a month in which the members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department.

Payments shall be made to each Board member within 60 days after the Contractor and Department have received all the applicable billing data and verified the data submitted by that member. The Contractor shall make payment to the Board member within seven calendar days of receipt of payment from the Department.

**ARTICLE IV
ASSIGNMENT**

Board members shall not assign any of the work to be performed by them under this agreement. Board members shall disclose any conflicts of interest including but not limited to any dealings with the either party in the previous five years other than serving as a Board member under other contracts.

**ARTICLE V
COMMENCEMENT AND TERMINATION OF SERVICES**

The commencement of the services of the Board shall be in accordance with subsection 105.22 of the specifications and shall continue until all assigned disputes under the Contract which may require the Board's services have been heard and a Recommendation has been issued by the Board as specified in subsection 105.22. If a Board member is unable to fulfill his responsibilities for reasons specified in subsection 105.22(b)7, he shall be replaced as provided therein, and the Board shall fulfill its responsibilities as though there had been no change.

**ARTICLE VI
LEGAL RELATIONS**

The parties hereto mutually agree that each Board member in performance of his duties on the Board is acting as an independent contractor and not as an employee of either the Department or the Contractor. Board members will guard their independence and avoid any communication about the substance of the dispute without both parties being present.

The Board members are absolved of any personal liability arising from the Recommendations of the Board.

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT PAGE 3
COLORADO PROJECT NO.

IN WITNESS HEREOF, the parties hereto have caused this agreement to be executed the day and year first written above.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

CONTRACTOR: _____.

BY: _____.

TITLE:

COLORADO DEPARTMENT OF TRANSPORTATION

BY: _____.

TITLE: CHIEF ENGINEER

105.23 Claims for Unresolved Disputes. The Contractor may file a claim only if the disputes resolution process described in subsections 105.21 and 105.22 has been exhausted without resolution of the dispute. Other methods of nonbinding dispute resolution, exclusive of arbitration and litigation, can be used if agreed to by both parties.

This subsection applies to any unresolved dispute or set of disputes between CDOT and the Contractor with an aggregate value of more than \$15,000. Unresolved disputes with an aggregate value of more than \$15,000 from subcontractors, materials suppliers or any other entity not a party to the Contract shall be submitted through the Contractor in accordance with this subsection as a pass-through claim. Review of a pass-through claim does not create privity of Contract between CDOT and any other entity.

Subsections 105.21, 105.22 and 105.23 provide both contractual alternative dispute resolution processes and constitute remedy-granting provisions pursuant to Colorado Revised Statutes which must be exhausted in their entirety.

Merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

The venue for all unresolved disputes with an aggregate value \$15,000 or less shall be the County Court for the City and County of Denver.

Non-binding Forms of alternative dispute resolution such as Mediation are available upon mutual agreement of the parties for all claims submitted in accordance with this subsection.

The cost of the non-binding ADR process shall be shared equally by both parties with each party bearing its own preparation costs. The type of nonbinding ADR process shall be agreed upon by the parties and shall be conducted within the State of Colorado at a mutually acceptable location. Participation in a nonbinding ADR process does not in any way waive the requirement that merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

- (a) *Notice of Intent to File a Claim.* Within 30 days after rejection of the Dispute Resolution Board's Recommendation issued in accordance with subsection 105.22, the Contractor shall provide the Region Transportation Director with a written notice of intent to file a claim. The Contractor shall also send a copy of this notice to the Resident Engineer. For the purpose of this subsection Region Transportation Director shall mean the Region Transportation Director or the Region Transportation Director's designated representative. CDOT will acknowledge in writing receipt of Notice of Intent within 7 days.
- (b) *Claim Package Submission.* Within 60 days after submitting the notice of intent to file a claim, the Contractor shall submit five copies of a complete claim package representing the final position the Contractor wishes to have considered. All claims shall be in writing and in sufficient detail to enable the RTD to ascertain the basis and amount of claim. The claim package shall include all documents supporting the claim, regardless of whether such documents were provided previously to CDOT.

If requested by the Contractor the 60 day period may be extended by the RTD in writing prior to final acceptance. As a minimum, the following information shall accompany each claim.

1. A claim certification containing the following language, as appropriate:

(9) For a direct claim by the Contractor:

CONTRACTOR'S CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
,
(title) _____, of _____ (company) _____, hereby certifies that the
claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for work
on this contract is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of _____

NOTARY PUBLIC

My Commission Expires: _____

B. For a pass-through claim:

PASS-THROUGH CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
,
(title) _____, of _____ (company) _____, hereby certifies that
the claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for
work on this Project is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

Dated _____/s/ _____

The Contractor certifies that the claim being passed through to CDOT is passed through in good faith and is
accurate and complete to the best of my knowledge and belief.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

2. A detailed factual statement of the claim for additional compensation, time, or both, providing all necessary dates, locations, and items of work affected by the claim. The Contractor's detailed factual statement shall expressly describe the basis of the claim and factual evidence supporting the claim. This requirement is not satisfied by simply incorporating into the claim package other documents that describe the basis of the claim and supporting factual evidence.
3. The date on which facts were discovered which gave rise to the claim.
4. The name, title, and activity of all known CDOT, Consultant, and other individuals who may be knowledgeable about facts giving rise to such claim.
5. The name, title, and activity of all known Contractor, subcontractor, supplier and other individuals who may be knowledgeable about facts giving rise to such claim.
6. The specific provisions of the Contract, which support the claim and a statement of the reasons why such provisions support the claim.

7. If the claim relates to a decision of the Project Engineer, which the Contract leaves to the Project Engineer's discretion, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Project Engineer.
8. The identification of any documents and the substance of all oral communications that support the claim.
9. Copies of all known documents that support the claim.
10. The Dispute Review Board Recommendation.
11. If an extension of contract time is sought, the documents required by subsection 108.07(d).
12. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - A. These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
 - (1) Actual wages and benefits, including FICA, paid for additional labor
 - (2) Costs for additional bond, insurance and tax
 - (3) Increased costs for materials
 - (4) Equipment costs calculated in accordance with subsection 109.04(c) for Contractor owned equipment and based on certified invoice costs for rented equipment
 - (5) Costs of extended job site overhead
 - (6) Salaried employees assigned to the project
 - (7) Claims from subcontractors and suppliers at any level (the same level of detail as specified herein is required for all such claims)
 - (8) An additional 16 percent will be added to the total of items (1) through (7) as compensation for items for which no specific allowance is provided, including profit and home office overhead.
 - (9) Interest shall be paid in accordance with CRS 5-12-102 beginning from the date of the Notice of Intent to File Claim
 - B. In adjustment for the costs as allowed above, the Department will have no liability for the following items of damages or expense:
 - (1) Profit in excess of that provided in 12.A.(8) above
 - (2) Loss of Profit
 - (3) Additional cost of labor inefficiencies in excess of that provided in A. above
 - (4) Home office overhead in excess of that provided in A. above
 - (5) Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities, and insolvency
 - (6) Indirect costs or expenses of any nature in excess of that provided in A. above
 - (7) Attorneys fees, claim preparation fees, and expert fees
- (c) *Audit.* An audit may be performed by the Department for any claim, and is mandatory for all claims with amounts greater than \$250,000. All audits will be complete within 60 days of receipt of the complete claim package, provided the Contractor allows the auditors reasonable and timely access to the Contractor's books and records. For all claims with amounts greater than \$250,000 the Contractor shall submit a copy of certified claim package directly to the CDOT Audit Unit at the following address:

Division of Audit
4201 E. Arkansas Ave
Denver, Co. 80222

- (d) *Region Transportation Director Decision.* When the Contractor properly files a claim, the RTD will review the claim and render a written decision to the Contractor to either affirm or deny the claim, in whole or in part, in accordance with the following procedure.

The RTD may consolidate all related claims on a project and issue one decision, provided that consolidation does not extend the time period within which the RTD is to render a decision. Consolidation of unrelated claims will not be made.

The RTD will render a written decision to the Contractor within 60 days after the receipt of the claim package or receipt of the audit whichever is later. In rendering the decision, the RTD: (1) will review the information in the Contractor's claim; (2) will conduct a hearing if requested by either party; and (3) may consider any other information available in rendering a decision.

The RTD will assemble and maintain a claim record comprised of all information physically submitted by the Contractor in support of the claim and all other discoverable information considered by the RTD in reaching a decision. Once the RTD assembles the claim record, the submission and consideration of additional information, other than for clarification and data supporting previously submitted documentation, at any subsequent level of review by anyone, will not be permitted.

The RTD will provide a copy of the claim record and the written decision to the Contractor describing the information considered by the RTD in reaching a decision and the basis for that decision. If the RTD fails to render a written decision within the 60 day period, or within any extended time period as agreed to by both parties, the Contractor shall either: (1) accept this as a denial of the claim, or (2) appeal the claim to the Chief Engineer, as described in this subsection.

If the Contractor accepts the RTD decision, the provisions of the decision shall be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the RTD decision, the Contractor shall either: (1) accept the RTD decision as final, or (2) file a written appeal to the Chief Engineer within 30 days from the receipt of the RTD decision. The Contractor hereby agrees that if a written appeal is not properly filed, the RTD decision is final.

- (e) *Chief Engineer Decision.* When a claim is appealed, the RTD will provide the claim record to the Chief Engineer. Within 15 days of the appeal either party may submit a written request for a hearing with the Chief Engineer or duly authorized Headquarters delegate(s). The Chief Engineer or a duly authorized Headquarters delegate will review the claim and render a decision to affirm, overrule, or modify the RTD decision in accordance with the following.

The Contractor's written appeal to the Chief Engineer will be made a part of the claim record.

The Chief Engineer will render a written decision within 60 days after receiving the written appeal. The Chief Engineer will not consider any information that was not previously made a part of the claim record, other than clarification and data supporting previously submitted documentation.

The Contractor shall have 30 days to accept or reject the Chief Engineer's decision. The Contractor shall notify the Chief Engineer of its acceptance or rejection in writing.

If the Contractor accepts the Chief Engineer's decision, the provisions of the decision will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the Chief Engineer's decision, the Contractor shall either (1) pursue an alternative dispute resolution process in accordance with this specification or (2) initiate litigation or merit binding arbitration in accordance with subsection 105.23(f).

If the Chief Engineer does not issue a decision as required, the Contractor may immediately initiate either litigation or merit binding arbitration in accordance with subsection 105.23(f).

For the convenience of the parties to the Contract it is mutually agreed by the parties that any merit binding arbitration or De Novo litigation shall be brought within 180-calendar days from the date of the Chief

Engineer's decision. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action.

- (f) *De Novo Litigation or Merit Binding Arbitration.* If the Contractor disagrees with the Chief Engineer's decision, the Contractor may initiate de novo litigation or merit binding arbitration to finally resolve the claim that the Contractor submitted to CDOT, depending on which option was selected by the Contractor on Form 1378 which shall be submitted at the preconstruction conference. Such litigation or arbitration shall be strictly limited to those claims that were previously submitted and decided in the contractual dispute and claims processes outlined herein. This does not preclude the joining in one litigation or arbitration of multiple claims from the same project provided that each claim has gone through the dispute and claim process specified in subsections 105.21 through 105.23. The parties may agree, in writing, at any time, to pursue some other form of alternative dispute resolution.

Any offer made by the Contractor or the Department at any stage of the claims process, as set forth in this subsection, shall be deemed an offer of settlement pursuant Colorado Rule of Evidence 408 and therefore inadmissible in any litigation or arbitration.

If the Contractor selected litigation, then de novo litigation shall proceed in accordance with the Colorado Rules of Civil Procedure and the proper venue is the Colorado State District Court in and for the City and County of Denver, unless both parties agree to the use of arbitration.

If the Contractor selected merit binding arbitration, or if both parties subsequently agreed to merit binding arbitration, arbitration shall be governed by the modified version of AAA's Construction Industry Arbitration Rules which follow.

**AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY ARBITRATION RULES MODIFIED
FOR USE WITH CDOT SPECIFICATION SUBSECTION 105.23**

REGULAR TRACK PROCEDURES

R-1. Agreement of Parties

- (a) The parties shall be deemed to have made these rules a part of their Contract. These rules and any amendments shall apply in the form in effect at the time the administrative requirements are met for a demand for arbitration. The parties, by written agreement, may vary the procedures set forth in these rules. After appointment of the arbitrator, such modifications may be made only with the consent of the arbitrator.
- (b) Unless the parties determine otherwise, the Fast Track Procedures shall apply in any case in which aggregate claims do not exceed \$75,000, exclusive of interest and arbitration fees and costs. Parties may also agree to use these procedures in larger cases. Unless the parties agree otherwise, these procedures will not apply in cases involving more than two parties except for pass-through claims. The Fast Track Procedures shall be applied as described in Sections F-1 through F-13 of these rules, in addition to any other portion of these rules that is not in conflict with the Fast Track Procedures.
- (c) Unless the parties agree otherwise, the Procedures for Large, Complex Construction Disputes shall apply to all cases in which the disclosed aggregate claims of any party is at least \$500,000, exclusive of claimed interest, arbitration fees and costs. Parties may also agree to use these procedures in cases involving claims under \$500,000, or in nonmonetary cases. The Procedures for Large, Complex Construction Disputes shall be applied as described in Sections L-1 through L-4 of these rules, in addition to any other portion of these rules that is not in conflict with the Procedures for Large, Complex Construction Disputes.
- (d) All other cases shall be administered in accordance with Sections R-1 through R-45 of these rules.

R-2. Independent Arbitration Provider and Delegation of Duties

When parties agree to arbitrate under these rules, or when they provide for arbitration by an independent third-party (Arbitration Provider) and an arbitration is initiated under these rules, they thereby authorize the Arbitration Provider to administer the arbitration. The authority and duties of the Arbitration Provider are prescribed in the parties' Contract and in these rules, and may be carried out through such of the Arbitration Provider's representatives as it may direct. The Arbitration Provider will assign the administration of an arbitration to its Denver office

R-3. Initiation of Arbitration

Arbitration shall be initiated in the following manner.

- (a) The Contractor shall, within 30 days after the Chief Engineer issues a decision, submit to the Chief Engineer written notice of its intention to arbitrate (the "demand"). The demand shall indicate the appropriate qualifications for the arbitrator(s) to be appointed to hear the arbitration.
- (b) CDOT may file an answering statement with the Contractor within 15 days after receiving the demand. If a counterclaim is asserted, it shall contain a statement setting forth the nature of the counterclaim, the amount involved, if any, and the remedy sought.
- (c) The Chief Engineer shall retain an Arbitration Provider, such as the American Arbitration Association, which will administer an arbitration pursuant to these Rules, except to the extent that such rules conflict with the specifications, in which case the specifications shall control.
- (d) The Arbitration Provider shall confirm its retention to the parties.

R-4. Consolidation or Joinder

If the parties' agreement or the law provides for consolidation or joinder of related arbitrations, all involved parties will endeavor to agree on a process to effectuate the consolidation or joinder.

If they are unable to agree, the Arbitration Provider shall directly appoint a single arbitrator for the limited purpose of deciding whether related arbitrations should be consolidated or joined and, if so, establishing a fair and appropriate process for consolidation or joinder. The Arbitration Provider may take reasonable administrative action to accomplish the consolidation or joinder as directed by the arbitrator.

R-5. Appointment of Arbitrator

An arbitrator shall be appointed in the following manner:

- (a) Immediately after the Arbitration Provider is retained, the Arbitration Provider shall send simultaneously to each party to the dispute an identical list of 10 names of potential arbitrators. The parties are encouraged to agree to an arbitrator from the submitted list and to advise the AAA of their agreement. Absent agreement of the parties, the arbitrator shall not have served as the mediator in the mediation phase of the instant proceeding.
- (b) If the parties cannot agree to arbitrator(s), each party to the dispute shall have 15 calendar days from the transmittal date in which to strike names objected to, number the remaining names in order of preference, and return the list to the Arbitration Provider. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the Arbitration Provider shall invite an arbitrator to serve.
- (c) Unless both parties agree otherwise one arbitrator shall be used for claims less than \$250,000 and three arbitrators shall be used for claims \$250,000 and greater. Within 15 calendar days from the date of the appointment of the last arbitrator, the Arbitration Provider shall appoint a chairperson.
- (d) The entire claim record will be made available to the arbitrators by the Chief Engineer within 15 calendar days from the date of the appointment of the last arbitrator.

R-6. Changes of Claim

The arbitrator(s) will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation.

R-7. Disclosure

- (a) Any person appointed or to be appointed as an arbitrator shall disclose to the Arbitration Provider any circumstance likely to give rise to justifiable doubt as to the arbitrator's impartiality or independence, including any bias or any interest in the result of the arbitration or any relationship with the parties or their representatives. Such obligation shall remain in effect throughout the arbitration.
- (b) Upon receipt of such information from the arbitrator or another source, the Arbitration Provider shall communicate the information to the parties and, if it deems it appropriate to do so, to the arbitrator and others.
- (c) In order to encourage disclosure by arbitrators, disclosure of information pursuant to this Section R-6 is not to be construed as an indication that the arbitrator considers that the disclosed circumstances are likely to affect impartiality or independence.
- (d) In no case shall an arbitrator be employed by, affiliated with, or have consultive or business connection with the claimant Contractor or CDOT. An arbitrator shall not have assisted either in the evaluation, preparation, or presentation of the claim case either for the Contractor or the Department or have rendered an opinion on the merits of the claim for either party, and shall not do so during the proceedings of arbitration.

R-8. Disqualification of Arbitrator

- (a) Any arbitrator shall be impartial and independent and shall perform his or her duties with diligence and in good faith, and shall be subject to disqualification for: (i) partiality or lack of independence, (ii) inability or

refusal to perform his or her duties with diligence and in good faith; and/or (iii) any grounds for disqualification provided by applicable law.

- (b) Upon objection of a party to the continued service of an arbitrator, or on its own initiative, the Arbitration Provider shall determine whether the arbitrator should be disqualified under the grounds set out above, and shall inform the parties of its decision, which decision shall be conclusive.

R-9. Communication with Arbitrator

No party and no one acting on behalf of any party shall communicate *ex parte* with an arbitrator or a candidate for arbitrator concerning the arbitration.

R-10. Vacancies

- (a) If for any reason an arbitrator is unable to perform the duties of the office, the Arbitration Provider may, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules.
- (b) In the event of a vacancy in a panel of neutral arbitrators after the hearings have commenced, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.
- (c) In the event of the appointment of a substitute arbitrator, the panel of arbitrators shall determine in its sole discretion whether it is necessary to repeat all or part of any prior hearings.

R-11. Jurisdiction

- (a) The arbitrator shall have the power to rule on his or her own jurisdiction, including any objections with respect to the existence, scope or validity of the arbitration agreement.
- (b) The arbitrator shall have the power to determine the existence or validity of a contract of which an arbitration clause forms a part. Such an arbitration clause shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitrator that the contract is null and void shall not for that reason alone render invalid the arbitration clause.
- (c) A party must object to the jurisdiction of the arbitrator or to the arbitrability of a claim or counterclaim no later than 15 days after the Arbitration Provider confirms its retention to the parties. The arbitrator may rule on such objections as a preliminary matter or as part of the final award.

R-12. Administrative Conference

At the request of any party or upon the Arbitration Provider's own initiative, the Arbitration Provider may conduct an administrative conference, in person or by telephone, with the parties and/or their representatives. The conference may address such issues as arbitrator selection, potential exchange of information, a timetable for hearings and any other administrative matters.

R-13. Preliminary Hearing

- (a) At the request of any party or at the discretion of the arbitrator or the Arbitration Provider, the arbitrator may schedule as soon as practicable a preliminary hearing with the parties and/or their representatives. The preliminary hearing may be conducted by telephone at the arbitrator's discretion.
- (b) During the preliminary hearing, the parties and the arbitrator should discuss the future conduct of the case, including clarification of the issues and claims, a schedule for the hearings and any other preliminary matters.

R-14. Exchange of Information

- (a) At the request of any party or at the discretion of the arbitrator, consistent with the expedited nature of arbitration, the arbitrator may direct: (i) the production of documents and other information; (ii) short depositions, particularly with regard to experts; and/or (iii) the identification of any witnesses to be called.
- (b) At least five business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing.
- (c) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (d) Additional discovery may be ordered by the arbitrator in extraordinary cases when the demands of justice require it.

R-15. Date, Time, and Place of Hearing

- (a) The arbitrator shall set the date, time, and place for each hearing and/or conference. The parties shall respond to requests for hearing dates in a timely manner, be cooperative in scheduling the earliest practicable date, and adhere to the established hearing schedule.
- (b) The parties may mutually agree on the locale where the arbitration is to be held. Absent such agreement, the arbitration shall be held in the City and County of Denver.
- (c) The Arbitration Provider shall send a notice of hearing to the parties at least ten calendar days in advance of the hearing date, unless otherwise agreed by the parties.

R-16. Attendance at Hearings

The arbitrator and the Arbitration Provider shall maintain the privacy of the hearings unless the law provides to the contrary. Any person having a direct interest in the arbitration is entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any person other than a party and its representative.

R-17. Representation

Any party may be represented by counsel or other authorized representative. A party intending to be so represented shall notify the other party and the Arbitration Provider of the name and address of the representative at least three calendar days prior to the date set for the hearing at which that person is first to appear.

R-18. Oaths

Before proceeding with the first hearing, each arbitrator may take an oath of office and, if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person and, if it is required by law or requested by any party, shall do so.

R-19. Stenographic Record

Any party desiring a stenographic record shall make arrangements directly with a stenographer and shall notify the other parties of these arrangements at least three days in advance of the hearing. The requesting party or parties shall pay the cost of the record. If the transcript is agreed by the parties, or determined by the arbitrator to be the official record of the proceeding, it must be provided to the arbitrator and made available to the other parties for inspection, at a date, time, and place determined by the arbitrator.

R-20. Interpreters

Any party wishing an interpreter shall make all arrangements directly with the interpreter and shall assume the costs of the service.

R-21. Postponements

The arbitrator for good cause shown may postpone any hearing upon agreement of the parties, upon request of a party, or upon the arbitrator's own initiative.

R-22. Arbitration in the Absence of a Party or Representative

Unless the law provides to the contrary, the arbitration may proceed in the absence of any party or representative who, after due notice, fails to be present or fails to obtain a postponement. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as the arbitrator may require for the making of an award.

R-23. Conduct of Proceedings

- (a) The Contractor shall present evidence to support its claim. CDOT shall then present evidence supporting its defense. Witnesses for each party shall also submit to questions from the arbitrator and the adverse party. The arbitrator has the discretion to vary this procedure; provided that the parties are treated with equality and that each party has the right to be heard and is given a fair opportunity to present its case.
- (b) The arbitrator, exercising his or her discretion, shall conduct the proceedings with a view to expediting the resolution of the dispute and may direct the order of proof, bifurcate proceedings, and direct the parties to focus their presentations on issues the decision of which could dispose of all or part of the case. The arbitrator shall entertain motions, including motions that dispose of all or part of a claim or that may expedite the proceedings, and may also make preliminary rulings and enter interlocutory orders.
- (c) The parties may agree to waive oral hearings in any case.

R-24. Evidence

- (a) The arbitrators shall consider all written information available in the claim record and all oral presentations in support of that record by the Contractor and CDOT. Conformity to legal rules of evidence shall not be necessary.
- (b) The arbitrators shall not consider any written documents or arguments which have not previously been made a part of the claim record, other than clarification and data supporting previously submitted documentation. The arbitrators shall not consider an increase in the amount of the claim, or any new claims.
- (c) The arbitrator shall determine the admissibility, relevance, and materiality of any evidence offered. The arbitrator may request offers of proof and may reject evidence deemed by the arbitrator to be cumulative, unreliable, unnecessary, or of slight value compared to the time and expense involved. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where: (i) any of the parties is absent, in default, or has waived the right to be present, or (ii) the parties and the arbitrators agree otherwise.
- (d) The arbitrator shall take into account applicable principles of legal privilege, such as those involving the confidentiality of communications between a lawyer and client.
- (e) An arbitrator or other person authorized by law to subpoena witnesses or documents may do so upon the request of any party or independently.

R-25. Evidence by Affidavit and Post-hearing Filing of Documents or Other Evidence

- (a) The arbitrator may receive and consider the evidence of witnesses by declaration or affidavit, but shall give it only such weight as the arbitrator deems it entitled to after consideration of any objection made to its admission.
- (b) If the parties agree or the arbitrator directs that documents or other evidence be submitted to the arbitrator after the hearing, the documents or other evidence, unless otherwise agreed by the parties and the arbitrator, shall be filed with the Arbitration Provider for transmission to the arbitrator. All parties shall be afforded an opportunity to examine and respond to such documents or other evidence.

R-26. Inspection or Investigation

An arbitrator finding it necessary to make an inspection or investigation in connection with the arbitration shall direct the Arbitration Provider to so advise the parties. The arbitrator shall set the date and time and the Arbitration Provider shall notify the parties. Any party who so desires may be present at such an inspection or investigation. In the event that one or all parties are not present at the inspection or investigation, the arbitrator shall make an oral or written report to the parties and afford them an opportunity to comment.

R-27. Interim Measures

- (a) The arbitrator may take whatever interim measures he or she deems necessary, including injunctive relief and measures for the protection or conservation of property and disposition of perishable goods.
- (b) A request for interim measures addressed by a party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate or a waiver of the right to arbitrate.

R-28. Closing of Hearing

When satisfied that the presentation of the parties is complete, the arbitrator shall declare the hearing closed.

If documents or responses are to be filed as provided in Section R-24, or if briefs are to be filed, the hearing shall be declared closed as of the final date set by the arbitrator for the receipt of documents, responses, or briefs. The time limit within which the arbitrator is required to make the award shall commence to run, in the absence of other agreements by the parties and the arbitrator, upon the closing of the hearing.

R-29. Reopening of Hearing

The hearing may be reopened on the arbitrator's initiative, or by direction of the arbitrator upon application of a party, at any time before the award is made. If reopening the hearing would prevent the making of the award within the specific time agreed to by the parties in the arbitration agreement, the matter may not be reopened unless the parties agree to an extension of time. When no specific date is fixed by agreement of the parties, the arbitrator shall have 15 calendar days from the closing of the reopened hearing within which to make an award.

R-30. Waiver of Rules

Any party who proceeds with the arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state an objection in writing shall be deemed to have waived the right to object.

R-31. Extensions of Time

The parties may modify any period of time by mutual agreement. The Arbitration Provider or the arbitrator may for good cause extend any period of time established by these rules, except the time for making the award. The Arbitration Provider shall notify the parties of any extension.

R-32. Serving of Notice

- (a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.
- (b) The Arbitration Provider, the arbitrator and the parties may also use overnight delivery, electronic facsimile transmission (fax), or electronic mail (email) to give the notices required by these rules.

- (c) Unless otherwise instructed by the Arbitration Provider or by the arbitrator, any documents submitted by any party to the Arbitration Provider or to the arbitrator shall simultaneously be provided to the other party or parties to the arbitration.

R-33. Majority Decision

When the panel consists of more than one arbitrator, unless required by law or by the arbitration agreement, a majority of the arbitrators must make all decisions.

R-34. Time of Award

The award shall be made promptly by the arbitrator and, unless otherwise agreed by the parties or specified by law, no later than 30 calendar days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

R-35. Form of Award

After complete review of the facts associated with the claim, the arbitrators shall render a written explanation of their decision. When three arbitrators are used, and only two arbitrators agree then the award shall be signed by the two arbitrators. The arbitrator's decision shall include:

- (a) A summary of the issues and factual evidence presented by the Contractor and the Department concerning the claim;
- (b) Decisions concerning the validity of the claim;
- (c) Decisions concerning the value of the claim as to cost impacts if the claim is determined to be valid;
- (d) The contractual and factual bases supporting the decisions made including an explanation as to why each and every position was accepted or rejected;
- (e) Detailed and supportable calculations which support any decisions.

R-36. Scope of Award

- (a) The arbitrator may grant any remedy or relief that the arbitrator deems just and equitable and within the scope of the agreement of the parties, including, but not limited to, equitable relief and specific performance of a contract.
- (b) In addition to the final award, the arbitrator may make other decisions, including interim, interlocutory, or partial rulings, orders, and awards. (c) The award of the arbitrator may include interest at the statutory rate and from such date as the arbitrator may deem appropriate.

R-37. Delivery of Award to Parties

Parties shall accept as notice and delivery of the award the placing of the award or a true copy thereof in the mail addressed to the parties or their representatives at the last known address, personal or electronic service of the award, or the filing of the award in any other manner that is permitted by law.

R-38. Modification of Award

Within 10 calendar days after the transmittal of an award, the arbitrator on his or her initiative, or any party, upon notice to the other parties, may request that the arbitrator correct any clerical, typographical, technical or computational errors in the award. The arbitrator is not empowered to redetermine the merits of any claim already decided.

If the modification request is made by a party, the other parties shall be given 10 calendar days to respond to the request. The arbitrator shall dispose of the request within 25 calendar days after transmittal by the Arbitration Provider to the arbitrator of the request.

If applicable law provides a different procedural time frame, that procedure shall be followed.

R-39. Appeal of Award

Appeal of the arbitrators' decision concerning the merit of the claim is governed by the Colorado Uniform Arbitration Act, C.R.S. §§ 13-22-202 to -230. Either party may appeal the arbitrator's decision on the value of the claim to the Colorado State District Court in and for the City and County of Denver for trial de novo.

R-40. Release of Documents for Judicial Proceedings

The Arbitration Provider shall, upon the written request of a party, furnish to the party, at its expense, certified copies of any papers in the Arbitration Provider's possession that may be required in judicial proceedings relating to the arbitration.

R-41. Applications to Court and Exclusion of Liability

- (a) No judicial proceeding by a party relating to the subject matter of the arbitration shall be deemed a waiver of the party's right to arbitrate.
- (b) Neither the Arbitration Provider nor any arbitrator in a proceeding under these rules is a necessary or proper party in judicial proceedings relating to the arbitration.
- (c) Parties to these rules shall be deemed to have consented that judgment upon the arbitration award may be entered in any federal or state court having jurisdiction thereof.
- (d) Parties to an arbitration under these rules shall be deemed to have consented that neither the Arbitration Provider nor any arbitrator shall be liable to any party in any action for damages or injunctive relief for any act or omission in connection with any arbitration under these rules.

R-42. Administrative Fees

The Arbitration Provider shall prescribe filing and other administrative fees and service charges to compensate it for the cost of providing administrative services. The fees in effect when the fee or charge is incurred shall be applicable. Such fees and charges shall be borne equally by the parties.

The Arbitration Provider may, in the event of extreme hardship on the part of any party, defer or reduce the administrative fees.

R-43. Expenses

The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the arbitration, including required travel and other expenses of the arbitrator, Arbitration Provider representatives, and any witness and the cost of any proof produced at the direct request of the arbitrator, shall be borne equally by the parties.

R-44. Neutral Arbitrator's Compensation

Arbitrators shall be compensated a rate consistent with the arbitrator's stated rate of compensation.

If there is disagreement concerning the terms of compensation, an appropriate rate shall be established with the arbitrator by the Arbitration Provider and confirmed to the parties.

Such compensation shall be borne equally by the parties.

R-45. Deposits

The Arbitration Provider may require the parties to deposit in advance of any hearings such sums of money as it deems necessary to cover the expense of the arbitration, including the arbitrator's fee, if any, and shall render an accounting to the parties and return any unexpended balance at the conclusion of the case.

R-46. Interpretation and Application of Rules

The arbitrator shall interpret and apply these rules insofar as they relate to the arbitrator's powers and duties by a majority vote. If that is not possible, either an arbitrator or a party may refer the question to the Arbitration Provider for final decision. All other rules shall be interpreted and applied by the Arbitration Provider.

R-45. Suspension for Nonpayment

If arbitrator compensation or administrative charges have not been paid in full, the Arbitration Provider may so inform the parties in order that the parties may advance the required payment. If such payments are not made, the arbitrator may order the suspension or termination of the proceedings. If no arbitrator has yet been appointed, the Arbitration Provider may suspend the proceedings.

FAST TRACK PROCEDURES

F-1. Limitations on Extensions

In the absence of extraordinary circumstances, the Arbitration Provider or the arbitrator may grant a party no more than one seven-day extension of the time in which to respond to the demand for arbitration or counterclaim as provided in Section R-3.

F-2. Changes of Claim

The arbitrator will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation

F-3. Serving of Notice

In addition to notice provided above, the parties shall also accept notice by telephone. Telephonic notices by the Arbitration Provider shall subsequently be confirmed in writing to the parties. Should there be a failure to confirm in writing any such oral notice, the proceeding shall nevertheless be valid if notice has, in fact, been given by telephone.

F-4. Appointment and Qualification of Arbitrator

Immediately after the retention of the Arbitration Provider, the Arbitration Provider will simultaneously submit to each party a listing and biographical information from its panel of arbitrators knowledgeable in construction who are available for service in Fast Track cases. The parties are encouraged to agree to an arbitrator from this list, and to advise the Arbitration Provider of their agreement, or any factual objections to any of the listed arbitrators, within 7 calendar days of the transmission of the list. The Arbitration Provider will appoint the agreed-upon arbitrator, or in the event the parties cannot agree on an arbitrator, will designate the arbitrator from among those names not stricken for factual objections.

The parties will be given notice by the Arbitration Provider of the appointment of the arbitrator, who shall be subject to disqualification for the reasons specified above. Within the time period established by the Arbitration Provider, the parties shall notify the Arbitration Provider of any objection to the arbitrator appointed. Any objection by a party to the arbitrator shall be for cause and shall be confirmed in writing to the Arbitration Provider with a copy to the other party or parties.

F-5. Preliminary Telephone Conference

Unless otherwise agreed by the parties and the arbitrator, as promptly as practicable after the appointment of the arbitrator, a preliminary telephone conference shall be held among the parties or their attorneys or representatives, and the arbitrator.

F-6. Exchange of Exhibits

At least 2 business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing. The arbitrator is authorized to resolve any disputes concerning the exchange of exhibits.

F-7. Discovery

There shall be no discovery, except as provided in Section F-4 or as ordered by the arbitrator in extraordinary cases when the demands of justice require it.

F-8. Date, Time, and Place of Hearing

The arbitrator shall set the date and time, and place of the hearing, to be scheduled to take place within 30 calendar days of confirmation of the arbitrator's appointment. The Arbitration Provider will notify the parties in advance of the hearing date. All hearings shall be held within the City and County of Denver.

F-9. The Hearing

- (a) Generally, the hearing shall not exceed 1 day. Each party shall have equal opportunity to submit its proofs and complete its case. The arbitrator shall determine the order of the hearing, and may require further submission of documents within two business days after the hearing. For good cause shown, the arbitrator may schedule 1 additional hearing day within 7 business days after the initial day of hearing.
- (b) Generally, there will be no stenographic record. Any party desiring a stenographic record may arrange for one pursuant to the provisions above.

F-10. Time of Award

Unless otherwise agreed by the parties, the award shall be rendered not later than 14 calendar days from the date of the closing of the hearing or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

F-11. Time Standards

The arbitration shall be completed by settlement or award within 60 calendar days of confirmation of the arbitrator's appointment, unless all parties and the arbitrator agree otherwise or the arbitrator extends this time in extraordinary cases when the demands of justice require it.

F-12. Arbitrator's Compensation

Arbitrators will receive compensation at a rate to be suggested by the Arbitration Provider regional office.

PROCEDURES FOR LARGE, COMPLEX CONSTRUCTION DISPUTES

L-1. Large, Complex Construction Disputes

The procedures for large, complex construction disputes shall apply to any claim with a value exceeding \$500,000 or as agreed to by the parties.

L-2. Administrative Conference

Prior to the dissemination of a list of potential arbitrators, the Arbitration Provider shall, unless the parties agree otherwise, conduct an administrative conference with the parties and/or their attorneys or other representatives by conference call. The conference call will take place within 14 days after the retention of the Arbitration Provider. In the event the parties are unable to agree on a mutually acceptable time for the conference, the Arbitration Provider may contact the parties individually to discuss the issues contemplated herein. Such administrative conference shall be conducted for the following purposes and for such additional purposes as the parties or the Arbitration Provider may deem appropriate:

- (a) To obtain additional information about the nature and magnitude of the dispute and the anticipated length of hearing and scheduling;
- (b) To discuss the views of the parties about the technical and other qualifications of the arbitrators;
- (c) To obtain conflicts statements from the parties; and
- (d) To consider, with the parties, whether mediation or other non-adjudicative methods of dispute resolution might be appropriate.

L-3. Arbitrators

- (a) Large, Complex Construction Cases shall be heard and determined by three arbitrators.
- (b) The Arbitration Provider shall appoint arbitrator(s) in the manner provided in the Regular Construction Industry Arbitration Rules.

L-4. Preliminary Hearing

As promptly as practicable after the selection of the arbitrator(s), a preliminary hearing shall be held among the parties and/or their attorneys or other representatives and the arbitrator(s). Unless the parties agree otherwise, the preliminary hearing will be conducted by telephone conference call rather than in person.

At the preliminary hearing the matters to be considered shall include, without limitation:

- (a) Service of a detailed statement of claims, damages and defenses, a statement of the issues asserted by each party and positions with respect thereto, and any legal authorities the parties may wish to bring to the attention of the arbitrator(s);
- (b) Stipulations to uncontested facts;
- (c) The extent to which discovery shall be conducted;
- (d) Exchange and premarking of those documents which each party believes may be offered at the hearing;
- (e) The identification and availability of witnesses, including experts, and such matters with respect to witnesses including their biographies and expected testimony as may be appropriate;
- (f) Whether, and the extent to which, any sworn statements and/or depositions may be introduced;
- (g) The extent to which hearings will proceed on consecutive days;
- (h) Whether a stenographic or other official record of the proceedings shall be maintained;
- (i) The possibility of utilizing mediation or other non-adjudicative methods of dispute resolution; and
- (j) The procedure for the issuance of subpoenas.

By agreement of the parties and/or order of the arbitrator(s), the pre-hearing activities and the hearing procedures that will govern the arbitration will be memorialized in a Scheduling and Procedure Order.

L-5. Management of Proceedings

- (a) Arbitrator(s) shall take such steps as they may deem necessary or desirable to avoid delay and to achieve a just, speedy and cost-effective resolution of Large, Complex Construction Cases.

- (b) Parties shall cooperate in the exchange of documents, exhibits and information within such party's control if the arbitrator(s) consider such production to be consistent with the goal of achieving a just, speedy and cost effective resolution of a Large, Complex Construction Case.
- (c) The parties may conduct such discovery as may be agreed to by all the parties provided, however, that the arbitrator(s) may place such limitations on the conduct of such discovery as the arbitrator(s) shall deem appropriate. If the parties cannot agree on production of document and other information, the arbitrator(s), consistent with the expedited nature of arbitration, may establish the extent of the discovery.
- (d) At the discretion of the arbitrator(s), upon good cause shown and consistent with the expedited nature of arbitration, the arbitrator(s) may order depositions of, or the propounding of interrogatories to such persons who may possess information determined by the arbitrator(s) to be necessary to a determination of the matter.
- (e) The parties shall exchange copies of all exhibits they intend to submit at the hearing 10 business days prior to the hearing unless the arbitrator(s) determine otherwise.
- (f) The exchange of information pursuant to this rule, as agreed by the parties and/or directed by the arbitrator(s), shall be included within the Scheduling and Procedure Order.
- (g) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (h) Generally hearings will be scheduled on consecutive days or in blocks of consecutive days in order to maximize efficiency and minimize costs.

January 17, 2008

REVISION OF SECTION 105
DISPUTES AND CLAIMS FOR
CONTRACT ADJUSTMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects. If a standing DRB is required for the project, add the following General Note to the Plans: "There shall be a Standing Disputes Review Board for this Project." A standing DRB should be called for on the following types of projects:

7. Large projects (greater than \$15 million)
8. Projects with complex construction
9. Projects with large complex structures
10. Projects with multi-phase construction
11. Projects with major impacts to traffic
12. Projects with other complicating factors that could easily lead to disputes

On projects that require a standing DRB, establish a planned force account item to cover the ongoing costs of the DRB.

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 105.21 and replace it with the following subsections 105.21, 105.22, and 105.23.

105.21 Dispute Resolution. Subsections 105.21, 105.22, and 105.23 detail the process through which the parties (CDOT and the Contractor) agree to resolve any issue that may result in a dispute. The intent of the process is to resolve issues early, efficiently, and as close to the project level as possible. Figure 105-1 at the end of subsection 105.23 outlines the process. Specified time frames may be extended by mutual agreement of the Engineer and the Contractor.

A dispute is a disagreement concerning contract price, time, interpretation of the Contract, or all three between the parties at the project level regarding or relating to the Contract. Disputes include, but are not limited to, any disagreement resulting from a delay, a change order, another written order, or an oral order from the Project Engineer, including any direction, instruction, interpretation, or determination by the Project Engineer, interpretations of the Contract provisions, plans, or specifications or the existence of alleged differing site conditions.

The term "merit" refers to the right of a party to recover on a claim or dispute, irrespective of quantum, based on the substance, elements, and grounds of that claim or dispute. The term "quantum" refers to the quantity or amount of compensation or time deserved when a claim or dispute is found to have merit.

Disputes from subcontractors, materials suppliers, or any other entity not party to the Contract shall be submitted through the Contractor. Review of a pass-through dispute does not create privity of Contract between CDOT and the subcontractor.

When an issue arises on the project that can not be resolved between the parties, either party may consider it a dispute and initiate the dispute resolution process as described in subsection 105.21(b).

If CDOT does not respond within the specified timelines, the Contractor may advance the dispute to the next level.

When the Project Engineer is a Consultant Project Engineer, actions, decisions, and determinations specified herein as made by the Project Engineer shall be made by the Resident Engineer.

A claim will not be accepted by CDOT until all remedies for dispute resolution provided for in subsections 105.21 and 105.22 have been exhausted. If CDOT contends that the Contractor has failed to follow the provisions of subsection 105.21 or 105.22, CDOT will notify the Contractor in writing and provide the Contractor with ten days in which to cure the alleged failure. After the CDOT notice, unless the Engineer grants an exception in writing, failure to comply with the requirements set forth in subsections 105.21, 105.22 and 105.23, shall bar the Contractor from any further administrative, equitable, or legal remedy.

(a) *Document Retention.* The Contractor shall keep full and complete records of the costs and additional time incurred for each dispute for a period of at least three years after the date of final payment or until dispute is resolved, whichever is more. The Contractor, subcontractors, and lower tier subcontractors shall provide adequate facilities, acceptable to the Engineer, for an audit during normal business hours. The Contractor shall permit the Engineer or Department auditor to examine and copy those records and all other records required by the Engineer to determine the facts or contentions involved in the dispute. CDOT and CDOT's attorneys and consultants will affirmatively act to protect the records and information from disclosure beyond those persons having a need to know the information for the purpose of making a decision regarding the claim, or for law enforcement purposes. The Contractor shall identify and segregate any documents or information that the Contractor considers particularly sensitive, such as confidential or proprietary information.

- (b) *Initial Dispute Resolution Process.* To initiate the dispute resolution process the Contractor shall provide a written notice of dispute to the Project Engineer upon the failure of the Parties to resolve the issue through negotiation. Disputes will not be considered unless the Contractor has first complied with specified issue resolution processes such as those specified in subsections 104.02, 106.05, 108.07(a), and 108.07(d).

The Contractor shall supplement the written notice of dispute within 15 days with a written Request for Equitable Adjustment (REA) providing the following:

- (18) The date of the dispute
- (19) The nature of the circumstances which caused the dispute
- (20) The Contract provisions and any other basis supporting the Contractor's position
- (21) The estimated dollar cost, if any, of the dispute with supporting documentation
- (22) An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption.

The Contractor shall submit as much of the above information as is reasonably available with the REA and then supplement the REA as additional information becomes available.

- (c) *Project Engineer Review.* Within 15 days after receipt of the REA, the Project Engineer will meet with the Contractor to discuss the merits of the dispute. Within seven days after this meeting, the Project Engineer will issue a written decision on the merits of the dispute.

The Project Engineer will either deny the merits of the dispute or notify the Contractor that the dispute has merit. This determination will include a summary of the relevant facts, Contract provisions supporting the determination, and an evaluation of all scheduling issues that may be involved.

If the dispute is determined to have merit, the Contractor and the Project Engineer will determine the adjustment in payment, schedule, or both within 30 days. When a satisfactory adjustment is determined, it shall be implemented in accordance with subsections 106.05, 108.07, 109.04, 109.05 or 109.10 and the dispute is resolved.

If the Contractor accepts the Project Engineer's denial of the merits of the dispute, the dispute is resolved and no further action will be taken. If the Contractor does not respond in seven days, it will be assumed he has accepted the denial. If the Contractor rejects the Project Engineer's denial of the merits of the dispute or a satisfactory adjustment of payment or schedule can not be agreed upon within 30 days, the Contractor may further pursue resolution of the dispute by providing written notice to the Resident Engineer within seven days, according to subsection 105.21(d).

- (d) *Resident Engineer Review.* Within seven days after receipt of the Contractor's written notice to the Resident Engineer of unsatisfactory resolution of the dispute, the Project Engineer and Resident Engineer will meet with the Contractor to discuss the dispute. Meetings shall continue weekly for a period of up to 30 days and shall include a Contractor's representative with decision authority above the project level.

If these meetings result in resolution of the dispute, the resolution will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If these meetings do not result in a resolution or the participants mutually agree that they have reached an impasse, the dispute shall be presented to the Dispute Review Board in accordance with subsection 105.22.

105.22 Dispute Review Board. A Dispute Review Board (DRB) is an independent third party that will provide specialized expertise in technical areas and administration of construction contracts. The DRB will assist in and facilitate the timely and equitable resolution of disputes between CDOT and the Contractor in an effort to avoid animosity and construction delays, and to resolve disputes as close to the project level as possible. The DRB shall be established and operate as provided herein and shall serve as an independent and impartial board.

There are two types of DRBs: the "On Demand DRB" and the "Standing DRB". The DRB shall be an "On Demand DRB" unless a "Standing DRB" is specified in the Contract. An On Demand DRB shall be established only when the Project Engineer initiates a DRB review in accordance with subsection 105.22(a). A Standing DRB, when specified in the Contract, shall be established at the beginning of the project.

- (a) *Initiation of Dispute Review Board Review.* When a dispute has not been resolved in accordance with subsection 105.21, the Project Engineer will initiate the DRB review process within 5 days after the period described in subsection 105.21(d).
- (b) *Formation of Dispute Review Board.* DRBs will be established in accordance with the following procedures:
1. CDOT, in conjunction with the Colorado Contractors Association, will maintain a non-exclusive statewide list of suggested DRB candidates experienced in construction processes and the interpretation of contract documents and the resolution of construction disputes. The Board members shall be experienced in highway and transportation projects. When a DRB is formed, the parties shall execute the agreement set forth in subsection 105.22(k). Either party may add candidates to the list at any time.
 2. If the dispute has a value of \$250,000 or less, the On Demand DRB shall have one member. The Contractor and CDOT shall select the DRB member and execute the agreement within 30 days of initiating the DRB process. If the parties do not agree on the DRB member, each shall select five candidates. Each party shall numerically rank their list using a scale of one to five with one being their first choice and five being their last choice. If common candidates are listed, but the parties cannot agree, that common candidate with the lowest combined numerical ranking shall be selected. If there is no common candidate, the lists shall be combined and each party shall eliminate three candidates from the list. Each party shall then numerically rank the remaining candidates, with No. 1 being the first choice. The candidate with the lowest combined numerical ranking shall be the DRB member.
 3. If the dispute has a value over \$250,000, the On Demand DRB shall have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson and execute the agreement within 45 days of initiating the DRB process.
 4. The Standing DRB shall always have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson, unless otherwise agreed to by the parties. The Contractor and CDOT shall submit their proposed Standing DRB members at the Preconstruction Conference.
 5. DRB members shall not have been involved in the administration of the project under consideration. DRB candidates shall disclose to the parties the following relationships:
 - (5) Prior employment with either party
 - (6) Prior or current financial interests or ties to either party
 - (7) Prior or current professional relationships with either party
 - (8) Anything else that might bring into question the impartiality or independence of the DRB memberIf either party objects to the selection of a potential DRB member based on the disclosures of the potential member, that potential member shall not be placed on the Board.
 6. There shall be no ex parte communications with the DRB at any time.
 7. The service of a Board member may be terminated only by written agreement of both parties.

If a Board member resigns, is unable to serve, or is terminated, a new Board member shall be selected within four weeks in the same manner as the Board member who was removed was originally selected.

(c) *Additional Responsibilities of the Standing Disputes Review Board*

1. General. Within 120 days after the establishment of the Board, the Board shall meet at a mutually agreeable location to:
 - (9) Obtain copies of the contract documents and Contractor's schedules for each of the Board members.
 - (10) Agree on the location of future meetings, which shall be reasonably close to the project site.
 - (11) Establish an address and telephone number for each Board member for the purposes of Board business.
2. Regular meetings. Regular meetings of the Board shall be held approximately every 120 to 180 days throughout the life of the Contract, except that this schedule may be modified to suit developments on the job as the work progresses. Regular meetings shall be attended by representatives of the Contractor and the Department.

3. The Board shall establish an agenda for each meeting which will cover all items that the Board considers necessary to keep it abreast of the project such as construction status, schedule, potential problems and solutions, status of past claims and disputes, and potential claims and disputes. Copies of each agenda shall be submitted to the Contractor and the Department at least seven days before the meeting date. Oral or written presentations or both shall be made by the Contractor and the Department as necessary to give the Board all the data the Board requires to perform its functions. The Board will prepare minutes of each meeting, circulate them to all participants for comments and approval, and issue revised minutes before the next meeting. As a part of each regular meeting, a field inspection trip of all active segments of the work at the project site may be made by the Board, the Contractor, and the Department.

(d) *Arranging a Dispute Review Board Hearing.* When the Project Engineer initiates the DRB review process, the Project Engineer will:

1. Arrange a hearing between CDOT, the Contractor, and the DRB (date, time, and location) and notify the Contractor at least 15 days before the hearing. Unless otherwise agreed to by both parties the DRB hearing will be held within 30 days after the DRB agreement is signed.
2. Ensure DRB members have copies of all documents previously prepared by the Contractor and CDOT pertaining to the dispute, the DRB request, the contract documents, and the special provisions at least two weeks before the hearing.

(e) *Pre-Hearing Submittal:* At least ten days prior to the hearing, CDOT and the Contractor shall each prepare and circulate to the DRB and the other party a pre-hearing position paper containing the following:

1. A joint statement of the dispute, and the scope of the desired decision. The joint statement shall summarize in a few sentences the nature of the dispute. If the parties are unable to agree on the wording of the joint statement, each party's position paper shall contain both statements, and identify the party authoring each statement.
2. The basis and justification for the party's position, with reference to contract language and other supporting documents for each element of the dispute. To minimize duplication and repetitiveness, the parties may identify a common set of documents that will be referred to by both parties and submit them in a separate package.
3. When the scope of the hearing includes quantum, the requesting party's position paper shall include full cost details, calculated in accordance with methods set forth in subsection 105.23(b).
4. A list of proposed attendees at the hearing. In the event of any disagreement, the DRB shall make the final determination as to who attends the hearing.
5. A list of any intended experts including their qualifications and a summary of what their presentation will include.

The number of copies, distribution requirements, and time for submittal shall be established by the DRB and communicated to the parties by the Chairperson.

(f) *Dispute Review Board Hearing.* The DRB shall preside over a hearing. The chairperson shall control the hearing and conduct it as follows:

1. An employee of CDOT presents a brief description of the project and the status of construction on the project.
2. The party that requested the DRB presents the dispute in detail as supported by previously submitted information and documentation.
3. The other party presents its position in detail.
4. Employees of each party are responsible for leading presentations at the DRB hearing.

5. Attorneys shall not participate in the hearing unless the DRB specifically addresses an issue to them or unless agreed to by both parties. Attorneys representing the parties are permitted to attend the hearing; provided their presence has been noted in the pre-hearing submittal.
 6. Either party may use experts. A party intending to offer an outside expert's analysis at the hearing shall disclose such intention in the pre-hearing position-paper. The expert's name and a general statement of the area of the dispute that will be covered by his presentation shall be included in the disclosure. The other party may present an outside expert to address or respond to those issues that may be raised by the disclosing party's outside expert.
 7. If both parties approve, the DRB may retain an outside expert. The DRB chairperson shall include the cost of the outside expert in the DRB's regular invoice. CDOT and the Contractor shall equally bear the cost of the services of the outside expert employed by the DRB.
 8. Upon completion of their presentations and rebuttals, both parties and the DRB will be provided the opportunity to exchange questions and answers. All questions shall be directed to the chairperson first. Attendees may respond only when board members request a response.
 9. The DRB shall hear only those disputes identified in the written request for the DRB and the information contained in the pre-hearing submittals. The board shall not hear or address other disputes. If either party attempts to discuss a dispute other than those to be heard by the DRB or attempts to submit new information, the chairperson shall inform such party that the board shall not hear the issue and shall not accept any additional information.
 10. If either party fails to timely deliver a position paper, the DRB may reschedule the hearing one time. On the final date and time established for the hearing, the DRB shall proceed with the hearing using the information that has been submitted.
 11. If a party fails to appear at the hearing, the DRB shall proceed as if all parties were in attendance.
- (g) *Dispute Review Board Recommendation.* The DRB shall issue a Recommendation in accordance with the following procedures:
1. The DRB shall not make a Recommendation on the dispute at the meeting. Prior to the closure of the hearing, the DRB members and the Contractor and CDOT together will discuss the time needed for analysis and review of the dispute and the issuance of the DRB's Recommendation. The maximum time shall be 30 days unless otherwise agreed to by both parties.
 2. After the meeting has been closed, the DRB shall prepare a written Recommendation signed by each member of the DRB. In the case of a three member DRB, where one member dissents, that member shall prepare a written dissent and sign it.
 3. The chairperson shall transmit the signed Recommendation and any supporting documents to both parties.
- (h) *Clarification and Reconsideration of Recommendation.* Either party may request clarification or reconsideration of a decision within ten days following receipt of the Recommendation. Within ten days after receiving the request, the DRB shall provide written clarification or reconsideration to both parties unless otherwise agreed to by both parties.

Requests for clarification or reconsideration shall be submitted in writing simultaneously to the DRB and to the other party.

The Board shall not accept requests for reconsideration that amount to a renewal of prior argument or additional argument based on facts available at the time of the hearing.

Only one request for clarification or reconsideration per dispute from each party will be allowed.

- (i) *Acceptance or Rejection of Recommendation.* CDOT and the Contractor shall submit their written acceptance or rejection of the Recommendation, in whole or in part, concurrently to the other party and to the DRB within 14 days after receipt of the Recommendation or following receipt of responses to requests for clarification or reconsideration.

If the parties accept the Recommendation or a discreet part thereof, it will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If either party rejects the Recommendation in whole or in part, it shall give written explanation to the other party within 14 days after receiving the Recommendation. When the Recommendation is rejected in whole or in part by either party, the other party may either abandon the dispute or pursue a formal claim in accordance with subsection 105.23.

- (j) *Admissibility of Recommendation.* Recommendations of a DRB issued in accordance with subsection 105.22 are admissible in subsequent proceedings but shall be prefaced with the following paragraph:

This Recommendation may be taken under consideration with the understanding that:

1. The DRB Recommendation was a proceeding based on presentations by the parties.
2. No fact or expert witnesses presented sworn testimony or were subject to cross-examination.
3. The parties to the DRB were not provided with the right to any discovery, such as production of documents or depositions.
4. There is no record of the DRB hearing other than the Recommendation.

- (k) *Cost and Payments.*

1. General Administrative Costs. The Contractor and the Department shall equally share the entire cost of the following to support the Board's operation:

- (13) Copies of Contract and other relevant documentation
- (14) Meeting space and facilities
- (15) Secretarial Services
- (16) Telephone
- (17) Mail
- (18) Reproduction
- (19) Filing

2. The Department and the Contractor shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,200 per day if time spent on-site per meeting is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$800 per day if time spent on-site per meeting is less than or equal to four hours. The time spent traveling to and from each meeting shall be reimbursed at \$50 per hour if the travel distance is more than 50 miles. The agreed daily and travel time rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel of more than 50 miles and incidentals for each day, or portion thereof that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time, (such as time spent evaluating and preparing recommendations on specific issues presented to the DRB), has been specifically agreed to in advance by the Department and Contractor. Time away from the project that has been specifically agreed to in advance by the parties will be compensated at an agreed rate of \$125 per hour. The agreed amount of \$125 per hour shall include all incidentals. Members serving on more than one DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project.
3. Payments to Board Members and General Administrative Costs. Each Board member shall submit an invoice to the Contractor for fees and applicable expenses incurred each month following a month in which the Board members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department. The Contractor shall submit to the Department copies of all invoices. No markups by the Contractor will be allowed on any DRB costs. The Department will split the cost by authorizing 50% payment on the next progress payment. The Contractor shall make all payments in full to Board members within seven calendar days after receiving payment from the Department for this work.

(l) *Dispute Review Board Three Party Agreement.*

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT
COLORADO PROJECT NO.

THIS THREE PARTY AGREEMENT, made this ____day of _____, _____,by and between:
the Colorado Department of Transportation, hereinafter called the "Department"; and

_____,
hereinafter called the "Contractor"; and

_____,
_____,
and

_____,
hereinafter called the "Dispute Review Board" or "Board".

WHEREAS, the Department is now engaged in the construction of the
[Project Name]

and

WHEREAS, the Contract provides for the establishment of a Board in accordance with subsections
105.21 and 105.22 of the specifications.

NOW, THEREFORE, it is hereby agreed:

ARTICLE I
DESCRIPTION OF WORK AND SERVICES

The Department and the Contractor shall form a Board in accordance with this agreement and the
provisions of subsection 105.22.

ARTICLE II
COMMITMENT ON PART OF THE PARTIES HERETO

The parties hereto shall faithfully fulfill the requirements of subsection 105.22 and the requirements of
this agreement.

ARTICLE III
COMPENSATION

The parties shall share equally in the cost of the Board, including general administrative costs (meeting
space and facilities, secretarial services, telephone, mail, reproduction, filing) and the member's
individual fees.. Reimbursement of the Contractor's share of the Board expenses for any reason is
prohibited.

The Contractor shall make all payments in full to Board members. The Contractor will submit to the
Department an itemized statement for all such payments, and the Department will split the cost by
including 50 percent payment on the next progress payment. The Contractor and the Department will
agree to accept invoiced costs prior to payment by the Contractor.

DISPUTE REVIEW BOARD

Board members shall keep all fee records pertaining to this agreement available for inspection by representatives of the Department and the Contractor for a period of three years after the termination of the Board members' services.

Payment to each Board member shall be at the fee rates established in subsection 105.22 and agreed to by each Board member, the Contractor, and the Department. In addition, reimbursement will be made for applicable expenses.

Each Board member shall submit an invoice to the Contractor for fees incurred each month following a month in which the members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department.

Payments shall be made to each Board member within 60 days after the Contractor and Department have received all the applicable billing data and verified the data submitted by that member. The Contractor shall make payment to the Board member within seven calendar days of receipt of payment from the Department.

ARTICLE IV ASSIGNMENT

Board members shall not assign any of the work to be performed by them under this agreement. Board members shall disclose any conflicts of interest including but not limited to any dealings with the either party in the previous five years other than serving as a Board member under other contracts.

ARTICLE V COMMENCEMENT AND TERMINATION OF SERVICES

The commencement of the services of the Board shall be in accordance with subsection 105.22 of the specifications and shall continue until all assigned disputes under the Contract which may require the Board's services have been heard and a Recommendation has been issued by the Board as specified in subsection 105.22. If a Board member is unable to fulfill his responsibilities for reasons specified in subsection 105.22(b)7, he shall be replaced as provided therein, and the Board shall fulfill its responsibilities as though there had been no change.

ARTICLE VI LEGAL RELATIONS

The parties hereto mutually agree that each Board member in performance of his duties on the Board is acting as an independent contractor and not as an employee of either the Department or the Contractor. Board members will guard their independence and avoid any communication about the substance of the dispute without both parties being present.

The Board members are absolved of any personal liability arising from the Recommendations of the Board.

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT PAGE 3
COLORADO PROJECT NO.

IN WITNESS HEREOF, the parties hereto have caused this agreement to be executed the day and year first written above.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

CONTRACTOR: _____.

BY: _____.

TITLE:

COLORADO DEPARTMENT OF TRANSPORTATION

BY: _____.

TITLE: CHIEF ENGINEER

105.23 Claims for Unresolved Disputes. The Contractor may file a claim only if the disputes resolution process described in subsections 105.21 and 105.22 has been exhausted without resolution of the dispute. Other methods of nonbinding dispute resolution, exclusive of arbitration and litigation, can be used if agreed to by both parties.

This subsection applies to any unresolved dispute or set of disputes between CDOT and the Contractor with an aggregate value of more than \$15,000. Unresolved disputes with an aggregate value of more than \$15,000 from subcontractors, materials suppliers or any other entity not a party to the Contract shall be submitted through the Contractor in accordance with this subsection as a pass-through claim. Review of a pass-through claim does not create privity of Contract between CDOT and any other entity.

Subsections 105.21, 105.22 and 105.23 provide both contractual alternative dispute resolution processes and constitute remedy-granting provisions pursuant to Colorado Revised Statutes which must be exhausted in their entirety.

Merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

The venue for all unresolved disputes with an aggregate value \$15,000 or less shall be the County Court for the City and County of Denver.

Non-binding Forms of alternative dispute resolution such as Mediation are available upon mutual agreement of the parties for all claims submitted in accordance with this subsection.

The cost of the non-binding ADR process shall be shared equally by both parties with each party bearing its own preparation costs. The type of nonbinding ADR process shall be agreed upon by the parties and shall be conducted within the State of Colorado at a mutually acceptable location. Participation in a nonbinding ADR process does not in any way waive the requirement that merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

- (a) *Notice of Intent to File a Claim.* Within 30 days after rejection of the Dispute Resolution Board's Recommendation issued in accordance with subsection 105.22, the Contractor shall provide the Region Transportation Director with a written notice of intent to file a claim. The Contractor shall also send a copy of this notice to the Resident Engineer. For the purpose of this subsection Region Transportation Director shall mean the Region Transportation Director or the Region Transportation Director's designated representative. CDOT will acknowledge in writing receipt of Notice of Intent within 7 days.
- (b) *Claim Package Submission.* Within 60 days after submitting the notice of intent to file a claim, the Contractor shall submit five copies of a complete claim package representing the final position the Contractor wishes to have considered. All claims shall be in writing and in sufficient detail to enable the RTD to ascertain the basis and amount of claim. The claim package shall include all documents supporting the claim, regardless of whether such documents were provided previously to CDOT.

If requested by the Contractor the 60 day period may be extended by the RTD in writing prior to final acceptance. As a minimum, the following information shall accompany each claim.

1. A claim certification containing the following language, as appropriate:

(10) For a direct claim by the Contractor:

CONTRACTOR'S CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
,
(title) _____, of _____ (company) _____, hereby certifies that the
claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for work
on this contract is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of _____

NOTARY PUBLIC

My Commission Expires: _____

B. For a pass-through claim:

PASS-THROUGH CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
(title) _____, of _____ (company) _____, hereby certifies that
the claim of
\$ _____ for extra compensation and _____ Days additional time, made herein for
work on this Project is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

Dated _____/s/ _____

The Contractor certifies that the claim being passed through to CDOT is passed through in good faith and is
accurate and complete to the best of my knowledge and belief.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

2. A detailed factual statement of the claim for additional compensation, time, or both, providing all necessary dates, locations, and items of work affected by the claim. The Contractor's detailed factual statement shall expressly describe the basis of the claim and factual evidence supporting the claim. This requirement is not satisfied by simply incorporating into the claim package other documents that describe the basis of the claim and supporting factual evidence.
3. The date on which facts were discovered which gave rise to the claim.
4. The name, title, and activity of all known CDOT, Consultant, and other individuals who may be knowledgeable about facts giving rise to such claim.
5. The name, title, and activity of all known Contractor, subcontractor, supplier and other individuals who may be knowledgeable about facts giving rise to such claim.
6. The specific provisions of the Contract, which support the claim and a statement of the reasons why such provisions support the claim.

7. If the claim relates to a decision of the Project Engineer, which the Contract leaves to the Project Engineer's discretion, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Project Engineer.
8. The identification of any documents and the substance of all oral communications that support the claim.
9. Copies of all known documents that support the claim.
10. The Dispute Review Board Recommendation.
11. If an extension of contract time is sought, the documents required by subsection 108.07(d).
12. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - A. These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
 - (1) Actual wages and benefits, including FICA, paid for additional labor
 - (2) Costs for additional bond, insurance and tax
 - (3) Increased costs for materials
 - (4) Equipment costs calculated in accordance with subsection 109.04(c) for Contractor owned equipment and based on certified invoice costs for rented equipment
 - (5) Costs of extended job site overhead
 - (6) Salaried employees assigned to the project
 - (7) Claims from subcontractors and suppliers at any level (the same level of detail as specified herein is required for all such claims)
 - (8) An additional 16 percent will be added to the total of items (1) through (7) as compensation for items for which no specific allowance is provided, including profit and home office overhead.
 - (9) Interest shall be paid in accordance with CRS 5-12-102 beginning from the date of the Notice of Intent to File Claim
 - B. In adjustment for the costs as allowed above, the Department will have no liability for the following items of damages or expense:
 - (1) Profit in excess of that provided in 12.A.(8) above
 - (2) Loss of Profit
 - (3) Additional cost of labor inefficiencies in excess of that provided in A. above
 - (4) Home office overhead in excess of that provided in A. above
 - (5) Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities, and insolvency
 - (6) Indirect costs or expenses of any nature in excess of that provided in A. above
 - (7) Attorneys fees, claim preparation fees, and expert fees
- (c) *Audit.* An audit may be performed by the Department for any claim, and is mandatory for all claims with amounts greater than \$250,000. All audits will be complete within 60 days of receipt of the complete claim package, provided the Contractor allows the auditors reasonable and timely access to the Contractor's books and records. For all claims with amounts greater than \$250,000 the Contractor shall submit a copy of certified claim package directly to the CDOT Audit Unit at the following address:

Division of Audit
4201 E. Arkansas Ave
Denver, Co. 80222

- (d) *Region Transportation Director Decision.* When the Contractor properly files a claim, the RTD will review the claim and render a written decision to the Contractor to either affirm or deny the claim, in whole or in part, in accordance with the following procedure.

The RTD may consolidate all related claims on a project and issue one decision, provided that consolidation does not extend the time period within which the RTD is to render a decision. Consolidation of unrelated claims will not be made.

The RTD will render a written decision to the Contractor within 60 days after the receipt of the claim package or receipt of the audit whichever is later. In rendering the decision, the RTD: (1) will review the information in the Contractor's claim; (2) will conduct a hearing if requested by either party; and (3) may consider any other information available in rendering a decision.

The RTD will assemble and maintain a claim record comprised of all information physically submitted by the Contractor in support of the claim and all other discoverable information considered by the RTD in reaching a decision. Once the RTD assembles the claim record, the submission and consideration of additional information, other than for clarification and data supporting previously submitted documentation, at any subsequent level of review by anyone, will not be permitted.

The RTD will provide a copy of the claim record and the written decision to the Contractor describing the information considered by the RTD in reaching a decision and the basis for that decision. If the RTD fails to render a written decision within the 60 day period, or within any extended time period as agreed to by both parties, the Contractor shall either: (1) accept this as a denial of the claim, or (2) appeal the claim to the Chief Engineer, as described in this subsection.

If the Contractor accepts the RTD decision, the provisions of the decision shall be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the RTD decision, the Contractor shall either: (1) accept the RTD decision as final, or (2) file a written appeal to the Chief Engineer within 30 days from the receipt of the RTD decision. The Contractor hereby agrees that if a written appeal is not properly filed, the RTD decision is final.

- (e) *Chief Engineer Decision.* When a claim is appealed, the RTD will provide the claim record to the Chief Engineer. Within 15 days of the appeal either party may submit a written request for a hearing with the Chief Engineer or duly authorized Headquarters delegate(s). The Chief Engineer or a duly authorized Headquarters delegate will review the claim and render a decision to affirm, overrule, or modify the RTD decision in accordance with the following.

The Contractor's written appeal to the Chief Engineer will be made a part of the claim record.

The Chief Engineer will render a written decision within 60 days after receiving the written appeal. The Chief Engineer will not consider any information that was not previously made a part of the claim record, other than clarification and data supporting previously submitted documentation.

The Contractor shall have 30 days to accept or reject the Chief Engineer's decision. The Contractor shall notify the Chief Engineer of its acceptance or rejection in writing.

If the Contractor accepts the Chief Engineer's decision, the provisions of the decision will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the Chief Engineer's decision, the Contractor shall either (1) pursue an alternative dispute resolution process in accordance with this specification or (2) initiate litigation or merit binding arbitration in accordance with subsection 105.23(f).

If the Chief Engineer does not issue a decision as required, the Contractor may immediately initiate either litigation or merit binding arbitration in accordance with subsection 105.23(f).

For the convenience of the parties to the Contract it is mutually agreed by the parties that any merit binding arbitration or De Novo litigation shall be brought within 180-calendar days from the date of the Chief

Engineer's decision. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action.

- (f) *De Novo Litigation or Merit Binding Arbitration.* If the Contractor disagrees with the Chief Engineer's decision, the Contractor may initiate de novo litigation or merit binding arbitration to finally resolve the claim that the Contractor submitted to CDOT, depending on which option was selected by the Contractor on Form 1378 which shall be submitted at the preconstruction conference. Such litigation or arbitration shall be strictly limited to those claims that were previously submitted and decided in the contractual dispute and claims processes outlined herein. This does not preclude the joining in one litigation or arbitration of multiple claims from the same project provided that each claim has gone through the dispute and claim process specified in subsections 105.21 through 105.23. The parties may agree, in writing, at any time, to pursue some other form of alternative dispute resolution.

Any offer made by the Contractor or the Department at any stage of the claims process, as set forth in this subsection, shall be deemed an offer of settlement pursuant Colorado Rule of Evidence 408 and therefore inadmissible in any litigation or arbitration.

If the Contractor selected litigation, then de novo litigation shall proceed in accordance with the Colorado Rules of Civil Procedure and the proper venue is the Colorado State District Court in and for the City and County of Denver, unless both parties agree to the use of arbitration.

If the Contractor selected merit binding arbitration, or if both parties subsequently agreed to merit binding arbitration, arbitration shall be governed by the modified version of AAA's Construction Industry Arbitration Rules which follow.

**AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY ARBITRATION RULES MODIFIED
FOR USE WITH CDOT SPECIFICATION SUBSECTION 105.23**

REGULAR TRACK PROCEDURES

R-1. Agreement of Parties

- (a) The parties shall be deemed to have made these rules a part of their Contract. These rules and any amendments shall apply in the form in effect at the time the administrative requirements are met for a demand for arbitration. The parties, by written agreement, may vary the procedures set forth in these rules. After appointment of the arbitrator, such modifications may be made only with the consent of the arbitrator.
- (b) Unless the parties determine otherwise, the Fast Track Procedures shall apply in any case in which aggregate claims do not exceed \$75,000, exclusive of interest and arbitration fees and costs. Parties may also agree to use these procedures in larger cases. Unless the parties agree otherwise, these procedures will not apply in cases involving more than two parties except for pass-through claims. The Fast Track Procedures shall be applied as described in Sections F-1 through F-13 of these rules, in addition to any other portion of these rules that is not in conflict with the Fast Track Procedures.
- (c) Unless the parties agree otherwise, the Procedures for Large, Complex Construction Disputes shall apply to all cases in which the disclosed aggregate claims of any party is at least \$500,000, exclusive of claimed interest, arbitration fees and costs. Parties may also agree to use these procedures in cases involving claims under \$500,000, or in nonmonetary cases. The Procedures for Large, Complex Construction Disputes shall be applied as described in Sections L-1 through L-4 of these rules, in addition to any other portion of these rules that is not in conflict with the Procedures for Large, Complex Construction Disputes.
- (d) All other cases shall be administered in accordance with Sections R-1 through R-45 of these rules.

R-2. Independent Arbitration Provider and Delegation of Duties

When parties agree to arbitrate under these rules, or when they provide for arbitration by an independent third-party (Arbitration Provider) and an arbitration is initiated under these rules, they thereby authorize the Arbitration Provider to administer the arbitration. The authority and duties of the Arbitration Provider are prescribed in the parties' Contract and in these rules, and may be carried out through such of the Arbitration Provider's representatives as it may direct. The Arbitration Provider will assign the administration of an arbitration to its Denver office

R-3. Initiation of Arbitration

Arbitration shall be initiated in the following manner.

- (a) The Contractor shall, within 30 days after the Chief Engineer issues a decision, submit to the Chief Engineer written notice of its intention to arbitrate (the "demand"). The demand shall indicate the appropriate qualifications for the arbitrator(s) to be appointed to hear the arbitration.
- (b) CDOT may file an answering statement with the Contractor within 15 days after receiving the demand. If a counterclaim is asserted, it shall contain a statement setting forth the nature of the counterclaim, the amount involved, if any, and the remedy sought.
- (c) The Chief Engineer shall retain an Arbitration Provider, such as the American Arbitration Association, which will administer an arbitration pursuant to these Rules, except to the extent that such rules conflict with the specifications, in which case the specifications shall control.
- (d) The Arbitration Provider shall confirm its retention to the parties.

R-4. Consolidation or Joinder

If the parties' agreement or the law provides for consolidation or joinder of related arbitrations, all involved parties will endeavor to agree on a process to effectuate the consolidation or joinder.

If they are unable to agree, the Arbitration Provider shall directly appoint a single arbitrator for the limited purpose of deciding whether related arbitrations should be consolidated or joined and, if so, establishing a fair and appropriate process for consolidation or joinder. The Arbitration Provider may take reasonable administrative action to accomplish the consolidation or joinder as directed by the arbitrator.

R-5. Appointment of Arbitrator

An arbitrator shall be appointed in the following manner:

- (a) Immediately after the Arbitration Provider is retained, the Arbitration Provider shall send simultaneously to each party to the dispute an identical list of 10 names of potential arbitrators. The parties are encouraged to agree to an arbitrator from the submitted list and to advise the AAA of their agreement. Absent agreement of the parties, the arbitrator shall not have served as the mediator in the mediation phase of the instant proceeding.
- (b) If the parties cannot agree to arbitrator(s), each party to the dispute shall have 15 calendar days from the transmittal date in which to strike names objected to, number the remaining names in order of preference, and return the list to the Arbitration Provider. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the Arbitration Provider shall invite an arbitrator to serve.
- (c) Unless both parties agree otherwise one arbitrator shall be used for claims less than \$250,000 and three arbitrators shall be used for claims \$250,000 and greater. Within 15 calendar days from the date of the appointment of the last arbitrator, the Arbitration Provider shall appoint a chairperson.
- (d) The entire claim record will be made available to the arbitrators by the Chief Engineer within 15 calendar days from the date of the appointment of the last arbitrator.

R-6. Changes of Claim

The arbitrator(s) will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation.

R-7. Disclosure

- (a) Any person appointed or to be appointed as an arbitrator shall disclose to the Arbitration Provider any circumstance likely to give rise to justifiable doubt as to the arbitrator's impartiality or independence, including any bias or any interest in the result of the arbitration or any relationship with the parties or their representatives. Such obligation shall remain in effect throughout the arbitration.
- (b) Upon receipt of such information from the arbitrator or another source, the Arbitration Provider shall communicate the information to the parties and, if it deems it appropriate to do so, to the arbitrator and others.
- (c) In order to encourage disclosure by arbitrators, disclosure of information pursuant to this Section R-6 is not to be construed as an indication that the arbitrator considers that the disclosed circumstances are likely to affect impartiality or independence.
- (d) In no case shall an arbitrator be employed by, affiliated with, or have consultive or business connection with the claimant Contractor or CDOT. An arbitrator shall not have assisted either in the evaluation, preparation, or presentation of the claim case either for the Contractor or the Department or have rendered an opinion on the merits of the claim for either party, and shall not do so during the proceedings of arbitration.

R-8. Disqualification of Arbitrator

- (a) Any arbitrator shall be impartial and independent and shall perform his or her duties with diligence and in good faith, and shall be subject to disqualification for: (i) partiality or lack of independence, (ii) inability or

refusal to perform his or her duties with diligence and in good faith; and/or (iii) any grounds for disqualification provided by applicable law.

- (b) Upon objection of a party to the continued service of an arbitrator, or on its own initiative, the Arbitration Provider shall determine whether the arbitrator should be disqualified under the grounds set out above, and shall inform the parties of its decision, which decision shall be conclusive.

R-9. Communication with Arbitrator

No party and no one acting on behalf of any party shall communicate *ex parte* with an arbitrator or a candidate for arbitrator concerning the arbitration.

R-10. Vacancies

- (a) If for any reason an arbitrator is unable to perform the duties of the office, the Arbitration Provider may, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules.
- (b) In the event of a vacancy in a panel of neutral arbitrators after the hearings have commenced, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.
- (c) In the event of the appointment of a substitute arbitrator, the panel of arbitrators shall determine in its sole discretion whether it is necessary to repeat all or part of any prior hearings.

R-11. Jurisdiction

- (a) The arbitrator shall have the power to rule on his or her own jurisdiction, including any objections with respect to the existence, scope or validity of the arbitration agreement.
- (b) The arbitrator shall have the power to determine the existence or validity of a contract of which an arbitration clause forms a part. Such an arbitration clause shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitrator that the contract is null and void shall not for that reason alone render invalid the arbitration clause.
- (c) A party must object to the jurisdiction of the arbitrator or to the arbitrability of a claim or counterclaim no later than 15 days after the Arbitration Provider confirms its retention to the parties. The arbitrator may rule on such objections as a preliminary matter or as part of the final award.

R-12. Administrative Conference

At the request of any party or upon the Arbitration Provider's own initiative, the Arbitration Provider may conduct an administrative conference, in person or by telephone, with the parties and/or their representatives. The conference may address such issues as arbitrator selection, potential exchange of information, a timetable for hearings and any other administrative matters.

R-13. Preliminary Hearing

- (a) At the request of any party or at the discretion of the arbitrator or the Arbitration Provider, the arbitrator may schedule as soon as practicable a preliminary hearing with the parties and/or their representatives. The preliminary hearing may be conducted by telephone at the arbitrator's discretion.
- (b) During the preliminary hearing, the parties and the arbitrator should discuss the future conduct of the case, including clarification of the issues and claims, a schedule for the hearings and any other preliminary matters.

R-14. Exchange of Information

- (a) At the request of any party or at the discretion of the arbitrator, consistent with the expedited nature of arbitration, the arbitrator may direct: (i) the production of documents and other information; (ii) short depositions, particularly with regard to experts; and/or (iii) the identification of any witnesses to be called.
- (b) At least five business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing.
- (c) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (d) Additional discovery may be ordered by the arbitrator in extraordinary cases when the demands of justice require it.

R-15. Date, Time, and Place of Hearing

- (a) The arbitrator shall set the date, time, and place for each hearing and/or conference. The parties shall respond to requests for hearing dates in a timely manner, be cooperative in scheduling the earliest practicable date, and adhere to the established hearing schedule.
- (b) The parties may mutually agree on the locale where the arbitration is to be held. Absent such agreement, the arbitration shall be held in the City and County of Denver.
- (c) The Arbitration Provider shall send a notice of hearing to the parties at least ten calendar days in advance of the hearing date, unless otherwise agreed by the parties.

R-16. Attendance at Hearings

The arbitrator and the Arbitration Provider shall maintain the privacy of the hearings unless the law provides to the contrary. Any person having a direct interest in the arbitration is entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any person other than a party and its representative.

R-17. Representation

Any party may be represented by counsel or other authorized representative. A party intending to be so represented shall notify the other party and the Arbitration Provider of the name and address of the representative at least three calendar days prior to the date set for the hearing at which that person is first to appear.

R-18. Oaths

Before proceeding with the first hearing, each arbitrator may take an oath of office and, if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person and, if it is required by law or requested by any party, shall do so.

R-19. Stenographic Record

Any party desiring a stenographic record shall make arrangements directly with a stenographer and shall notify the other parties of these arrangements at least three days in advance of the hearing. The requesting party or parties shall pay the cost of the record. If the transcript is agreed by the parties, or determined by the arbitrator to be the official record of the proceeding, it must be provided to the arbitrator and made available to the other parties for inspection, at a date, time, and place determined by the arbitrator.

R-20. Interpreters

Any party wishing an interpreter shall make all arrangements directly with the interpreter and shall assume the costs of the service.

R-21. Postponements

The arbitrator for good cause shown may postpone any hearing upon agreement of the parties, upon request of a party, or upon the arbitrator's own initiative.

R-22. Arbitration in the Absence of a Party or Representative

Unless the law provides to the contrary, the arbitration may proceed in the absence of any party or representative who, after due notice, fails to be present or fails to obtain a postponement. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as the arbitrator may require for the making of an award.

R-23. Conduct of Proceedings

- (a) The Contractor shall present evidence to support its claim. CDOT shall then present evidence supporting its defense. Witnesses for each party shall also submit to questions from the arbitrator and the adverse party. The arbitrator has the discretion to vary this procedure; provided that the parties are treated with equality and that each party has the right to be heard and is given a fair opportunity to present its case.
- (b) The arbitrator, exercising his or her discretion, shall conduct the proceedings with a view to expediting the resolution of the dispute and may direct the order of proof, bifurcate proceedings, and direct the parties to focus their presentations on issues the decision of which could dispose of all or part of the case. The arbitrator shall entertain motions, including motions that dispose of all or part of a claim or that may expedite the proceedings, and may also make preliminary rulings and enter interlocutory orders.
- (c) The parties may agree to waive oral hearings in any case.

R-24. Evidence

- (a) The arbitrators shall consider all written information available in the claim record and all oral presentations in support of that record by the Contractor and CDOT. Conformity to legal rules of evidence shall not be necessary.
- (b) The arbitrators shall not consider any written documents or arguments which have not previously been made a part of the claim record, other than clarification and data supporting previously submitted documentation. The arbitrators shall not consider an increase in the amount of the claim, or any new claims.
- (c) The arbitrator shall determine the admissibility, relevance, and materiality of any evidence offered. The arbitrator may request offers of proof and may reject evidence deemed by the arbitrator to be cumulative, unreliable, unnecessary, or of slight value compared to the time and expense involved. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where: (i) any of the parties is absent, in default, or has waived the right to be present, or (ii) the parties and the arbitrators agree otherwise.
- (d) The arbitrator shall take into account applicable principles of legal privilege, such as those involving the confidentiality of communications between a lawyer and client.
- (e) An arbitrator or other person authorized by law to subpoena witnesses or documents may do so upon the request of any party or independently.

R-25. Evidence by Affidavit and Post-hearing Filing of Documents or Other Evidence

- (a) The arbitrator may receive and consider the evidence of witnesses by declaration or affidavit, but shall give it only such weight as the arbitrator deems it entitled to after consideration of any objection made to its admission.
- (b) If the parties agree or the arbitrator directs that documents or other evidence be submitted to the arbitrator after the hearing, the documents or other evidence, unless otherwise agreed by the parties and the arbitrator, shall be filed with the Arbitration Provider for transmission to the arbitrator. All parties shall be afforded an opportunity to examine and respond to such documents or other evidence.

R-26. Inspection or Investigation

An arbitrator finding it necessary to make an inspection or investigation in connection with the arbitration shall direct the Arbitration Provider to so advise the parties. The arbitrator shall set the date and time and the Arbitration Provider shall notify the parties. Any party who so desires may be present at such an inspection or investigation. In the event that one or all parties are not present at the inspection or investigation, the arbitrator shall make an oral or written report to the parties and afford them an opportunity to comment.

R-27. Interim Measures

- (a) The arbitrator may take whatever interim measures he or she deems necessary, including injunctive relief and measures for the protection or conservation of property and disposition of perishable goods.
- (b) A request for interim measures addressed by a party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate or a waiver of the right to arbitrate.

R-28. Closing of Hearing

When satisfied that the presentation of the parties is complete, the arbitrator shall declare the hearing closed.

If documents or responses are to be filed as provided in Section R-24, or if briefs are to be filed, the hearing shall be declared closed as of the final date set by the arbitrator for the receipt of documents, responses, or briefs. The time limit within which the arbitrator is required to make the award shall commence to run, in the absence of other agreements by the parties and the arbitrator, upon the closing of the hearing.

R-29. Reopening of Hearing

The hearing may be reopened on the arbitrator's initiative, or by direction of the arbitrator upon application of a party, at any time before the award is made. If reopening the hearing would prevent the making of the award within the specific time agreed to by the parties in the arbitration agreement, the matter may not be reopened unless the parties agree to an extension of time. When no specific date is fixed by agreement of the parties, the arbitrator shall have 15 calendar days from the closing of the reopened hearing within which to make an award.

R-30. Waiver of Rules

Any party who proceeds with the arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state an objection in writing shall be deemed to have waived the right to object.

R-31. Extensions of Time

The parties may modify any period of time by mutual agreement. The Arbitration Provider or the arbitrator may for good cause extend any period of time established by these rules, except the time for making the award. The Arbitration Provider shall notify the parties of any extension.

R-32. Serving of Notice

- (a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.
- (b) The Arbitration Provider, the arbitrator and the parties may also use overnight delivery, electronic facsimile transmission (fax), or electronic mail (email) to give the notices required by these rules.

- (c) Unless otherwise instructed by the Arbitration Provider or by the arbitrator, any documents submitted by any party to the Arbitration Provider or to the arbitrator shall simultaneously be provided to the other party or parties to the arbitration.

R-33. Majority Decision

When the panel consists of more than one arbitrator, unless required by law or by the arbitration agreement, a majority of the arbitrators must make all decisions.

R-34. Time of Award

The award shall be made promptly by the arbitrator and, unless otherwise agreed by the parties or specified by law, no later than 30 calendar days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

R-35. Form of Award

After complete review of the facts associated with the claim, the arbitrators shall render a written explanation of their decision. When three arbitrators are used, and only two arbitrators agree then the award shall be signed by the two arbitrators. The arbitrator's decision shall include:

- (a) A summary of the issues and factual evidence presented by the Contractor and the Department concerning the claim;
- (b) Decisions concerning the validity of the claim;
- (c) Decisions concerning the value of the claim as to cost impacts if the claim is determined to be valid;
- (d) The contractual and factual bases supporting the decisions made including an explanation as to why each and every position was accepted or rejected;
- (e) Detailed and supportable calculations which support any decisions.

R-36. Scope of Award

- (a) The arbitrator may grant any remedy or relief that the arbitrator deems just and equitable and within the scope of the agreement of the parties, including, but not limited to, equitable relief and specific performance of a contract.
- (b) In addition to the final award, the arbitrator may make other decisions, including interim, interlocutory, or partial rulings, orders, and awards. (c) The award of the arbitrator may include interest at the statutory rate and from such date as the arbitrator may deem appropriate.

R-37. Delivery of Award to Parties

Parties shall accept as notice and delivery of the award the placing of the award or a true copy thereof in the mail addressed to the parties or their representatives at the last known address, personal or electronic service of the award, or the filing of the award in any other manner that is permitted by law.

R-38. Modification of Award

Within 10 calendar days after the transmittal of an award, the arbitrator on his or her initiative, or any party, upon notice to the other parties, may request that the arbitrator correct any clerical, typographical, technical or computational errors in the award. The arbitrator is not empowered to redetermine the merits of any claim already decided.

If the modification request is made by a party, the other parties shall be given 10 calendar days to respond to the request. The arbitrator shall dispose of the request within 25 calendar days after transmittal by the Arbitration Provider to the arbitrator of the request.

If applicable law provides a different procedural time frame, that procedure shall be followed.

R-39. Appeal of Award

Appeal of the arbitrators' decision concerning the merit of the claim is governed by the Colorado Uniform Arbitration Act, C.R.S. §§ 13-22-202 to -230. Either party may appeal the arbitrator's decision on the value of the claim to the Colorado State District Court in and for the City and County of Denver for trial de novo.

R-40. Release of Documents for Judicial Proceedings

The Arbitration Provider shall, upon the written request of a party, furnish to the party, at its expense, certified copies of any papers in the Arbitration Provider's possession that may be required in judicial proceedings relating to the arbitration.

R-41. Applications to Court and Exclusion of Liability

- (a) No judicial proceeding by a party relating to the subject matter of the arbitration shall be deemed a waiver of the party's right to arbitrate.
- (b) Neither the Arbitration Provider nor any arbitrator in a proceeding under these rules is a necessary or proper party in judicial proceedings relating to the arbitration.
- (c) Parties to these rules shall be deemed to have consented that judgment upon the arbitration award may be entered in any federal or state court having jurisdiction thereof.
- (d) Parties to an arbitration under these rules shall be deemed to have consented that neither the Arbitration Provider nor any arbitrator shall be liable to any party in any action for damages or injunctive relief for any act or omission in connection with any arbitration under these rules.

R-42. Administrative Fees

The Arbitration Provider shall prescribe filing and other administrative fees and service charges to compensate it for the cost of providing administrative services. The fees in effect when the fee or charge is incurred shall be applicable. Such fees and charges shall be borne equally by the parties.

The Arbitration Provider may, in the event of extreme hardship on the part of any party, defer or reduce the administrative fees.

R-43. Expenses

The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the arbitration, including required travel and other expenses of the arbitrator, Arbitration Provider representatives, and any witness and the cost of any proof produced at the direct request of the arbitrator, shall be borne equally by the parties.

R-44. Neutral Arbitrator's Compensation

Arbitrators shall be compensated a rate consistent with the arbitrator's stated rate of compensation.

If there is disagreement concerning the terms of compensation, an appropriate rate shall be established with the arbitrator by the Arbitration Provider and confirmed to the parties.

Such compensation shall be borne equally by the parties.

R-45. Deposits

The Arbitration Provider may require the parties to deposit in advance of any hearings such sums of money as it deems necessary to cover the expense of the arbitration, including the arbitrator's fee, if any, and shall render an accounting to the parties and return any unexpended balance at the conclusion of the case.

R-46. Interpretation and Application of Rules

The arbitrator shall interpret and apply these rules insofar as they relate to the arbitrator's powers and duties by a majority vote. If that is not possible, either an arbitrator or a party may refer the question to the Arbitration Provider for final decision. All other rules shall be interpreted and applied by the Arbitration Provider.

R-45. Suspension for Nonpayment

If arbitrator compensation or administrative charges have not been paid in full, the Arbitration Provider may so inform the parties in order that the parties may advance the required payment. If such payments are not made, the arbitrator may order the suspension or termination of the proceedings. If no arbitrator has yet been appointed, the Arbitration Provider may suspend the proceedings.

FAST TRACK PROCEDURES

F-1. Limitations on Extensions

In the absence of extraordinary circumstances, the Arbitration Provider or the arbitrator may grant a party no more than one seven-day extension of the time in which to respond to the demand for arbitration or counterclaim as provided in Section R-3.

F-2. Changes of Claim

The arbitrator will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation

F-3. Serving of Notice

In addition to notice provided above, the parties shall also accept notice by telephone. Telephonic notices by the Arbitration Provider shall subsequently be confirmed in writing to the parties. Should there be a failure to confirm in writing any such oral notice, the proceeding shall nevertheless be valid if notice has, in fact, been given by telephone.

F-4. Appointment and Qualification of Arbitrator

Immediately after the retention of the Arbitration Provider, the Arbitration Provider will simultaneously submit to each party a listing and biographical information from its panel of arbitrators knowledgeable in construction who are available for service in Fast Track cases. The parties are encouraged to agree to an arbitrator from this list, and to advise the Arbitration Provider of their agreement, or any factual objections to any of the listed arbitrators, within 7 calendar days of the transmission of the list. The Arbitration Provider will appoint the agreed-upon arbitrator, or in the event the parties cannot agree on an arbitrator, will designate the arbitrator from among those names not stricken for factual objections.

The parties will be given notice by the Arbitration Provider of the appointment of the arbitrator, who shall be subject to disqualification for the reasons specified above. Within the time period established by the Arbitration Provider, the parties shall notify the Arbitration Provider of any objection to the arbitrator appointed. Any objection by a party to the arbitrator shall be for cause and shall be confirmed in writing to the Arbitration Provider with a copy to the other party or parties.

F-5. Preliminary Telephone Conference

Unless otherwise agreed by the parties and the arbitrator, as promptly as practicable after the appointment of the arbitrator, a preliminary telephone conference shall be held among the parties or their attorneys or representatives, and the arbitrator.

F-6. Exchange of Exhibits

At least 2 business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing. The arbitrator is authorized to resolve any disputes concerning the exchange of exhibits.

F-7. Discovery

There shall be no discovery, except as provided in Section F-4 or as ordered by the arbitrator in extraordinary cases when the demands of justice require it.

F-8. Date, Time, and Place of Hearing

The arbitrator shall set the date and time, and place of the hearing, to be scheduled to take place within 30 calendar days of confirmation of the arbitrator's appointment. The Arbitration Provider will notify the parties in advance of the hearing date. All hearings shall be held within the City and County of Denver.

F-9. The Hearing

- (a) Generally, the hearing shall not exceed 1 day. Each party shall have equal opportunity to submit its proofs and complete its case. The arbitrator shall determine the order of the hearing, and may require further submission of documents within two business days after the hearing. For good cause shown, the arbitrator may schedule 1 additional hearing day within 7 business days after the initial day of hearing.
- (b) Generally, there will be no stenographic record. Any party desiring a stenographic record may arrange for one pursuant to the provisions above.

F-10. Time of Award

Unless otherwise agreed by the parties, the award shall be rendered not later than 14 calendar days from the date of the closing of the hearing or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

F-11. Time Standards

The arbitration shall be completed by settlement or award within 60 calendar days of confirmation of the arbitrator's appointment, unless all parties and the arbitrator agree otherwise or the arbitrator extends this time in extraordinary cases when the demands of justice require it.

F-12. Arbitrator's Compensation

Arbitrators will receive compensation at a rate to be suggested by the Arbitration Provider regional office.

PROCEDURES FOR LARGE, COMPLEX CONSTRUCTION DISPUTES

L-1. Large, Complex Construction Disputes

The procedures for large, complex construction disputes shall apply to any claim with a value exceeding \$500,000 or as agreed to by the parties.

L-2. Administrative Conference

Prior to the dissemination of a list of potential arbitrators, the Arbitration Provider shall, unless the parties agree otherwise, conduct an administrative conference with the parties and/or their attorneys or other representatives by conference call. The conference call will take place within 14 days after the retention of the Arbitration Provider. In the event the parties are unable to agree on a mutually acceptable time for the conference, the Arbitration Provider may contact the parties individually to discuss the issues contemplated herein. Such administrative conference shall be conducted for the following purposes and for such additional purposes as the parties or the Arbitration Provider may deem appropriate:

- (a) To obtain additional information about the nature and magnitude of the dispute and the anticipated length of hearing and scheduling;
- (b) To discuss the views of the parties about the technical and other qualifications of the arbitrators;
- (c) To obtain conflicts statements from the parties; and
- (d) To consider, with the parties, whether mediation or other non-adjudicative methods of dispute resolution might be appropriate.

L-3. Arbitrators

- (a) Large, Complex Construction Cases shall be heard and determined by three arbitrators.
- (b) The Arbitration Provider shall appoint arbitrator(s) in the manner provided in the Regular Construction Industry Arbitration Rules.

L-4. Preliminary Hearing

As promptly as practicable after the selection of the arbitrator(s), a preliminary hearing shall be held among the parties and/or their attorneys or other representatives and the arbitrator(s). Unless the parties agree otherwise, the preliminary hearing will be conducted by telephone conference call rather than in person.

At the preliminary hearing the matters to be considered shall include, without limitation:

- (a) Service of a detailed statement of claims, damages and defenses, a statement of the issues asserted by each party and positions with respect thereto, and any legal authorities the parties may wish to bring to the attention of the arbitrator(s);
- (b) Stipulations to uncontested facts;
- (c) The extent to which discovery shall be conducted;
- (d) Exchange and premarking of those documents which each party believes may be offered at the hearing;
- (e) The identification and availability of witnesses, including experts, and such matters with respect to witnesses including their biographies and expected testimony as may be appropriate;
- (f) Whether, and the extent to which, any sworn statements and/or depositions may be introduced;
- (g) The extent to which hearings will proceed on consecutive days;
- (h) Whether a stenographic or other official record of the proceedings shall be maintained;
- (i) The possibility of utilizing mediation or other non-adjudicative methods of dispute resolution; and
- (j) The procedure for the issuance of subpoenas.

By agreement of the parties and/or order of the arbitrator(s), the pre-hearing activities and the hearing procedures that will govern the arbitration will be memorialized in a Scheduling and Procedure Order.

L-5. Management of Proceedings

- (a) Arbitrator(s) shall take such steps as they may deem necessary or desirable to avoid delay and to achieve a just, speedy and cost-effective resolution of Large, Complex Construction Cases.

- (b) Parties shall cooperate in the exchange of documents, exhibits and information within such party's control if the arbitrator(s) consider such production to be consistent with the goal of achieving a just, speedy and cost effective resolution of a Large, Complex Construction Case.
- (c) The parties may conduct such discovery as may be agreed to by all the parties provided, however, that the arbitrator(s) may place such limitations on the conduct of such discovery as the arbitrator(s) shall deem appropriate. If the parties cannot agree on production of document and other information, the arbitrator(s), consistent with the expedited nature of arbitration, may establish the extent of the discovery.
- (d) At the discretion of the arbitrator(s), upon good cause shown and consistent with the expedited nature of arbitration, the arbitrator(s) may order depositions of, or the propounding of interrogatories to such persons who may possess information determined by the arbitrator(s) to be necessary to a determination of the matter.
- (e) The parties shall exchange copies of all exhibits they intend to submit at the hearing 10 business days prior to the hearing unless the arbitrator(s) determine otherwise.
- (f) The exchange of information pursuant to this rule, as agreed by the parties and/or directed by the arbitrator(s), shall be included within the Scheduling and Procedure Order.
- (g) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (h) Generally hearings will be scheduled on consecutive days or in blocks of consecutive days in order to maximize efficiency and minimize costs.

**Figure 105-1
DISPUTES AND CLAIMS FLOW CHART**

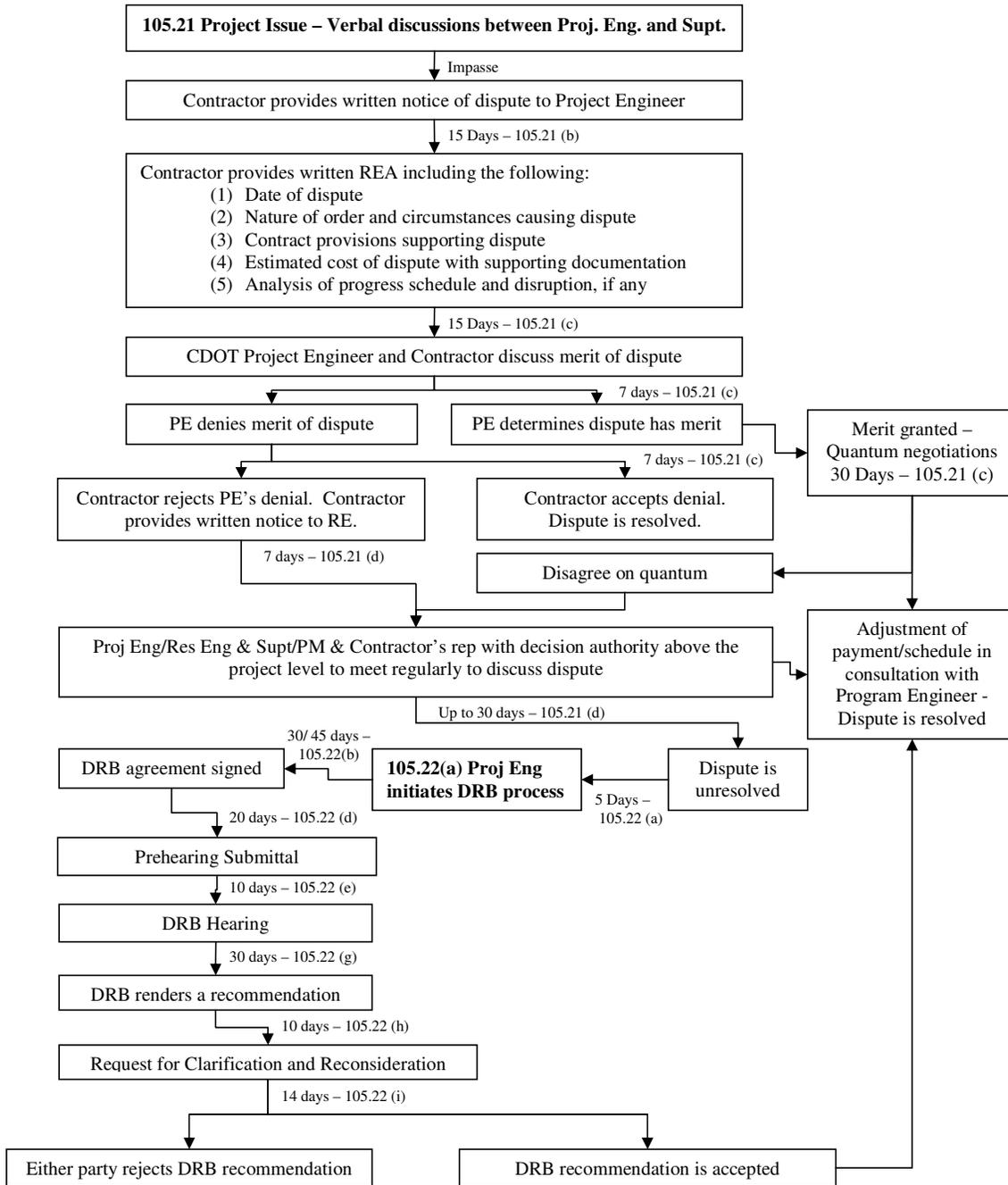


Figure 105-1 continued on next page

January 17, 2008

REVISION OF SECTION 105
DISPUTES AND CLAIMS FOR
CONTRACT ADJUSTMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects. If a standing DRB is required for the project, add the following General Note to the Plans: "There shall be a Standing Disputes Review Board for this Project." A standing DRB should be called for on the following types of projects:

13. Large projects (greater than \$15 million)
14. Projects with complex construction
15. Projects with large complex structures
16. Projects with multi-phase construction
17. Projects with major impacts to traffic
18. Projects with other complicating factors that could easily lead to disputes

On projects that require a standing DRB, establish a planned force account item to cover the ongoing costs of the DRB.

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 105.21 and replace it with the following subsections 105.21, 105.22, and 105.23.

105.21 Dispute Resolution. Subsections 105.21, 105.22, and 105.23 detail the process through which the parties (CDOT and the Contractor) agree to resolve any issue that may result in a dispute. The intent of the process is to resolve issues early, efficiently, and as close to the project level as possible. Figure 105-1 at the end of subsection 105.23 outlines the process. Specified time frames may be extended by mutual agreement of the Engineer and the Contractor.

A dispute is a disagreement concerning contract price, time, interpretation of the Contract, or all three between the parties at the project level regarding or relating to the Contract. Disputes include, but are not limited to, any disagreement resulting from a delay, a change order, another written order, or an oral order from the Project Engineer, including any direction, instruction, interpretation, or determination by the Project Engineer, interpretations of the Contract provisions, plans, or specifications or the existence of alleged differing site conditions.

The term "merit" refers to the right of a party to recover on a claim or dispute, irrespective of quantum, based on the substance, elements, and grounds of that claim or dispute. The term "quantum" refers to the quantity or amount of compensation or time deserved when a claim or dispute is found to have merit.

Disputes from subcontractors, materials suppliers, or any other entity not party to the Contract shall be submitted through the Contractor. Review of a pass-through dispute does not create privity of Contract between CDOT and the subcontractor.

When an issue arises on the project that can not be resolved between the parties, either party may consider it a dispute and initiate the dispute resolution process as described in subsection 105.21(b).

If CDOT does not respond within the specified timelines, the Contractor may advance the dispute to the next level.

When the Project Engineer is a Consultant Project Engineer, actions, decisions, and determinations specified herein as made by the Project Engineer shall be made by the Resident Engineer.

A claim will not be accepted by CDOT until all remedies for dispute resolution provided for in subsections 105.21 and 105.22 have been exhausted. If CDOT contends that the Contractor has failed to follow the provisions of subsection 105.21 or 105.22, CDOT will notify the Contractor in writing and provide the Contractor with ten days in which to cure the alleged failure. After the CDOT notice, unless the Engineer grants an exception in writing, failure to comply with the requirements set forth in subsections 105.21, 105.22 and 105.23, shall bar the Contractor from any further administrative, equitable, or legal remedy.

(a) *Document Retention.* The Contractor shall keep full and complete records of the costs and additional time incurred for each dispute for a period of at least three years after the date of final payment or until dispute is resolved, whichever is more. The Contractor, subcontractors, and lower tier subcontractors shall provide adequate facilities, acceptable to the Engineer, for an audit during normal business hours. The Contractor shall permit the Engineer or Department auditor to examine and copy those records and all other records required by the Engineer to determine the facts or contentions involved in the dispute. CDOT and CDOT's attorneys and consultants will affirmatively act to protect the records and information from disclosure beyond those persons having a need to know the information for the purpose of making a decision regarding the claim, or for law enforcement purposes. The Contractor shall identify and segregate any documents or information that the Contractor considers particularly sensitive, such as confidential or proprietary information.

- (b) *Initial Dispute Resolution Process.* To initiate the dispute resolution process the Contractor shall provide a written notice of dispute to the Project Engineer upon the failure of the Parties to resolve the issue through negotiation. Disputes will not be considered unless the Contractor has first complied with specified issue resolution processes such as those specified in subsections 104.02, 106.05, 108.07(a), and 108.07(d).

The Contractor shall supplement the written notice of dispute within 15 days with a written Request for Equitable Adjustment (REA) providing the following:

- (23) The date of the dispute
- (24) The nature of the circumstances which caused the dispute
- (25) The Contract provisions and any other basis supporting the Contractor's position
- (26) The estimated dollar cost, if any, of the dispute with supporting documentation
- (27) An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption.

The Contractor shall submit as much of the above information as is reasonably available with the REA and then supplement the REA as additional information becomes available.

- (c) *Project Engineer Review.* Within 15 days after receipt of the REA, the Project Engineer will meet with the Contractor to discuss the merits of the dispute. Within seven days after this meeting, the Project Engineer will issue a written decision on the merits of the dispute.

The Project Engineer will either deny the merits of the dispute or notify the Contractor that the dispute has merit. This determination will include a summary of the relevant facts, Contract provisions supporting the determination, and an evaluation of all scheduling issues that may be involved.

If the dispute is determined to have merit, the Contractor and the Project Engineer will determine the adjustment in payment, schedule, or both within 30 days. When a satisfactory adjustment is determined, it shall be implemented in accordance with subsections 106.05, 108.07, 109.04, 109.05 or 109.10 and the dispute is resolved.

If the Contractor accepts the Project Engineer's denial of the merits of the dispute, the dispute is resolved and no further action will be taken. If the Contractor does not respond in seven days, it will be assumed he has accepted the denial. If the Contractor rejects the Project Engineer's denial of the merits of the dispute or a satisfactory adjustment of payment or schedule can not be agreed upon within 30 days, the Contractor may further pursue resolution of the dispute by providing written notice to the Resident Engineer within seven days, according to subsection 105.21(d).

- (d) *Resident Engineer Review.* Within seven days after receipt of the Contractor's written notice to the Resident Engineer of unsatisfactory resolution of the dispute, the Project Engineer and Resident Engineer will meet with the Contractor to discuss the dispute. Meetings shall continue weekly for a period of up to 30 days and shall include a Contractor's representative with decision authority above the project level.

If these meetings result in resolution of the dispute, the resolution will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If these meetings do not result in a resolution or the participants mutually agree that they have reached an impasse, the dispute shall be presented to the Dispute Review Board in accordance with subsection 105.22.

105.22 Dispute Review Board. A Dispute Review Board (DRB) is an independent third party that will provide specialized expertise in technical areas and administration of construction contracts. The DRB will assist in and facilitate the timely and equitable resolution of disputes between CDOT and the Contractor in an effort to avoid animosity and construction delays, and to resolve disputes as close to the project level as possible. The DRB shall be established and operate as provided herein and shall serve as an independent and impartial board.

There are two types of DRBs: the "On Demand DRB" and the "Standing DRB". The DRB shall be an "On Demand DRB" unless a "Standing DRB" is specified in the Contract. An On Demand DRB shall be established only when the Project Engineer initiates a DRB review in accordance with subsection 105.22(a). A Standing DRB, when specified in the Contract, shall be established at the beginning of the project.

- (a) *Initiation of Dispute Review Board Review.* When a dispute has not been resolved in accordance with subsection 105.21, the Project Engineer will initiate the DRB review process within 5 days after the period described in subsection 105.21(d).
- (b) *Formation of Dispute Review Board.* DRBs will be established in accordance with the following procedures:
1. CDOT, in conjunction with the Colorado Contractors Association, will maintain a non-exclusive statewide list of suggested DRB candidates experienced in construction processes and the interpretation of contract documents and the resolution of construction disputes. The Board members shall be experienced in highway and transportation projects. When a DRB is formed, the parties shall execute the agreement set forth in subsection 105.22(k). Either party may add candidates to the list at any time.
 2. If the dispute has a value of \$250,000 or less, the On Demand DRB shall have one member. The Contractor and CDOT shall select the DRB member and execute the agreement within 30 days of initiating the DRB process. If the parties do not agree on the DRB member, each shall select five candidates. Each party shall numerically rank their list using a scale of one to five with one being their first choice and five being their last choice. If common candidates are listed, but the parties cannot agree, that common candidate with the lowest combined numerical ranking shall be selected. If there is no common candidate, the lists shall be combined and each party shall eliminate three candidates from the list. Each party shall then numerically rank the remaining candidates, with No. 1 being the first choice. The candidate with the lowest combined numerical ranking shall be the DRB member.
 3. If the dispute has a value over \$250,000, the On Demand DRB shall have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson and execute the agreement within 45 days of initiating the DRB process.
 4. The Standing DRB shall always have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson, unless otherwise agreed to by the parties. The Contractor and CDOT shall submit their proposed Standing DRB members at the Preconstruction Conference.
 5. DRB members shall not have been involved in the administration of the project under consideration. DRB candidates shall disclose to the parties the following relationships:
 - (9) Prior employment with either party
 - (10) Prior or current financial interests or ties to either party
 - (11) Prior or current professional relationships with either party
 - (12) Anything else that might bring into question the impartiality or independence of the DRB memberIf either party objects to the selection of a potential DRB member based on the disclosures of the potential member, that potential member shall not be placed on the Board.
 6. There shall be no ex parte communications with the DRB at any time.
 7. The service of a Board member may be terminated only by written agreement of both parties.

If a Board member resigns, is unable to serve, or is terminated, a new Board member shall be selected within four weeks in the same manner as the Board member who was removed was originally selected.

(c) *Additional Responsibilities of the Standing Disputes Review Board*

1. General. Within 120 days after the establishment of the Board, the Board shall meet at a mutually agreeable location to:
 - (12) Obtain copies of the contract documents and Contractor's schedules for each of the Board members.
 - (13) Agree on the location of future meetings, which shall be reasonably close to the project site.
 - (14) Establish an address and telephone number for each Board member for the purposes of Board business.
2. Regular meetings. Regular meetings of the Board shall be held approximately every 120 to 180 days throughout the life of the Contract, except that this schedule may be modified to suit developments on the job as the work progresses. Regular meetings shall be attended by representatives of the Contractor and the Department.

3. The Board shall establish an agenda for each meeting which will cover all items that the Board considers necessary to keep it abreast of the project such as construction status, schedule, potential problems and solutions, status of past claims and disputes, and potential claims and disputes. Copies of each agenda shall be submitted to the Contractor and the Department at least seven days before the meeting date. Oral or written presentations or both shall be made by the Contractor and the Department as necessary to give the Board all the data the Board requires to perform its functions. The Board will prepare minutes of each meeting, circulate them to all participants for comments and approval, and issue revised minutes before the next meeting. As a part of each regular meeting, a field inspection trip of all active segments of the work at the project site may be made by the Board, the Contractor, and the Department.

(d) *Arranging a Dispute Review Board Hearing.* When the Project Engineer initiates the DRB review process, the Project Engineer will:

1. Arrange a hearing between CDOT, the Contractor, and the DRB (date, time, and location) and notify the Contractor at least 15 days before the hearing. Unless otherwise agreed to by both parties the DRB hearing will be held within 30 days after the DRB agreement is signed.
2. Ensure DRB members have copies of all documents previously prepared by the Contractor and CDOT pertaining to the dispute, the DRB request, the contract documents, and the special provisions at least two weeks before the hearing.

(e) *Pre-Hearing Submittal:* At least ten days prior to the hearing, CDOT and the Contractor shall each prepare and circulate to the DRB and the other party a pre-hearing position paper containing the following:

1. A joint statement of the dispute, and the scope of the desired decision. The joint statement shall summarize in a few sentences the nature of the dispute. If the parties are unable to agree on the wording of the joint statement, each party's position paper shall contain both statements, and identify the party authoring each statement.
2. The basis and justification for the party's position, with reference to contract language and other supporting documents for each element of the dispute. To minimize duplication and repetitiveness, the parties may identify a common set of documents that will be referred to by both parties and submit them in a separate package.
3. When the scope of the hearing includes quantum, the requesting party's position paper shall include full cost details, calculated in accordance with methods set forth in subsection 105.23(b).
4. A list of proposed attendees at the hearing. In the event of any disagreement, the DRB shall make the final determination as to who attends the hearing.
5. A list of any intended experts including their qualifications and a summary of what their presentation will include.

The number of copies, distribution requirements, and time for submittal shall be established by the DRB and communicated to the parties by the Chairperson.

(f) *Dispute Review Board Hearing.* The DRB shall preside over a hearing. The chairperson shall control the hearing and conduct it as follows:

1. An employee of CDOT presents a brief description of the project and the status of construction on the project.
2. The party that requested the DRB presents the dispute in detail as supported by previously submitted information and documentation.
3. The other party presents its position in detail.
4. Employees of each party are responsible for leading presentations at the DRB hearing.

5. Attorneys shall not participate in the hearing unless the DRB specifically addresses an issue to them or unless agreed to by both parties. Attorneys representing the parties are permitted to attend the hearing; provided their presence has been noted in the pre-hearing submittal.
 6. Either party may use experts. A party intending to offer an outside expert's analysis at the hearing shall disclose such intention in the pre-hearing position-paper. The expert's name and a general statement of the area of the dispute that will be covered by his presentation shall be included in the disclosure. The other party may present an outside expert to address or respond to those issues that may be raised by the disclosing party's outside expert.
 7. If both parties approve, the DRB may retain an outside expert. The DRB chairperson shall include the cost of the outside expert in the DRB's regular invoice. CDOT and the Contractor shall equally bear the cost of the services of the outside expert employed by the DRB.
 8. Upon completion of their presentations and rebuttals, both parties and the DRB will be provided the opportunity to exchange questions and answers. All questions shall be directed to the chairperson first. Attendees may respond only when board members request a response.
 9. The DRB shall hear only those disputes identified in the written request for the DRB and the information contained in the pre-hearing submittals. The board shall not hear or address other disputes. If either party attempts to discuss a dispute other than those to be heard by the DRB or attempts to submit new information, the chairperson shall inform such party that the board shall not hear the issue and shall not accept any additional information.
 10. If either party fails to timely deliver a position paper, the DRB may reschedule the hearing one time. On the final date and time established for the hearing, the DRB shall proceed with the hearing using the information that has been submitted.
 11. If a party fails to appear at the hearing, the DRB shall proceed as if all parties were in attendance.
- (g) *Dispute Review Board Recommendation.* The DRB shall issue a Recommendation in accordance with the following procedures:
1. The DRB shall not make a Recommendation on the dispute at the meeting. Prior to the closure of the hearing, the DRB members and the Contractor and CDOT together will discuss the time needed for analysis and review of the dispute and the issuance of the DRB's Recommendation. The maximum time shall be 30 days unless otherwise agreed to by both parties.
 2. After the meeting has been closed, the DRB shall prepare a written Recommendation signed by each member of the DRB. In the case of a three member DRB, where one member dissents, that member shall prepare a written dissent and sign it.
 3. The chairperson shall transmit the signed Recommendation and any supporting documents to both parties.
- (h) *Clarification and Reconsideration of Recommendation.* Either party may request clarification or reconsideration of a decision within ten days following receipt of the Recommendation. Within ten days after receiving the request, the DRB shall provide written clarification or reconsideration to both parties unless otherwise agreed to by both parties.

Requests for clarification or reconsideration shall be submitted in writing simultaneously to the DRB and to the other party.

The Board shall not accept requests for reconsideration that amount to a renewal of prior argument or additional argument based on facts available at the time of the hearing.

Only one request for clarification or reconsideration per dispute from each party will be allowed.

- (i) *Acceptance or Rejection of Recommendation.* CDOT and the Contractor shall submit their written acceptance or rejection of the Recommendation, in whole or in part, concurrently to the other party and to the DRB within 14 days after receipt of the Recommendation or following receipt of responses to requests for clarification or reconsideration.

If the parties accept the Recommendation or a discreet part thereof, it will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If either party rejects the Recommendation in whole or in part, it shall give written explanation to the other party within 14 days after receiving the Recommendation. When the Recommendation is rejected in whole or in part by either party, the other party may either abandon the dispute or pursue a formal claim in accordance with subsection 105.23.

- (j) *Admissibility of Recommendation.* Recommendations of a DRB issued in accordance with subsection 105.22 are admissible in subsequent proceedings but shall be prefaced with the following paragraph:

This Recommendation may be taken under consideration with the understanding that:

1. The DRB Recommendation was a proceeding based on presentations by the parties.
2. No fact or expert witnesses presented sworn testimony or were subject to cross-examination.
3. The parties to the DRB were not provided with the right to any discovery, such as production of documents or depositions.
4. There is no record of the DRB hearing other than the Recommendation.

- (k) *Cost and Payments.*

1. General Administrative Costs. The Contractor and the Department shall equally share the entire cost of the following to support the Board's operation:

- (20) Copies of Contract and other relevant documentation
- (21) Meeting space and facilities
- (22) Secretarial Services
- (23) Telephone
- (24) Mail
- (25) Reproduction
- (26) Filing

2. The Department and the Contractor shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,200 per day if time spent on-site per meeting is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$800 per day if time spent on-site per meeting is less than or equal to four hours. The time spent traveling to and from each meeting shall be reimbursed at \$50 per hour if the travel distance is more than 50 miles. The agreed daily and travel time rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel of more than 50 miles and incidentals for each day, or portion thereof that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time, (such as time spent evaluating and preparing recommendations on specific issues presented to the DRB), has been specifically agreed to in advance by the Department and Contractor. Time away from the project that has been specifically agreed to in advance by the parties will be compensated at an agreed rate of \$125 per hour. The agreed amount of \$125 per hour shall include all incidentals. Members serving on more than one DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project.
3. Payments to Board Members and General Administrative Costs. Each Board member shall submit an invoice to the Contractor for fees and applicable expenses incurred each month following a month in which the Board members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department. The Contractor shall submit to the Department copies of all invoices. No markups by the Contractor will be allowed on any DRB costs. The Department will split the cost by authorizing 50% payment on the next progress payment. The Contractor shall make all payments in full to Board members within seven calendar days after receiving payment from the Department for this work.

(l) *Dispute Review Board Three Party Agreement.*

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT
COLORADO PROJECT NO.

THIS THREE PARTY AGREEMENT, made this ____day of _____, _____,by and between:
the Colorado Department of Transportation, hereinafter called the "Department"; and

_____,
hereinafter called the "Contractor"; and

_____,
_____,
and

_____,
hereinafter called the "Dispute Review Board" or "Board".

WHEREAS, the Department is now engaged in the construction of the
[Project Name]

and

WHEREAS, the Contract provides for the establishment of a Board in accordance with subsections
105.21 and 105.22 of the specifications.

NOW, THEREFORE, it is hereby agreed:

ARTICLE I
DESCRIPTION OF WORK AND SERVICES

The Department and the Contractor shall form a Board in accordance with this agreement and the
provisions of subsection 105.22.

ARTICLE II
COMMITMENT ON PART OF THE PARTIES HERETO

The parties hereto shall faithfully fulfill the requirements of subsection 105.22 and the requirements of
this agreement.

ARTICLE III
COMPENSATION

The parties shall share equally in the cost of the Board, including general administrative costs (meeting
space and facilities, secretarial services, telephone, mail, reproduction, filing) and the member's
individual fees.. Reimbursement of the Contractor's share of the Board expenses for any reason is
prohibited.

The Contractor shall make all payments in full to Board members. The Contractor will submit to the
Department an itemized statement for all such payments, and the Department will split the cost by
including 50 percent payment on the next progress payment. The Contractor and the Department will
agree to accept invoiced costs prior to payment by the Contractor.

DISPUTE REVIEW BOARD

Board members shall keep all fee records pertaining to this agreement available for inspection by representatives of the Department and the Contractor for a period of three years after the termination of the Board members' services.

Payment to each Board member shall be at the fee rates established in subsection 105.22 and agreed to by each Board member, the Contractor, and the Department. In addition, reimbursement will be made for applicable expenses.

Each Board member shall submit an invoice to the Contractor for fees incurred each month following a month in which the members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department.

Payments shall be made to each Board member within 60 days after the Contractor and Department have received all the applicable billing data and verified the data submitted by that member. The Contractor shall make payment to the Board member within seven calendar days of receipt of payment from the Department.

**ARTICLE IV
ASSIGNMENT**

Board members shall not assign any of the work to be performed by them under this agreement. Board members shall disclose any conflicts of interest including but not limited to any dealings with the either party in the previous five years other than serving as a Board member under other contracts.

**ARTICLE V
COMMENCEMENT AND TERMINATION OF SERVICES**

The commencement of the services of the Board shall be in accordance with subsection 105.22 of the specifications and shall continue until all assigned disputes under the Contract which may require the Board's services have been heard and a Recommendation has been issued by the Board as specified in subsection 105.22. If a Board member is unable to fulfill his responsibilities for reasons specified in subsection 105.22(b)7, he shall be replaced as provided therein, and the Board shall fulfill its responsibilities as though there had been no change.

**ARTICLE VI
LEGAL RELATIONS**

The parties hereto mutually agree that each Board member in performance of his duties on the Board is acting as an independent contractor and not as an employee of either the Department or the Contractor. Board members will guard their independence and avoid any communication about the substance of the dispute without both parties being present.

The Board members are absolved of any personal liability arising from the Recommendations of the Board.

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT PAGE 3
COLORADO PROJECT NO.

IN WITNESS HEREOF, the parties hereto have caused this agreement to be executed the day and year first written above.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

CONTRACTOR: _____.

BY: _____.

TITLE:

COLORADO DEPARTMENT OF TRANSPORTATION

BY: _____.

TITLE: CHIEF ENGINEER

105.23 Claims for Unresolved Disputes. The Contractor may file a claim only if the disputes resolution process described in subsections 105.21 and 105.22 has been exhausted without resolution of the dispute. Other methods of nonbinding dispute resolution, exclusive of arbitration and litigation, can be used if agreed to by both parties.

This subsection applies to any unresolved dispute or set of disputes between CDOT and the Contractor with an aggregate value of more than \$15,000. Unresolved disputes with an aggregate value of more than \$15,000 from subcontractors, materials suppliers or any other entity not a party to the Contract shall be submitted through the Contractor in accordance with this subsection as a pass-through claim. Review of a pass-through claim does not create privity of Contract between CDOT and any other entity.

Subsections 105.21, 105.22 and 105.23 provide both contractual alternative dispute resolution processes and constitute remedy-granting provisions pursuant to Colorado Revised Statutes which must be exhausted in their entirety.

Merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

The venue for all unresolved disputes with an aggregate value \$15,000 or less shall be the County Court for the City and County of Denver.

Non-binding Forms of alternative dispute resolution such as Mediation are available upon mutual agreement of the parties for all claims submitted in accordance with this subsection.

The cost of the non-binding ADR process shall be shared equally by both parties with each party bearing its own preparation costs. The type of nonbinding ADR process shall be agreed upon by the parties and shall be conducted within the State of Colorado at a mutually acceptable location. Participation in a nonbinding ADR process does not in any way waive the requirement that merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

- (a) *Notice of Intent to File a Claim.* Within 30 days after rejection of the Dispute Resolution Board's Recommendation issued in accordance with subsection 105.22, the Contractor shall provide the Region Transportation Director with a written notice of intent to file a claim. The Contractor shall also send a copy of this notice to the Resident Engineer. For the purpose of this subsection Region Transportation Director shall mean the Region Transportation Director or the Region Transportation Director's designated representative. CDOT will acknowledge in writing receipt of Notice of Intent within 7 days.
- (b) *Claim Package Submission.* Within 60 days after submitting the notice of intent to file a claim, the Contractor shall submit five copies of a complete claim package representing the final position the Contractor wishes to have considered. All claims shall be in writing and in sufficient detail to enable the RTD to ascertain the basis and amount of claim. The claim package shall include all documents supporting the claim, regardless of whether such documents were provided previously to CDOT.

If requested by the Contractor the 60 day period may be extended by the RTD in writing prior to final acceptance. As a minimum, the following information shall accompany each claim.

1. A claim certification containing the following language, as appropriate:

(11) For a direct claim by the Contractor:

CONTRACTOR'S CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name)
,
(title) _____, of _____ (company) _____, hereby certifies that the
claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for work
on this contract is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

B. For a pass-through claim:

PASS-THROUGH CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
,
(title) _____, of _____ (company) _____, hereby certifies that
the claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for
work on this Project is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

Dated _____/s/ _____

The Contractor certifies that the claim being passed through to CDOT is passed through in good faith and is
accurate and complete to the best of my knowledge and belief.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

2. A detailed factual statement of the claim for additional compensation, time, or both, providing all necessary dates, locations, and items of work affected by the claim. The Contractor's detailed factual statement shall expressly describe the basis of the claim and factual evidence supporting the claim. This requirement is not satisfied by simply incorporating into the claim package other documents that describe the basis of the claim and supporting factual evidence.
3. The date on which facts were discovered which gave rise to the claim.
4. The name, title, and activity of all known CDOT, Consultant, and other individuals who may be knowledgeable about facts giving rise to such claim.
5. The name, title, and activity of all known Contractor, subcontractor, supplier and other individuals who may be knowledgeable about facts giving rise to such claim.
6. The specific provisions of the Contract, which support the claim and a statement of the reasons why such provisions support the claim.

7. If the claim relates to a decision of the Project Engineer, which the Contract leaves to the Project Engineer's discretion, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Project Engineer.
8. The identification of any documents and the substance of all oral communications that support the claim.
9. Copies of all known documents that support the claim.
10. The Dispute Review Board Recommendation.
11. If an extension of contract time is sought, the documents required by subsection 108.07(d).
12. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - A. These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
 - (1) Actual wages and benefits, including FICA, paid for additional labor
 - (2) Costs for additional bond, insurance and tax
 - (3) Increased costs for materials
 - (4) Equipment costs calculated in accordance with subsection 109.04(c) for Contractor owned equipment and based on certified invoice costs for rented equipment
 - (5) Costs of extended job site overhead
 - (6) Salaried employees assigned to the project
 - (7) Claims from subcontractors and suppliers at any level (the same level of detail as specified herein is required for all such claims)
 - (8) An additional 16 percent will be added to the total of items (1) through (7) as compensation for items for which no specific allowance is provided, including profit and home office overhead.
 - (9) Interest shall be paid in accordance with CRS 5-12-102 beginning from the date of the Notice of Intent to File Claim
 - B. In adjustment for the costs as allowed above, the Department will have no liability for the following items of damages or expense:
 - (1) Profit in excess of that provided in 12.A.(8) above
 - (2) Loss of Profit
 - (3) Additional cost of labor inefficiencies in excess of that provided in A. above
 - (4) Home office overhead in excess of that provided in A. above
 - (5) Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities, and insolvency
 - (6) Indirect costs or expenses of any nature in excess of that provided in A. above
 - (7) Attorneys fees, claim preparation fees, and expert fees
- (c) *Audit.* An audit may be performed by the Department for any claim, and is mandatory for all claims with amounts greater than \$250,000. All audits will be complete within 60 days of receipt of the complete claim package, provided the Contractor allows the auditors reasonable and timely access to the Contractor's books and records. For all claims with amounts greater than \$250,000 the Contractor shall submit a copy of certified claim package directly to the CDOT Audit Unit at the following address:

Division of Audit
4201 E. Arkansas Ave
Denver, Co. 80222

- (d) *Region Transportation Director Decision.* When the Contractor properly files a claim, the RTD will review the claim and render a written decision to the Contractor to either affirm or deny the claim, in whole or in part, in accordance with the following procedure.

The RTD may consolidate all related claims on a project and issue one decision, provided that consolidation does not extend the time period within which the RTD is to render a decision. Consolidation of unrelated claims will not be made.

The RTD will render a written decision to the Contractor within 60 days after the receipt of the claim package or receipt of the audit whichever is later. In rendering the decision, the RTD: (1) will review the information in the Contractor's claim; (2) will conduct a hearing if requested by either party; and (3) may consider any other information available in rendering a decision.

The RTD will assemble and maintain a claim record comprised of all information physically submitted by the Contractor in support of the claim and all other discoverable information considered by the RTD in reaching a decision. Once the RTD assembles the claim record, the submission and consideration of additional information, other than for clarification and data supporting previously submitted documentation, at any subsequent level of review by anyone, will not be permitted.

The RTD will provide a copy of the claim record and the written decision to the Contractor describing the information considered by the RTD in reaching a decision and the basis for that decision. If the RTD fails to render a written decision within the 60 day period, or within any extended time period as agreed to by both parties, the Contractor shall either: (1) accept this as a denial of the claim, or (2) appeal the claim to the Chief Engineer, as described in this subsection.

If the Contractor accepts the RTD decision, the provisions of the decision shall be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the RTD decision, the Contractor shall either: (1) accept the RTD decision as final, or (2) file a written appeal to the Chief Engineer within 30 days from the receipt of the RTD decision. The Contractor hereby agrees that if a written appeal is not properly filed, the RTD decision is final.

- (e) *Chief Engineer Decision.* When a claim is appealed, the RTD will provide the claim record to the Chief Engineer. Within 15 days of the appeal either party may submit a written request for a hearing with the Chief Engineer or duly authorized Headquarters delegate(s). The Chief Engineer or a duly authorized Headquarters delegate will review the claim and render a decision to affirm, overrule, or modify the RTD decision in accordance with the following.

The Contractor's written appeal to the Chief Engineer will be made a part of the claim record.

The Chief Engineer will render a written decision within 60 days after receiving the written appeal. The Chief Engineer will not consider any information that was not previously made a part of the claim record, other than clarification and data supporting previously submitted documentation.

The Contractor shall have 30 days to accept or reject the Chief Engineer's decision. The Contractor shall notify the Chief Engineer of its acceptance or rejection in writing.

If the Contractor accepts the Chief Engineer's decision, the provisions of the decision will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the Chief Engineer's decision, the Contractor shall either (1) pursue an alternative dispute resolution process in accordance with this specification or (2) initiate litigation or merit binding arbitration in accordance with subsection 105.23(f).

If the Chief Engineer does not issue a decision as required, the Contractor may immediately initiate either litigation or merit binding arbitration in accordance with subsection 105.23(f).

For the convenience of the parties to the Contract it is mutually agreed by the parties that any merit binding arbitration or De Novo litigation shall be brought within 180-calendar days from the date of the Chief

Engineer's decision. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action.

- (f) *De Novo Litigation or Merit Binding Arbitration.* If the Contractor disagrees with the Chief Engineer's decision, the Contractor may initiate de novo litigation or merit binding arbitration to finally resolve the claim that the Contractor submitted to CDOT, depending on which option was selected by the Contractor on Form 1378 which shall be submitted at the preconstruction conference. Such litigation or arbitration shall be strictly limited to those claims that were previously submitted and decided in the contractual dispute and claims processes outlined herein. This does not preclude the joining in one litigation or arbitration of multiple claims from the same project provided that each claim has gone through the dispute and claim process specified in subsections 105.21 through 105.23. The parties may agree, in writing, at any time, to pursue some other form of alternative dispute resolution.

Any offer made by the Contractor or the Department at any stage of the claims process, as set forth in this subsection, shall be deemed an offer of settlement pursuant Colorado Rule of Evidence 408 and therefore inadmissible in any litigation or arbitration.

If the Contractor selected litigation, then de novo litigation shall proceed in accordance with the Colorado Rules of Civil Procedure and the proper venue is the Colorado State District Court in and for the City and County of Denver, unless both parties agree to the use of arbitration.

If the Contractor selected merit binding arbitration, or if both parties subsequently agreed to merit binding arbitration, arbitration shall be governed by the modified version of AAA's Construction Industry Arbitration Rules which follow.

**AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY ARBITRATION RULES MODIFIED
FOR USE WITH CDOT SPECIFICATION SUBSECTION 105.23**

REGULAR TRACK PROCEDURES

R-1. Agreement of Parties

- (a) The parties shall be deemed to have made these rules a part of their Contract. These rules and any amendments shall apply in the form in effect at the time the administrative requirements are met for a demand for arbitration. The parties, by written agreement, may vary the procedures set forth in these rules. After appointment of the arbitrator, such modifications may be made only with the consent of the arbitrator.
- (b) Unless the parties determine otherwise, the Fast Track Procedures shall apply in any case in which aggregate claims do not exceed \$75,000, exclusive of interest and arbitration fees and costs. Parties may also agree to use these procedures in larger cases. Unless the parties agree otherwise, these procedures will not apply in cases involving more than two parties except for pass-through claims. The Fast Track Procedures shall be applied as described in Sections F-1 through F-13 of these rules, in addition to any other portion of these rules that is not in conflict with the Fast Track Procedures.
- (c) Unless the parties agree otherwise, the Procedures for Large, Complex Construction Disputes shall apply to all cases in which the disclosed aggregate claims of any party is at least \$500,000, exclusive of claimed interest, arbitration fees and costs. Parties may also agree to use these procedures in cases involving claims under \$500,000, or in nonmonetary cases. The Procedures for Large, Complex Construction Disputes shall be applied as described in Sections L-1 through L-4 of these rules, in addition to any other portion of these rules that is not in conflict with the Procedures for Large, Complex Construction Disputes.
- (d) All other cases shall be administered in accordance with Sections R-1 through R-45 of these rules.

R-2. Independent Arbitration Provider and Delegation of Duties

When parties agree to arbitrate under these rules, or when they provide for arbitration by an independent third-party (Arbitration Provider) and an arbitration is initiated under these rules, they thereby authorize the Arbitration Provider to administer the arbitration. The authority and duties of the Arbitration Provider are prescribed in the parties' Contract and in these rules, and may be carried out through such of the Arbitration Provider's representatives as it may direct. The Arbitration Provider will assign the administration of an arbitration to its Denver office

R-3. Initiation of Arbitration

Arbitration shall be initiated in the following manner.

- (a) The Contractor shall, within 30 days after the Chief Engineer issues a decision, submit to the Chief Engineer written notice of its intention to arbitrate (the "demand"). The demand shall indicate the appropriate qualifications for the arbitrator(s) to be appointed to hear the arbitration.
- (b) CDOT may file an answering statement with the Contractor within 15 days after receiving the demand. If a counterclaim is asserted, it shall contain a statement setting forth the nature of the counterclaim, the amount involved, if any, and the remedy sought.
- (c) The Chief Engineer shall retain an Arbitration Provider, such as the American Arbitration Association, which will administer an arbitration pursuant to these Rules, except to the extent that such rules conflict with the specifications, in which case the specifications shall control.
- (d) The Arbitration Provider shall confirm its retention to the parties.

R-4. Consolidation or Joinder

If the parties' agreement or the law provides for consolidation or joinder of related arbitrations, all involved parties will endeavor to agree on a process to effectuate the consolidation or joinder.

If they are unable to agree, the Arbitration Provider shall directly appoint a single arbitrator for the limited purpose of deciding whether related arbitrations should be consolidated or joined and, if so, establishing a fair and appropriate process for consolidation or joinder. The Arbitration Provider may take reasonable administrative action to accomplish the consolidation or joinder as directed by the arbitrator.

R-5. Appointment of Arbitrator

An arbitrator shall be appointed in the following manner:

- (a) Immediately after the Arbitration Provider is retained, the Arbitration Provider shall send simultaneously to each party to the dispute an identical list of 10 names of potential arbitrators. The parties are encouraged to agree to an arbitrator from the submitted list and to advise the AAA of their agreement. Absent agreement of the parties, the arbitrator shall not have served as the mediator in the mediation phase of the instant proceeding.
- (b) If the parties cannot agree to arbitrator(s), each party to the dispute shall have 15 calendar days from the transmittal date in which to strike names objected to, number the remaining names in order of preference, and return the list to the Arbitration Provider. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the Arbitration Provider shall invite an arbitrator to serve.
- (c) Unless both parties agree otherwise one arbitrator shall be used for claims less than \$250,000 and three arbitrators shall be used for claims \$250,000 and greater. Within 15 calendar days from the date of the appointment of the last arbitrator, the Arbitration Provider shall appoint a chairperson.
- (d) The entire claim record will be made available to the arbitrators by the Chief Engineer within 15 calendar days from the date of the appointment of the last arbitrator.

R-6. Changes of Claim

The arbitrator(s) will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation.

R-7. Disclosure

- (a) Any person appointed or to be appointed as an arbitrator shall disclose to the Arbitration Provider any circumstance likely to give rise to justifiable doubt as to the arbitrator's impartiality or independence, including any bias or any interest in the result of the arbitration or any relationship with the parties or their representatives. Such obligation shall remain in effect throughout the arbitration.
- (b) Upon receipt of such information from the arbitrator or another source, the Arbitration Provider shall communicate the information to the parties and, if it deems it appropriate to do so, to the arbitrator and others.
- (c) In order to encourage disclosure by arbitrators, disclosure of information pursuant to this Section R-6 is not to be construed as an indication that the arbitrator considers that the disclosed circumstances are likely to affect impartiality or independence.
- (d) In no case shall an arbitrator be employed by, affiliated with, or have consultive or business connection with the claimant Contractor or CDOT. An arbitrator shall not have assisted either in the evaluation, preparation, or presentation of the claim case either for the Contractor or the Department or have rendered an opinion on the merits of the claim for either party, and shall not do so during the proceedings of arbitration.

R-8. Disqualification of Arbitrator

- (a) Any arbitrator shall be impartial and independent and shall perform his or her duties with diligence and in good faith, and shall be subject to disqualification for: (i) partiality or lack of independence, (ii) inability or

refusal to perform his or her duties with diligence and in good faith; and/or (iii) any grounds for disqualification provided by applicable law.

- (b) Upon objection of a party to the continued service of an arbitrator, or on its own initiative, the Arbitration Provider shall determine whether the arbitrator should be disqualified under the grounds set out above, and shall inform the parties of its decision, which decision shall be conclusive.

R-9. Communication with Arbitrator

No party and no one acting on behalf of any party shall communicate *ex parte* with an arbitrator or a candidate for arbitrator concerning the arbitration.

R-10. Vacancies

- (a) If for any reason an arbitrator is unable to perform the duties of the office, the Arbitration Provider may, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules.
- (b) In the event of a vacancy in a panel of neutral arbitrators after the hearings have commenced, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.
- (c) In the event of the appointment of a substitute arbitrator, the panel of arbitrators shall determine in its sole discretion whether it is necessary to repeat all or part of any prior hearings.

R-11. Jurisdiction

- (a) The arbitrator shall have the power to rule on his or her own jurisdiction, including any objections with respect to the existence, scope or validity of the arbitration agreement.
- (b) The arbitrator shall have the power to determine the existence or validity of a contract of which an arbitration clause forms a part. Such an arbitration clause shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitrator that the contract is null and void shall not for that reason alone render invalid the arbitration clause.
- (c) A party must object to the jurisdiction of the arbitrator or to the arbitrability of a claim or counterclaim no later than 15 days after the Arbitration Provider confirms its retention to the parties. The arbitrator may rule on such objections as a preliminary matter or as part of the final award.

R-12. Administrative Conference

At the request of any party or upon the Arbitration Provider's own initiative, the Arbitration Provider may conduct an administrative conference, in person or by telephone, with the parties and/or their representatives. The conference may address such issues as arbitrator selection, potential exchange of information, a timetable for hearings and any other administrative matters.

R-13. Preliminary Hearing

- (a) At the request of any party or at the discretion of the arbitrator or the Arbitration Provider, the arbitrator may schedule as soon as practicable a preliminary hearing with the parties and/or their representatives. The preliminary hearing may be conducted by telephone at the arbitrator's discretion.
- (b) During the preliminary hearing, the parties and the arbitrator should discuss the future conduct of the case, including clarification of the issues and claims, a schedule for the hearings and any other preliminary matters.

R-14. Exchange of Information

- (a) At the request of any party or at the discretion of the arbitrator, consistent with the expedited nature of arbitration, the arbitrator may direct: (i) the production of documents and other information; (ii) short depositions, particularly with regard to experts; and/or (iii) the identification of any witnesses to be called.
- (b) At least five business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing.
- (c) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (d) Additional discovery may be ordered by the arbitrator in extraordinary cases when the demands of justice require it.

R-15. Date, Time, and Place of Hearing

- (a) The arbitrator shall set the date, time, and place for each hearing and/or conference. The parties shall respond to requests for hearing dates in a timely manner, be cooperative in scheduling the earliest practicable date, and adhere to the established hearing schedule.
- (b) The parties may mutually agree on the locale where the arbitration is to be held. Absent such agreement, the arbitration shall be held in the City and County of Denver.
- (c) The Arbitration Provider shall send a notice of hearing to the parties at least ten calendar days in advance of the hearing date, unless otherwise agreed by the parties.

R-16. Attendance at Hearings

The arbitrator and the Arbitration Provider shall maintain the privacy of the hearings unless the law provides to the contrary. Any person having a direct interest in the arbitration is entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any person other than a party and its representative.

R-17. Representation

Any party may be represented by counsel or other authorized representative. A party intending to be so represented shall notify the other party and the Arbitration Provider of the name and address of the representative at least three calendar days prior to the date set for the hearing at which that person is first to appear.

R-18. Oaths

Before proceeding with the first hearing, each arbitrator may take an oath of office and, if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person and, if it is required by law or requested by any party, shall do so.

R-19. Stenographic Record

Any party desiring a stenographic record shall make arrangements directly with a stenographer and shall notify the other parties of these arrangements at least three days in advance of the hearing. The requesting party or parties shall pay the cost of the record. If the transcript is agreed by the parties, or determined by the arbitrator to be the official record of the proceeding, it must be provided to the arbitrator and made available to the other parties for inspection, at a date, time, and place determined by the arbitrator.

R-20. Interpreters

Any party wishing an interpreter shall make all arrangements directly with the interpreter and shall assume the costs of the service.

R-21. Postponements

The arbitrator for good cause shown may postpone any hearing upon agreement of the parties, upon request of a party, or upon the arbitrator's own initiative.

R-22. Arbitration in the Absence of a Party or Representative

Unless the law provides to the contrary, the arbitration may proceed in the absence of any party or representative who, after due notice, fails to be present or fails to obtain a postponement. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as the arbitrator may require for the making of an award.

R-23. Conduct of Proceedings

- (a) The Contractor shall present evidence to support its claim. CDOT shall then present evidence supporting its defense. Witnesses for each party shall also submit to questions from the arbitrator and the adverse party. The arbitrator has the discretion to vary this procedure; provided that the parties are treated with equality and that each party has the right to be heard and is given a fair opportunity to present its case.
- (b) The arbitrator, exercising his or her discretion, shall conduct the proceedings with a view to expediting the resolution of the dispute and may direct the order of proof, bifurcate proceedings, and direct the parties to focus their presentations on issues the decision of which could dispose of all or part of the case. The arbitrator shall entertain motions, including motions that dispose of all or part of a claim or that may expedite the proceedings, and may also make preliminary rulings and enter interlocutory orders.
- (c) The parties may agree to waive oral hearings in any case.

R-24. Evidence

- (a) The arbitrators shall consider all written information available in the claim record and all oral presentations in support of that record by the Contractor and CDOT. Conformity to legal rules of evidence shall not be necessary.
- (b) The arbitrators shall not consider any written documents or arguments which have not previously been made a part of the claim record, other than clarification and data supporting previously submitted documentation. The arbitrators shall not consider an increase in the amount of the claim, or any new claims.
- (c) The arbitrator shall determine the admissibility, relevance, and materiality of any evidence offered. The arbitrator may request offers of proof and may reject evidence deemed by the arbitrator to be cumulative, unreliable, unnecessary, or of slight value compared to the time and expense involved. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where: (i) any of the parties is absent, in default, or has waived the right to be present, or (ii) the parties and the arbitrators agree otherwise.
- (d) The arbitrator shall take into account applicable principles of legal privilege, such as those involving the confidentiality of communications between a lawyer and client.
- (e) An arbitrator or other person authorized by law to subpoena witnesses or documents may do so upon the request of any party or independently.

R-25. Evidence by Affidavit and Post-hearing Filing of Documents or Other Evidence

- (a) The arbitrator may receive and consider the evidence of witnesses by declaration or affidavit, but shall give it only such weight as the arbitrator deems it entitled to after consideration of any objection made to its admission.
- (b) If the parties agree or the arbitrator directs that documents or other evidence be submitted to the arbitrator after the hearing, the documents or other evidence, unless otherwise agreed by the parties and the arbitrator, shall be filed with the Arbitration Provider for transmission to the arbitrator. All parties shall be afforded an opportunity to examine and respond to such documents or other evidence.

R-26. Inspection or Investigation

An arbitrator finding it necessary to make an inspection or investigation in connection with the arbitration shall direct the Arbitration Provider to so advise the parties. The arbitrator shall set the date and time and the Arbitration Provider shall notify the parties. Any party who so desires may be present at such an inspection or investigation. In the event that one or all parties are not present at the inspection or investigation, the arbitrator shall make an oral or written report to the parties and afford them an opportunity to comment.

R-27. Interim Measures

- (a) The arbitrator may take whatever interim measures he or she deems necessary, including injunctive relief and measures for the protection or conservation of property and disposition of perishable goods.
- (b) A request for interim measures addressed by a party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate or a waiver of the right to arbitrate.

R-28. Closing of Hearing

When satisfied that the presentation of the parties is complete, the arbitrator shall declare the hearing closed.

If documents or responses are to be filed as provided in Section R-24, or if briefs are to be filed, the hearing shall be declared closed as of the final date set by the arbitrator for the receipt of documents, responses, or briefs. The time limit within which the arbitrator is required to make the award shall commence to run, in the absence of other agreements by the parties and the arbitrator, upon the closing of the hearing.

R-29. Reopening of Hearing

The hearing may be reopened on the arbitrator's initiative, or by direction of the arbitrator upon application of a party, at any time before the award is made. If reopening the hearing would prevent the making of the award within the specific time agreed to by the parties in the arbitration agreement, the matter may not be reopened unless the parties agree to an extension of time. When no specific date is fixed by agreement of the parties, the arbitrator shall have 15 calendar days from the closing of the reopened hearing within which to make an award.

R-30. Waiver of Rules

Any party who proceeds with the arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state an objection in writing shall be deemed to have waived the right to object.

R-31. Extensions of Time

The parties may modify any period of time by mutual agreement. The Arbitration Provider or the arbitrator may for good cause extend any period of time established by these rules, except the time for making the award. The Arbitration Provider shall notify the parties of any extension.

R-32. Serving of Notice

- (a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.
- (b) The Arbitration Provider, the arbitrator and the parties may also use overnight delivery, electronic facsimile transmission (fax), or electronic mail (email) to give the notices required by these rules.

- (c) Unless otherwise instructed by the Arbitration Provider or by the arbitrator, any documents submitted by any party to the Arbitration Provider or to the arbitrator shall simultaneously be provided to the other party or parties to the arbitration.

R-33. Majority Decision

When the panel consists of more than one arbitrator, unless required by law or by the arbitration agreement, a majority of the arbitrators must make all decisions.

R-34. Time of Award

The award shall be made promptly by the arbitrator and, unless otherwise agreed by the parties or specified by law, no later than 30 calendar days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

R-35. Form of Award

After complete review of the facts associated with the claim, the arbitrators shall render a written explanation of their decision. When three arbitrators are used, and only two arbitrators agree then the award shall be signed by the two arbitrators. The arbitrator's decision shall include:

- (a) A summary of the issues and factual evidence presented by the Contractor and the Department concerning the claim;
- (b) Decisions concerning the validity of the claim;
- (c) Decisions concerning the value of the claim as to cost impacts if the claim is determined to be valid;
- (d) The contractual and factual bases supporting the decisions made including an explanation as to why each and every position was accepted or rejected;
- (e) Detailed and supportable calculations which support any decisions.

R-36. Scope of Award

- (a) The arbitrator may grant any remedy or relief that the arbitrator deems just and equitable and within the scope of the agreement of the parties, including, but not limited to, equitable relief and specific performance of a contract.
- (b) In addition to the final award, the arbitrator may make other decisions, including interim, interlocutory, or partial rulings, orders, and awards. (c) The award of the arbitrator may include interest at the statutory rate and from such date as the arbitrator may deem appropriate.

R-37. Delivery of Award to Parties

Parties shall accept as notice and delivery of the award the placing of the award or a true copy thereof in the mail addressed to the parties or their representatives at the last known address, personal or electronic service of the award, or the filing of the award in any other manner that is permitted by law.

R-38. Modification of Award

Within 10 calendar days after the transmittal of an award, the arbitrator on his or her initiative, or any party, upon notice to the other parties, may request that the arbitrator correct any clerical, typographical, technical or computational errors in the award. The arbitrator is not empowered to redetermine the merits of any claim already decided.

If the modification request is made by a party, the other parties shall be given 10 calendar days to respond to the request. The arbitrator shall dispose of the request within 25 calendar days after transmittal by the Arbitration Provider to the arbitrator of the request.

If applicable law provides a different procedural time frame, that procedure shall be followed.

R-39. Appeal of Award

Appeal of the arbitrators' decision concerning the merit of the claim is governed by the Colorado Uniform Arbitration Act, C.R.S. §§ 13-22-202 to -230. Either party may appeal the arbitrator's decision on the value of the claim to the Colorado State District Court in and for the City and County of Denver for trial de novo.

R-40. Release of Documents for Judicial Proceedings

The Arbitration Provider shall, upon the written request of a party, furnish to the party, at its expense, certified copies of any papers in the Arbitration Provider's possession that may be required in judicial proceedings relating to the arbitration.

R-41. Applications to Court and Exclusion of Liability

- (a) No judicial proceeding by a party relating to the subject matter of the arbitration shall be deemed a waiver of the party's right to arbitrate.
- (b) Neither the Arbitration Provider nor any arbitrator in a proceeding under these rules is a necessary or proper party in judicial proceedings relating to the arbitration.
- (c) Parties to these rules shall be deemed to have consented that judgment upon the arbitration award may be entered in any federal or state court having jurisdiction thereof.
- (d) Parties to an arbitration under these rules shall be deemed to have consented that neither the Arbitration Provider nor any arbitrator shall be liable to any party in any action for damages or injunctive relief for any act or omission in connection with any arbitration under these rules.

R-42. Administrative Fees

The Arbitration Provider shall prescribe filing and other administrative fees and service charges to compensate it for the cost of providing administrative services. The fees in effect when the fee or charge is incurred shall be applicable. Such fees and charges shall be borne equally by the parties.

The Arbitration Provider may, in the event of extreme hardship on the part of any party, defer or reduce the administrative fees.

R-43. Expenses

The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the arbitration, including required travel and other expenses of the arbitrator, Arbitration Provider representatives, and any witness and the cost of any proof produced at the direct request of the arbitrator, shall be borne equally by the parties.

R-44. Neutral Arbitrator's Compensation

Arbitrators shall be compensated a rate consistent with the arbitrator's stated rate of compensation.

If there is disagreement concerning the terms of compensation, an appropriate rate shall be established with the arbitrator by the Arbitration Provider and confirmed to the parties.

Such compensation shall be borne equally by the parties.

R-45. Deposits

The Arbitration Provider may require the parties to deposit in advance of any hearings such sums of money as it deems necessary to cover the expense of the arbitration, including the arbitrator's fee, if any, and shall render an accounting to the parties and return any unexpended balance at the conclusion of the case.

R-46. Interpretation and Application of Rules

The arbitrator shall interpret and apply these rules insofar as they relate to the arbitrator's powers and duties by a majority vote. If that is not possible, either an arbitrator or a party may refer the question to the Arbitration Provider for final decision. All other rules shall be interpreted and applied by the Arbitration Provider.

R-45. Suspension for Nonpayment

If arbitrator compensation or administrative charges have not been paid in full, the Arbitration Provider may so inform the parties in order that the parties may advance the required payment. If such payments are not made, the arbitrator may order the suspension or termination of the proceedings. If no arbitrator has yet been appointed, the Arbitration Provider may suspend the proceedings.

FAST TRACK PROCEDURES

F-1. Limitations on Extensions

In the absence of extraordinary circumstances, the Arbitration Provider or the arbitrator may grant a party no more than one seven-day extension of the time in which to respond to the demand for arbitration or counterclaim as provided in Section R-3.

F-2. Changes of Claim

The arbitrator will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation

F-3. Serving of Notice

In addition to notice provided above, the parties shall also accept notice by telephone. Telephonic notices by the Arbitration Provider shall subsequently be confirmed in writing to the parties. Should there be a failure to confirm in writing any such oral notice, the proceeding shall nevertheless be valid if notice has, in fact, been given by telephone.

F-4. Appointment and Qualification of Arbitrator

Immediately after the retention of the Arbitration Provider, the Arbitration Provider will simultaneously submit to each party a listing and biographical information from its panel of arbitrators knowledgeable in construction who are available for service in Fast Track cases. The parties are encouraged to agree to an arbitrator from this list, and to advise the Arbitration Provider of their agreement, or any factual objections to any of the listed arbitrators, within 7 calendar days of the transmission of the list. The Arbitration Provider will appoint the agreed-upon arbitrator, or in the event the parties cannot agree on an arbitrator, will designate the arbitrator from among those names not stricken for factual objections.

The parties will be given notice by the Arbitration Provider of the appointment of the arbitrator, who shall be subject to disqualification for the reasons specified above. Within the time period established by the Arbitration Provider, the parties shall notify the Arbitration Provider of any objection to the arbitrator appointed. Any objection by a party to the arbitrator shall be for cause and shall be confirmed in writing to the Arbitration Provider with a copy to the other party or parties.

F-5. Preliminary Telephone Conference

Unless otherwise agreed by the parties and the arbitrator, as promptly as practicable after the appointment of the arbitrator, a preliminary telephone conference shall be held among the parties or their attorneys or representatives, and the arbitrator.

F-6. Exchange of Exhibits

At least 2 business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing. The arbitrator is authorized to resolve any disputes concerning the exchange of exhibits.

F-7. Discovery

There shall be no discovery, except as provided in Section F-4 or as ordered by the arbitrator in extraordinary cases when the demands of justice require it.

F-8. Date, Time, and Place of Hearing

The arbitrator shall set the date and time, and place of the hearing, to be scheduled to take place within 30 calendar days of confirmation of the arbitrator's appointment. The Arbitration Provider will notify the parties in advance of the hearing date. All hearings shall be held within the City and County of Denver.

F-9. The Hearing

- (a) Generally, the hearing shall not exceed 1 day. Each party shall have equal opportunity to submit its proofs and complete its case. The arbitrator shall determine the order of the hearing, and may require further submission of documents within two business days after the hearing. For good cause shown, the arbitrator may schedule 1 additional hearing day within 7 business days after the initial day of hearing.
- (b) Generally, there will be no stenographic record. Any party desiring a stenographic record may arrange for one pursuant to the provisions above.

F-10. Time of Award

Unless otherwise agreed by the parties, the award shall be rendered not later than 14 calendar days from the date of the closing of the hearing or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

F-11. Time Standards

The arbitration shall be completed by settlement or award within 60 calendar days of confirmation of the arbitrator's appointment, unless all parties and the arbitrator agree otherwise or the arbitrator extends this time in extraordinary cases when the demands of justice require it.

F-12. Arbitrator's Compensation

Arbitrators will receive compensation at a rate to be suggested by the Arbitration Provider regional office.

PROCEDURES FOR LARGE, COMPLEX CONSTRUCTION DISPUTES

L-1. Large, Complex Construction Disputes

The procedures for large, complex construction disputes shall apply to any claim with a value exceeding \$500,000 or as agreed to by the parties.

L-2. Administrative Conference

Prior to the dissemination of a list of potential arbitrators, the Arbitration Provider shall, unless the parties agree otherwise, conduct an administrative conference with the parties and/or their attorneys or other representatives by conference call. The conference call will take place within 14 days after the retention of the Arbitration Provider. In the event the parties are unable to agree on a mutually acceptable time for the conference, the Arbitration Provider may contact the parties individually to discuss the issues contemplated herein. Such administrative conference shall be conducted for the following purposes and for such additional purposes as the parties or the Arbitration Provider may deem appropriate:

- (a) To obtain additional information about the nature and magnitude of the dispute and the anticipated length of hearing and scheduling;
- (b) To discuss the views of the parties about the technical and other qualifications of the arbitrators;
- (c) To obtain conflicts statements from the parties; and
- (d) To consider, with the parties, whether mediation or other non-adjudicative methods of dispute resolution might be appropriate.

L-3. Arbitrators

- (a) Large, Complex Construction Cases shall be heard and determined by three arbitrators.
- (b) The Arbitration Provider shall appoint arbitrator(s) in the manner provided in the Regular Construction Industry Arbitration Rules.

L-4. Preliminary Hearing

As promptly as practicable after the selection of the arbitrator(s), a preliminary hearing shall be held among the parties and/or their attorneys or other representatives and the arbitrator(s). Unless the parties agree otherwise, the preliminary hearing will be conducted by telephone conference call rather than in person.

At the preliminary hearing the matters to be considered shall include, without limitation:

- (a) Service of a detailed statement of claims, damages and defenses, a statement of the issues asserted by each party and positions with respect thereto, and any legal authorities the parties may wish to bring to the attention of the arbitrator(s);
- (b) Stipulations to uncontested facts;
- (c) The extent to which discovery shall be conducted;
- (d) Exchange and premarking of those documents which each party believes may be offered at the hearing;
- (e) The identification and availability of witnesses, including experts, and such matters with respect to witnesses including their biographies and expected testimony as may be appropriate;
- (f) Whether, and the extent to which, any sworn statements and/or depositions may be introduced;
- (g) The extent to which hearings will proceed on consecutive days;
- (h) Whether a stenographic or other official record of the proceedings shall be maintained;
- (i) The possibility of utilizing mediation or other non-adjudicative methods of dispute resolution; and
- (j) The procedure for the issuance of subpoenas.

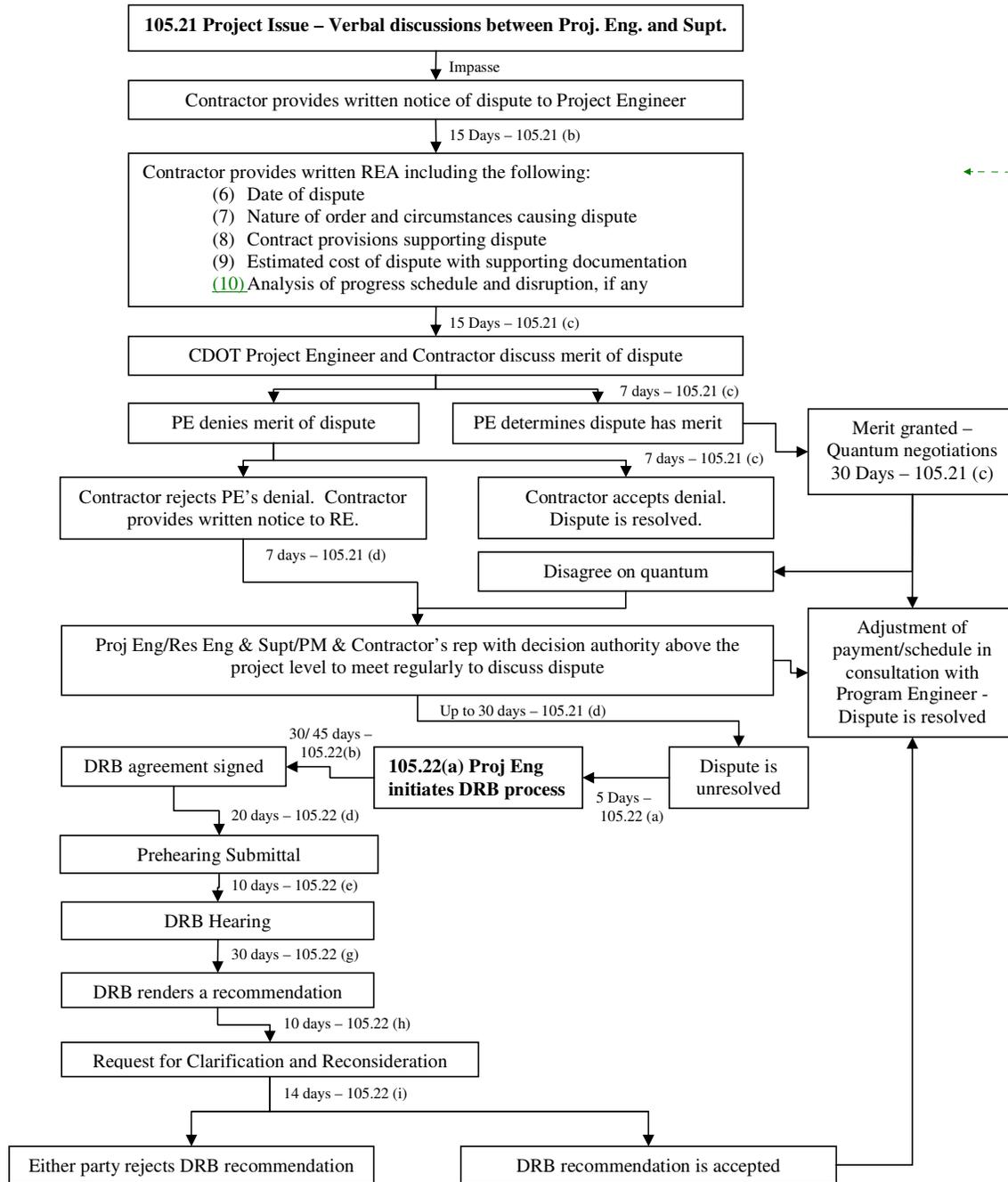
By agreement of the parties and/or order of the arbitrator(s), the pre-hearing activities and the hearing procedures that will govern the arbitration will be memorialized in a Scheduling and Procedure Order.

L-5. Management of Proceedings

- (a) Arbitrator(s) shall take such steps as they may deem necessary or desirable to avoid delay and to achieve a just, speedy and cost-effective resolution of Large, Complex Construction Cases.

- (b) Parties shall cooperate in the exchange of documents, exhibits and information within such party's control if the arbitrator(s) consider such production to be consistent with the goal of achieving a just, speedy and cost effective resolution of a Large, Complex Construction Case.
- (c) The parties may conduct such discovery as may be agreed to by all the parties provided, however, that the arbitrator(s) may place such limitations on the conduct of such discovery as the arbitrator(s) shall deem appropriate. If the parties cannot agree on production of document and other information, the arbitrator(s), consistent with the expedited nature of arbitration, may establish the extent of the discovery.
- (d) At the discretion of the arbitrator(s), upon good cause shown and consistent with the expedited nature of arbitration, the arbitrator(s) may order depositions of, or the propounding of interrogatories to such persons who may possess information determined by the arbitrator(s) to be necessary to a determination of the matter.
- (e) The parties shall exchange copies of all exhibits they intend to submit at the hearing 10 business days prior to the hearing unless the arbitrator(s) determine otherwise.
- (f) The exchange of information pursuant to this rule, as agreed by the parties and/or directed by the arbitrator(s), shall be included within the Scheduling and Procedure Order.
- (g) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (h) Generally hearings will be scheduled on consecutive days or in blocks of consecutive days in order to maximize efficiency and minimize costs.

**Figure 105-1
DISPUTES AND CLAIMS FLOW CHART**



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Figure 105-1 continued on next page

January 17, 2008

REVISION OF SECTION 105
DISPUTES AND CLAIMS FOR
CONTRACT ADJUSTMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects. If a standing DRB is required for the project, add the following General Note to the Plans: "There shall be a Standing Disputes Review Board for this Project." A standing DRB should be called for on the following types of projects:

19. Large projects (greater than \$15 million)
20. Projects with complex construction
21. Projects with large complex structures
22. Projects with multi-phase construction
23. Projects with major impacts to traffic
24. Projects with other complicating factors that could easily lead to disputes

On projects that require a standing DRB, establish a planned force account item to cover the ongoing costs of the DRB.

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 105.21 and replace it with the following subsections 105.21, 105.22, and 105.23.

105.21 Dispute Resolution. Subsections 105.21, 105.22, and 105.23 detail the process through which the parties (CDOT and the Contractor) agree to resolve any issue that may result in a dispute. The intent of the process is to resolve issues early, efficiently, and as close to the project level as possible. Figure 105-1 at the end of subsection 105.23 outlines the process. Specified time frames may be extended by mutual agreement of the Engineer and the Contractor.

A dispute is a disagreement concerning contract price, time, interpretation of the Contract, or all three between the parties at the project level regarding or relating to the Contract. Disputes include, but are not limited to, any disagreement resulting from a delay, a change order, another written order, or an oral order from the Project Engineer, including any direction, instruction, interpretation, or determination by the Project Engineer, interpretations of the Contract provisions, plans, or specifications or the existence of alleged differing site conditions.

The term "merit" refers to the right of a party to recover on a claim or dispute, irrespective of quantum, based on the substance, elements, and grounds of that claim or dispute. The term "quantum" refers to the quantity or amount of compensation or time deserved when a claim or dispute is found to have merit.

Disputes from subcontractors, materials suppliers, or any other entity not party to the Contract shall be submitted through the Contractor. Review of a pass-through dispute does not create privity of Contract between CDOT and the subcontractor.

When an issue arises on the project that can not be resolved between the parties, either party may consider it a dispute and initiate the dispute resolution process as described in subsection 105.21(b).

If CDOT does not respond within the specified timelines, the Contractor may advance the dispute to the next level.

When the Project Engineer is a Consultant Project Engineer, actions, decisions, and determinations specified herein as made by the Project Engineer shall be made by the Resident Engineer.

A claim will not be accepted by CDOT until all remedies for dispute resolution provided for in subsections 105.21 and 105.22 have been exhausted. If CDOT contends that the Contractor has failed to follow the provisions of subsection 105.21 or 105.22, CDOT will notify the Contractor in writing and provide the Contractor with ten days in which to cure the alleged failure. After the CDOT notice, unless the Engineer grants an exception in writing, failure to comply with the requirements set forth in subsections 105.21, 105.22 and 105.23, shall bar the Contractor from any further administrative, equitable, or legal remedy.

(a) *Document Retention.* The Contractor shall keep full and complete records of the costs and additional time incurred for each dispute for a period of at least three years after the date of final payment or until dispute is resolved, whichever is more. The Contractor, subcontractors, and lower tier subcontractors shall provide adequate facilities, acceptable to the Engineer, for an audit during normal business hours. The Contractor shall permit the Engineer or Department auditor to examine and copy those records and all other records required by the Engineer to determine the facts or contentions involved in the dispute. CDOT and CDOT's attorneys and consultants will affirmatively act to protect the records and information from disclosure beyond those persons having a need to know the information for the purpose of making a decision regarding the claim, or for law enforcement purposes. The Contractor shall identify and segregate any documents or information that the Contractor considers particularly sensitive, such as confidential or proprietary information.

- (b) *Initial Dispute Resolution Process.* To initiate the dispute resolution process the Contractor shall provide a written notice of dispute to the Project Engineer upon the failure of the Parties to resolve the issue through negotiation. Disputes will not be considered unless the Contractor has first complied with specified issue resolution processes such as those specified in subsections 104.02, 106.05, 108.07(a), and 108.07(d).

The Contractor shall supplement the written notice of dispute within 15 days with a written Request for Equitable Adjustment (REA) providing the following:

- (28) The date of the dispute
- (29) The nature of the circumstances which caused the dispute
- (30) The Contract provisions and any other basis supporting the Contractor's position
- (31) The estimated dollar cost, if any, of the dispute with supporting documentation
- (32) An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption.

The Contractor shall submit as much of the above information as is reasonably available with the REA and then supplement the REA as additional information becomes available.

- (c) *Project Engineer Review.* Within 15 days after receipt of the REA, the Project Engineer will meet with the Contractor to discuss the merits of the dispute. Within seven days after this meeting, the Project Engineer will issue a written decision on the merits of the dispute.

The Project Engineer will either deny the merits of the dispute or notify the Contractor that the dispute has merit. This determination will include a summary of the relevant facts, Contract provisions supporting the determination, and an evaluation of all scheduling issues that may be involved.

If the dispute is determined to have merit, the Contractor and the Project Engineer will determine the adjustment in payment, schedule, or both within 30 days. When a satisfactory adjustment is determined, it shall be implemented in accordance with subsections 106.05, 108.07, 109.04, 109.05 or 109.10 and the dispute is resolved.

If the Contractor accepts the Project Engineer's denial of the merits of the dispute, the dispute is resolved and no further action will be taken. If the Contractor does not respond in seven days, it will be assumed he has accepted the denial. If the Contractor rejects the Project Engineer's denial of the merits of the dispute or a satisfactory adjustment of payment or schedule can not be agreed upon within 30 days, the Contractor may further pursue resolution of the dispute by providing written notice to the Resident Engineer within seven days, according to subsection 105.21(d).

- (d) *Resident Engineer Review.* Within seven days after receipt of the Contractor's written notice to the Resident Engineer of unsatisfactory resolution of the dispute, the Project Engineer and Resident Engineer will meet with the Contractor to discuss the dispute. Meetings shall continue weekly for a period of up to 30 days and shall include a Contractor's representative with decision authority above the project level.

If these meetings result in resolution of the dispute, the resolution will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If these meetings do not result in a resolution or the participants mutually agree that they have reached an impasse, the dispute shall be presented to the Dispute Review Board in accordance with subsection 105.22.

105.22 Dispute Review Board. A Dispute Review Board (DRB) is an independent third party that will provide specialized expertise in technical areas and administration of construction contracts. The DRB will assist in and facilitate the timely and equitable resolution of disputes between CDOT and the Contractor in an effort to avoid animosity and construction delays, and to resolve disputes as close to the project level as possible. The DRB shall be established and operate as provided herein and shall serve as an independent and impartial board.

There are two types of DRBs: the "On Demand DRB" and the "Standing DRB". The DRB shall be an "On Demand DRB" unless a "Standing DRB" is specified in the Contract. An On Demand DRB shall be established only when the Project Engineer initiates a DRB review in accordance with subsection 105.22(a). A Standing DRB, when specified in the Contract, shall be established at the beginning of the project.

- (a) *Initiation of Dispute Review Board Review.* When a dispute has not been resolved in accordance with subsection 105.21, the Project Engineer will initiate the DRB review process within 5 days after the period described in subsection 105.21(d).
- (b) *Formation of Dispute Review Board.* DRBs will be established in accordance with the following procedures:
1. CDOT, in conjunction with the Colorado Contractors Association, will maintain a non-exclusive statewide list of suggested DRB candidates experienced in construction processes and the interpretation of contract documents and the resolution of construction disputes. The Board members shall be experienced in highway and transportation projects. When a DRB is formed, the parties shall execute the agreement set forth in subsection 105.22(k). Either party may add candidates to the list at any time.
 2. If the dispute has a value of \$250,000 or less, the On Demand DRB shall have one member. The Contractor and CDOT shall select the DRB member and execute the agreement within 30 days of initiating the DRB process. If the parties do not agree on the DRB member, each shall select five candidates. Each party shall numerically rank their list using a scale of one to five with one being their first choice and five being their last choice. If common candidates are listed, but the parties cannot agree, that common candidate with the lowest combined numerical ranking shall be selected. If there is no common candidate, the lists shall be combined and each party shall eliminate three candidates from the list. Each party shall then numerically rank the remaining candidates, with No. 1 being the first choice. The candidate with the lowest combined numerical ranking shall be the DRB member.
 3. If the dispute has a value over \$250,000, the On Demand DRB shall have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson and execute the agreement within 45 days of initiating the DRB process.
 4. The Standing DRB shall always have three members. The Contractor and CDOT shall each select a member and those two members shall select a third member to act as the chairperson, unless otherwise agreed to by the parties. The Contractor and CDOT shall submit their proposed Standing DRB members at the Preconstruction Conference.
 5. DRB members shall not have been involved in the administration of the project under consideration. DRB candidates shall disclose to the parties the following relationships:
 - (13) Prior employment with either party
 - (14) Prior or current financial interests or ties to either party
 - (15) Prior or current professional relationships with either party
 - (16) Anything else that might bring into question the impartiality or independence of the DRB memberIf either party objects to the selection of a potential DRB member based on the disclosures of the potential member, that potential member shall not be placed on the Board.
 6. There shall be no ex parte communications with the DRB at any time.
 7. The service of a Board member may be terminated only by written agreement of both parties.

If a Board member resigns, is unable to serve, or is terminated, a new Board member shall be selected within four weeks in the same manner as the Board member who was removed was originally selected.

(c) *Additional Responsibilities of the Standing Disputes Review Board*

1. General. Within 120 days after the establishment of the Board, the Board shall meet at a mutually agreeable location to:
 - (15) Obtain copies of the contract documents and Contractor's schedules for each of the Board members.
 - (16) Agree on the location of future meetings, which shall be reasonably close to the project site.
 - (17) Establish an address and telephone number for each Board member for the purposes of Board business.
2. Regular meetings. Regular meetings of the Board shall be held approximately every 120 to 180 days throughout the life of the Contract, except that this schedule may be modified to suit developments on the job as the work progresses. Regular meetings shall be attended by representatives of the Contractor and the Department.

3. The Board shall establish an agenda for each meeting which will cover all items that the Board considers necessary to keep it abreast of the project such as construction status, schedule, potential problems and solutions, status of past claims and disputes, and potential claims and disputes. Copies of each agenda shall be submitted to the Contractor and the Department at least seven days before the meeting date. Oral or written presentations or both shall be made by the Contractor and the Department as necessary to give the Board all the data the Board requires to perform its functions. The Board will prepare minutes of each meeting, circulate them to all participants for comments and approval, and issue revised minutes before the next meeting. As a part of each regular meeting, a field inspection trip of all active segments of the work at the project site may be made by the Board, the Contractor, and the Department.

(d) *Arranging a Dispute Review Board Hearing.* When the Project Engineer initiates the DRB review process, the Project Engineer will:

1. Arrange a hearing between CDOT, the Contractor, and the DRB (date, time, and location) and notify the Contractor at least 15 days before the hearing. Unless otherwise agreed to by both parties the DRB hearing will be held within 30 days after the DRB agreement is signed.
2. Ensure DRB members have copies of all documents previously prepared by the Contractor and CDOT pertaining to the dispute, the DRB request, the contract documents, and the special provisions at least two weeks before the hearing.

(e) *Pre-Hearing Submittal:* At least ten days prior to the hearing, CDOT and the Contractor shall each prepare and circulate to the DRB and the other party a pre-hearing position paper containing the following:

1. A joint statement of the dispute, and the scope of the desired decision. The joint statement shall summarize in a few sentences the nature of the dispute. If the parties are unable to agree on the wording of the joint statement, each party's position paper shall contain both statements, and identify the party authoring each statement.
2. The basis and justification for the party's position, with reference to contract language and other supporting documents for each element of the dispute. To minimize duplication and repetitiveness, the parties may identify a common set of documents that will be referred to by both parties and submit them in a separate package.
3. When the scope of the hearing includes quantum, the requesting party's position paper shall include full cost details, calculated in accordance with methods set forth in subsection 105.23(b).
4. A list of proposed attendees at the hearing. In the event of any disagreement, the DRB shall make the final determination as to who attends the hearing.
5. A list of any intended experts including their qualifications and a summary of what their presentation will include.

The number of copies, distribution requirements, and time for submittal shall be established by the DRB and communicated to the parties by the Chairperson.

(f) *Dispute Review Board Hearing.* The DRB shall preside over a hearing. The chairperson shall control the hearing and conduct it as follows:

1. An employee of CDOT presents a brief description of the project and the status of construction on the project.
2. The party that requested the DRB presents the dispute in detail as supported by previously submitted information and documentation.
3. The other party presents its position in detail.
4. Employees of each party are responsible for leading presentations at the DRB hearing.

5. Attorneys shall not participate in the hearing unless the DRB specifically addresses an issue to them or unless agreed to by both parties. Attorneys representing the parties are permitted to attend the hearing; provided their presence has been noted in the pre-hearing submittal.
 6. Either party may use experts. A party intending to offer an outside expert's analysis at the hearing shall disclose such intention in the pre-hearing position-paper. The expert's name and a general statement of the area of the dispute that will be covered by his presentation shall be included in the disclosure. The other party may present an outside expert to address or respond to those issues that may be raised by the disclosing party's outside expert.
 7. If both parties approve, the DRB may retain an outside expert. The DRB chairperson shall include the cost of the outside expert in the DRB's regular invoice. CDOT and the Contractor shall equally bear the cost of the services of the outside expert employed by the DRB.
 8. Upon completion of their presentations and rebuttals, both parties and the DRB will be provided the opportunity to exchange questions and answers. All questions shall be directed to the chairperson first. Attendees may respond only when board members request a response.
 9. The DRB shall hear only those disputes identified in the written request for the DRB and the information contained in the pre-hearing submittals. The board shall not hear or address other disputes. If either party attempts to discuss a dispute other than those to be heard by the DRB or attempts to submit new information, the chairperson shall inform such party that the board shall not hear the issue and shall not accept any additional information.
 10. If either party fails to timely deliver a position paper, the DRB may reschedule the hearing one time. On the final date and time established for the hearing, the DRB shall proceed with the hearing using the information that has been submitted.
 11. If a party fails to appear at the hearing, the DRB shall proceed as if all parties were in attendance.
- (g) *Dispute Review Board Recommendation.* The DRB shall issue a Recommendation in accordance with the following procedures:
1. The DRB shall not make a Recommendation on the dispute at the meeting. Prior to the closure of the hearing, the DRB members and the Contractor and CDOT together will discuss the time needed for analysis and review of the dispute and the issuance of the DRB's Recommendation. The maximum time shall be 30 days unless otherwise agreed to by both parties.
 2. After the meeting has been closed, the DRB shall prepare a written Recommendation signed by each member of the DRB. In the case of a three member DRB, where one member dissents, that member shall prepare a written dissent and sign it.
 3. The chairperson shall transmit the signed Recommendation and any supporting documents to both parties.
- (h) *Clarification and Reconsideration of Recommendation.* Either party may request clarification or reconsideration of a decision within ten days following receipt of the Recommendation. Within ten days after receiving the request, the DRB shall provide written clarification or reconsideration to both parties unless otherwise agreed to by both parties.

Requests for clarification or reconsideration shall be submitted in writing simultaneously to the DRB and to the other party.

The Board shall not accept requests for reconsideration that amount to a renewal of prior argument or additional argument based on facts available at the time of the hearing.

Only one request for clarification or reconsideration per dispute from each party will be allowed.

- (i) *Acceptance or Rejection of Recommendation.* CDOT and the Contractor shall submit their written acceptance or rejection of the Recommendation, in whole or in part, concurrently to the other party and to the DRB within 14 days after receipt of the Recommendation or following receipt of responses to requests for clarification or reconsideration.

If the parties accept the Recommendation or a discreet part thereof, it will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the dispute is resolved.

If either party rejects the Recommendation in whole or in part, it shall give written explanation to the other party within 14 days after receiving the Recommendation. When the Recommendation is rejected in whole or in part by either party, the other party may either abandon the dispute or pursue a formal claim in accordance with subsection 105.23.

- (j) *Admissibility of Recommendation.* Recommendations of a DRB issued in accordance with subsection 105.22 are admissible in subsequent proceedings but shall be prefaced with the following paragraph:

This Recommendation may be taken under consideration with the understanding that:

1. The DRB Recommendation was a proceeding based on presentations by the parties.
2. No fact or expert witnesses presented sworn testimony or were subject to cross-examination.
3. The parties to the DRB were not provided with the right to any discovery, such as production of documents or depositions.
4. There is no record of the DRB hearing other than the Recommendation.

- (k) *Cost and Payments.*

1. General Administrative Costs. The Contractor and the Department shall equally share the entire cost of the following to support the Board's operation:

- (27) Copies of Contract and other relevant documentation
- (28) Meeting space and facilities
- (29) Secretarial Services
- (30) Telephone
- (31) Mail
- (32) Reproduction
- (33) Filing

2. The Department and the Contractor shall bear the costs and expenses of the DRB equally. Each DRB board member shall be compensated at an agreed rate of \$1,200 per day if time spent on-site per meeting is greater than four hours. Each DRB board member shall be compensated at an agreed rate of \$800 per day if time spent on-site per meeting is less than or equal to four hours. The time spent traveling to and from each meeting shall be reimbursed at \$50 per hour if the travel distance is more than 50 miles. The agreed daily and travel time rates shall be considered full compensation for on-site time, travel expenses, transportation, lodging, time for travel of more than 50 miles and incidentals for each day, or portion thereof that the DRB member is at an authorized DRB meeting. No additional compensation will be made for time spent by DRB members in review and research activities outside the official DRB meetings unless that time, (such as time spent evaluating and preparing recommendations on specific issues presented to the DRB), has been specifically agreed to in advance by the Department and Contractor. Time away from the project that has been specifically agreed to in advance by the parties will be compensated at an agreed rate of \$125 per hour. The agreed amount of \$125 per hour shall include all incidentals. Members serving on more than one DRB, regardless of the number of meetings per day, shall not be paid more than the all inclusive rate per day or rate per hour for an individual project.
3. Payments to Board Members and General Administrative Costs. Each Board member shall submit an invoice to the Contractor for fees and applicable expenses incurred each month following a month in which the Board members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department. The Contractor shall submit to the Department copies of all invoices. No markups by the Contractor will be allowed on any DRB costs. The Department will split the cost by authorizing 50% payment on the next progress payment. The Contractor shall make all payments in full to Board members within seven calendar days after receiving payment from the Department for this work.

(l) *Dispute Review Board Three Party Agreement.*

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT
COLORADO PROJECT NO.

THIS THREE PARTY AGREEMENT, made this ____day of _____, _____,by and between:
the Colorado Department of Transportation, hereinafter called the "Department"; and

_____,
hereinafter called the "Contractor"; and

_____,
_____,
and

_____,
hereinafter called the "Dispute Review Board" or "Board".

WHEREAS, the Department is now engaged in the construction of the
[Project Name]

and

WHEREAS, the Contract provides for the establishment of a Board in accordance with subsections
105.21 and 105.22 of the specifications.

NOW, THEREFORE, it is hereby agreed:

ARTICLE I
DESCRIPTION OF WORK AND SERVICES

The Department and the Contractor shall form a Board in accordance with this agreement and the
provisions of subsection 105.22.

ARTICLE II
COMMITMENT ON PART OF THE PARTIES HERETO

The parties hereto shall faithfully fulfill the requirements of subsection 105.22 and the requirements of
this agreement.

ARTICLE III
COMPENSATION

The parties shall share equally in the cost of the Board, including general administrative costs (meeting
space and facilities, secretarial services, telephone, mail, reproduction, filing) and the member's
individual fees.. Reimbursement of the Contractor's share of the Board expenses for any reason is
prohibited.

The Contractor shall make all payments in full to Board members. The Contractor will submit to the
Department an itemized statement for all such payments, and the Department will split the cost by
including 50 percent payment on the next progress payment. The Contractor and the Department will
agree to accept invoiced costs prior to payment by the Contractor.

DISPUTE REVIEW BOARD

Board members shall keep all fee records pertaining to this agreement available for inspection by representatives of the Department and the Contractor for a period of three years after the termination of the Board members' services.

Payment to each Board member shall be at the fee rates established in subsection 105.22 and agreed to by each Board member, the Contractor, and the Department. In addition, reimbursement will be made for applicable expenses.

Each Board member shall submit an invoice to the Contractor for fees incurred each month following a month in which the members participated in Board functions. Such invoices shall be in the format established by the Contractor and the Department.

Payments shall be made to each Board member within 60 days after the Contractor and Department have received all the applicable billing data and verified the data submitted by that member. The Contractor shall make payment to the Board member within seven calendar days of receipt of payment from the Department.

ARTICLE IV ASSIGNMENT

Board members shall not assign any of the work to be performed by them under this agreement. Board members shall disclose any conflicts of interest including but not limited to any dealings with the either party in the previous five years other than serving as a Board member under other contracts.

ARTICLE V COMMENCEMENT AND TERMINATION OF SERVICES

The commencement of the services of the Board shall be in accordance with subsection 105.22 of the specifications and shall continue until all assigned disputes under the Contract which may require the Board's services have been heard and a Recommendation has been issued by the Board as specified in subsection 105.22. If a Board member is unable to fulfill his responsibilities for reasons specified in subsection 105.22(b)7, he shall be replaced as provided therein, and the Board shall fulfill its responsibilities as though there had been no change.

ARTICLE VI LEGAL RELATIONS

The parties hereto mutually agree that each Board member in performance of his duties on the Board is acting as an independent contractor and not as an employee of either the Department or the Contractor. Board members will guard their independence and avoid any communication about the substance of the dispute without both parties being present.

The Board members are absolved of any personal liability arising from the Recommendations of the Board.

DISPUTE REVIEW BOARD

THREE PARTY AGREEMENT PAGE 3
COLORADO PROJECT NO.

IN WITNESS HEREOF, the parties hereto have caused this agreement to be executed the day and year first written above.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

BOARD MEMBER: _____.

BY: _____.

CONTRACTOR: _____.

BY: _____.

TITLE:

COLORADO DEPARTMENT OF TRANSPORTATION

BY: _____.

TITLE: CHIEF ENGINEER

105.23 Claims for Unresolved Disputes. The Contractor may file a claim only if the disputes resolution process described in subsections 105.21 and 105.22 has been exhausted without resolution of the dispute. Other methods of nonbinding dispute resolution, exclusive of arbitration and litigation, can be used if agreed to by both parties.

This subsection applies to any unresolved dispute or set of disputes between CDOT and the Contractor with an aggregate value of more than \$15,000. Unresolved disputes with an aggregate value of more than \$15,000 from subcontractors, materials suppliers or any other entity not a party to the Contract shall be submitted through the Contractor in accordance with this subsection as a pass-through claim. Review of a pass-through claim does not create privity of Contract between CDOT and any other entity.

Subsections 105.21, 105.22 and 105.23 provide both contractual alternative dispute resolution processes and constitute remedy-granting provisions pursuant to Colorado Revised Statutes which must be exhausted in their entirety.

Merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

The venue for all unresolved disputes with an aggregate value \$15,000 or less shall be the County Court for the City and County of Denver.

Non-binding Forms of alternative dispute resolution such as Mediation are available upon mutual agreement of the parties for all claims submitted in accordance with this subsection.

The cost of the non-binding ADR process shall be shared equally by both parties with each party bearing its own preparation costs. The type of nonbinding ADR process shall be agreed upon by the parties and shall be conducted within the State of Colorado at a mutually acceptable location. Participation in a nonbinding ADR process does not in any way waive the requirement that merit-binding arbitration or litigation proceedings must commence within 180-calendar days of the Chief Engineer's decision, absent written agreement otherwise by both parties.

- (a) *Notice of Intent to File a Claim.* Within 30 days after rejection of the Dispute Resolution Board's Recommendation issued in accordance with subsection 105.22, the Contractor shall provide the Region Transportation Director with a written notice of intent to file a claim. The Contractor shall also send a copy of this notice to the Resident Engineer. For the purpose of this subsection Region Transportation Director shall mean the Region Transportation Director or the Region Transportation Director's designated representative. CDOT will acknowledge in writing receipt of Notice of Intent within 7 days.
- (b) *Claim Package Submission.* Within 60 days after submitting the notice of intent to file a claim, the Contractor shall submit five copies of a complete claim package representing the final position the Contractor wishes to have considered. All claims shall be in writing and in sufficient detail to enable the RTD to ascertain the basis and amount of claim. The claim package shall include all documents supporting the claim, regardless of whether such documents were provided previously to CDOT.

If requested by the Contractor the 60 day period may be extended by the RTD in writing prior to final acceptance. As a minimum, the following information shall accompany each claim.

1. A claim certification containing the following language, as appropriate:

(12) For a direct claim by the Contractor:

CONTRACTOR'S CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
,
(title) _____, of _____ (company) _____, hereby certifies that the
claim of
\$ _____ for extra compensation and ____ Days additional time, made herein for work
on this contract is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of _____

NOTARY PUBLIC

My Commission Expires: _____

B. For a pass-through claim:

PASS-THROUGH CLAIM CERTIFICATION

Under penalty of law for perjury or falsification, the undersigned, _____ (name),
(title) _____, of _____ (company) _____, hereby certifies that
the claim of
\$ _____ for extra compensation and _____ Days additional time, made herein for
work on this Project is true to the best of my knowledge and belief and supported under the contract
between the parties.

This claim package contains all available documents that support the claims made herein and I
understand that no additional information, other than for clarification and data supporting previously
submitted documentation, may be presented by me.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

Dated _____/s/ _____

The Contractor certifies that the claim being passed through to CDOT is passed through in good faith and is
accurate and complete to the best of my knowledge and belief.

Dated _____/s/ _____

Subscribed and sworn before me this _____ day of

NOTARY PUBLIC

My Commission Expires: _____

2. A detailed factual statement of the claim for additional compensation, time, or both, providing all necessary dates, locations, and items of work affected by the claim. The Contractor's detailed factual statement shall expressly describe the basis of the claim and factual evidence supporting the claim. This requirement is not satisfied by simply incorporating into the claim package other documents that describe the basis of the claim and supporting factual evidence.
3. The date on which facts were discovered which gave rise to the claim.
4. The name, title, and activity of all known CDOT, Consultant, and other individuals who may be knowledgeable about facts giving rise to such claim.
5. The name, title, and activity of all known Contractor, subcontractor, supplier and other individuals who may be knowledgeable about facts giving rise to such claim.
6. The specific provisions of the Contract, which support the claim and a statement of the reasons why such provisions support the claim.

7. If the claim relates to a decision of the Project Engineer, which the Contract leaves to the Project Engineer's discretion, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Project Engineer.
8. The identification of any documents and the substance of all oral communications that support the claim.
9. Copies of all known documents that support the claim.
10. The Dispute Review Board Recommendation.
11. If an extension of contract time is sought, the documents required by subsection 108.07(d).
12. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - A. These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
 - (1) Actual wages and benefits, including FICA, paid for additional labor
 - (2) Costs for additional bond, insurance and tax
 - (3) Increased costs for materials
 - (4) Equipment costs calculated in accordance with subsection 109.04(c) for Contractor owned equipment and based on certified invoice costs for rented equipment
 - (5) Costs of extended job site overhead
 - (6) Salaried employees assigned to the project
 - (7) Claims from subcontractors and suppliers at any level (the same level of detail as specified herein is required for all such claims)
 - (8) An additional 16 percent will be added to the total of items (1) through (7) as compensation for items for which no specific allowance is provided, including profit and home office overhead.
 - (9) Interest shall be paid in accordance with CRS 5-12-102 beginning from the date of the Notice of Intent to File Claim
 - B. In adjustment for the costs as allowed above, the Department will have no liability for the following items of damages or expense:
 - (1) Profit in excess of that provided in 12.A.(8) above
 - (2) Loss of Profit
 - (3) Additional cost of labor inefficiencies in excess of that provided in A. above
 - (4) Home office overhead in excess of that provided in A. above
 - (5) Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities, and insolvency
 - (6) Indirect costs or expenses of any nature in excess of that provided in A. above
 - (7) Attorneys fees, claim preparation fees, and expert fees
- (c) *Audit.* An audit may be performed by the Department for any claim, and is mandatory for all claims with amounts greater than \$250,000. All audits will be complete within 60 days of receipt of the complete claim package, provided the Contractor allows the auditors reasonable and timely access to the Contractor's books and records. For all claims with amounts greater than \$250,000 the Contractor shall submit a copy of certified claim package directly to the CDOT Audit Unit at the following address:

Division of Audit
4201 E. Arkansas Ave
Denver, Co. 80222

- (d) *Region Transportation Director Decision.* When the Contractor properly files a claim, the RTD will review the claim and render a written decision to the Contractor to either affirm or deny the claim, in whole or in part, in accordance with the following procedure.

The RTD may consolidate all related claims on a project and issue one decision, provided that consolidation does not extend the time period within which the RTD is to render a decision. Consolidation of unrelated claims will not be made.

The RTD will render a written decision to the Contractor within 60 days after the receipt of the claim package or receipt of the audit whichever is later. In rendering the decision, the RTD: (1) will review the information in the Contractor's claim; (2) will conduct a hearing if requested by either party; and (3) may consider any other information available in rendering a decision.

The RTD will assemble and maintain a claim record comprised of all information physically submitted by the Contractor in support of the claim and all other discoverable information considered by the RTD in reaching a decision. Once the RTD assembles the claim record, the submission and consideration of additional information, other than for clarification and data supporting previously submitted documentation, at any subsequent level of review by anyone, will not be permitted.

The RTD will provide a copy of the claim record and the written decision to the Contractor describing the information considered by the RTD in reaching a decision and the basis for that decision. If the RTD fails to render a written decision within the 60 day period, or within any extended time period as agreed to by both parties, the Contractor shall either: (1) accept this as a denial of the claim, or (2) appeal the claim to the Chief Engineer, as described in this subsection.

If the Contractor accepts the RTD decision, the provisions of the decision shall be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the RTD decision, the Contractor shall either: (1) accept the RTD decision as final, or (2) file a written appeal to the Chief Engineer within 30 days from the receipt of the RTD decision. The Contractor hereby agrees that if a written appeal is not properly filed, the RTD decision is final.

- (e) *Chief Engineer Decision.* When a claim is appealed, the RTD will provide the claim record to the Chief Engineer. Within 15 days of the appeal either party may submit a written request for a hearing with the Chief Engineer or duly authorized Headquarters delegate(s). The Chief Engineer or a duly authorized Headquarters delegate will review the claim and render a decision to affirm, overrule, or modify the RTD decision in accordance with the following.

The Contractor's written appeal to the Chief Engineer will be made a part of the claim record.

The Chief Engineer will render a written decision within 60 days after receiving the written appeal. The Chief Engineer will not consider any information that was not previously made a part of the claim record, other than clarification and data supporting previously submitted documentation.

The Contractor shall have 30 days to accept or reject the Chief Engineer's decision. The Contractor shall notify the Chief Engineer of its acceptance or rejection in writing.

If the Contractor accepts the Chief Engineer's decision, the provisions of the decision will be implemented in accordance with subsections 108.07, 109.04, 109.05, or 109.10 and the claim is resolved.

If the Contractor disagrees with the Chief Engineer's decision, the Contractor shall either (1) pursue an alternative dispute resolution process in accordance with this specification or (2) initiate litigation or merit binding arbitration in accordance with subsection 105.23(f).

If the Chief Engineer does not issue a decision as required, the Contractor may immediately initiate either litigation or merit binding arbitration in accordance with subsection 105.23(f).

For the convenience of the parties to the Contract it is mutually agreed by the parties that any merit binding arbitration or De Novo litigation shall be brought within 180-calendar days from the date of the Chief

Engineer's decision. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action.

- (f) *De Novo Litigation or Merit Binding Arbitration.* If the Contractor disagrees with the Chief Engineer's decision, the Contractor may initiate de novo litigation or merit binding arbitration to finally resolve the claim that the Contractor submitted to CDOT, depending on which option was selected by the Contractor on Form 1378 which shall be submitted at the preconstruction conference. Such litigation or arbitration shall be strictly limited to those claims that were previously submitted and decided in the contractual dispute and claims processes outlined herein. This does not preclude the joining in one litigation or arbitration of multiple claims from the same project provided that each claim has gone through the dispute and claim process specified in subsections 105.21 through 105.23. The parties may agree, in writing, at any time, to pursue some other form of alternative dispute resolution.

Any offer made by the Contractor or the Department at any stage of the claims process, as set forth in this subsection, shall be deemed an offer of settlement pursuant Colorado Rule of Evidence 408 and therefore inadmissible in any litigation or arbitration.

If the Contractor selected litigation, then de novo litigation shall proceed in accordance with the Colorado Rules of Civil Procedure and the proper venue is the Colorado State District Court in and for the City and County of Denver, unless both parties agree to the use of arbitration.

If the Contractor selected merit binding arbitration, or if both parties subsequently agreed to merit binding arbitration, arbitration shall be governed by the modified version of AAA's Construction Industry Arbitration Rules which follow.

**AMERICAN ARBITRATION ASSOCIATION CONSTRUCTION INDUSTRY ARBITRATION RULES MODIFIED
FOR USE WITH CDOT SPECIFICATION SUBSECTION 105.23**

REGULAR TRACK PROCEDURES

R-1. Agreement of Parties

- (a) The parties shall be deemed to have made these rules a part of their Contract. These rules and any amendments shall apply in the form in effect at the time the administrative requirements are met for a demand for arbitration. The parties, by written agreement, may vary the procedures set forth in these rules. After appointment of the arbitrator, such modifications may be made only with the consent of the arbitrator.
- (b) Unless the parties determine otherwise, the Fast Track Procedures shall apply in any case in which aggregate claims do not exceed \$75,000, exclusive of interest and arbitration fees and costs. Parties may also agree to use these procedures in larger cases. Unless the parties agree otherwise, these procedures will not apply in cases involving more than two parties except for pass-through claims. The Fast Track Procedures shall be applied as described in Sections F-1 through F-13 of these rules, in addition to any other portion of these rules that is not in conflict with the Fast Track Procedures.
- (c) Unless the parties agree otherwise, the Procedures for Large, Complex Construction Disputes shall apply to all cases in which the disclosed aggregate claims of any party is at least \$500,000, exclusive of claimed interest, arbitration fees and costs. Parties may also agree to use these procedures in cases involving claims under \$500,000, or in nonmonetary cases. The Procedures for Large, Complex Construction Disputes shall be applied as described in Sections L-1 through L-4 of these rules, in addition to any other portion of these rules that is not in conflict with the Procedures for Large, Complex Construction Disputes.
- (d) All other cases shall be administered in accordance with Sections R-1 through R-45 of these rules.

R-2. Independent Arbitration Provider and Delegation of Duties

When parties agree to arbitrate under these rules, or when they provide for arbitration by an independent third-party (Arbitration Provider) and an arbitration is initiated under these rules, they thereby authorize the Arbitration Provider to administer the arbitration. The authority and duties of the Arbitration Provider are prescribed in the parties' Contract and in these rules, and may be carried out through such of the Arbitration Provider's representatives as it may direct. The Arbitration Provider will assign the administration of an arbitration to its Denver office

R-3. Initiation of Arbitration

Arbitration shall be initiated in the following manner.

- (a) The Contractor shall, within 30 days after the Chief Engineer issues a decision, submit to the Chief Engineer written notice of its intention to arbitrate (the "demand"). The demand shall indicate the appropriate qualifications for the arbitrator(s) to be appointed to hear the arbitration.
- (b) CDOT may file an answering statement with the Contractor within 15 days after receiving the demand. If a counterclaim is asserted, it shall contain a statement setting forth the nature of the counterclaim, the amount involved, if any, and the remedy sought.
- (c) The Chief Engineer shall retain an Arbitration Provider, such as the American Arbitration Association, which will administer an arbitration pursuant to these Rules, except to the extent that such rules conflict with the specifications, in which case the specifications shall control.
- (d) The Arbitration Provider shall confirm its retention to the parties.

R-4. Consolidation or Joinder

If the parties' agreement or the law provides for consolidation or joinder of related arbitrations, all involved parties will endeavor to agree on a process to effectuate the consolidation or joinder.

If they are unable to agree, the Arbitration Provider shall directly appoint a single arbitrator for the limited purpose of deciding whether related arbitrations should be consolidated or joined and, if so, establishing a fair and appropriate process for consolidation or joinder. The Arbitration Provider may take reasonable administrative action to accomplish the consolidation or joinder as directed by the arbitrator.

R-5. Appointment of Arbitrator

An arbitrator shall be appointed in the following manner:

- (a) Immediately after the Arbitration Provider is retained, the Arbitration Provider shall send simultaneously to each party to the dispute an identical list of 10 names of potential arbitrators. The parties are encouraged to agree to an arbitrator from the submitted list and to advise the AAA of their agreement. Absent agreement of the parties, the arbitrator shall not have served as the mediator in the mediation phase of the instant proceeding.
- (b) If the parties cannot agree to arbitrator(s), each party to the dispute shall have 15 calendar days from the transmittal date in which to strike names objected to, number the remaining names in order of preference, and return the list to the Arbitration Provider. If a party does not return the list within the time specified, all persons named therein shall be deemed acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the Arbitration Provider shall invite an arbitrator to serve.
- (c) Unless both parties agree otherwise one arbitrator shall be used for claims less than \$250,000 and three arbitrators shall be used for claims \$250,000 and greater. Within 15 calendar days from the date of the appointment of the last arbitrator, the Arbitration Provider shall appoint a chairperson.
- (d) The entire claim record will be made available to the arbitrators by the Chief Engineer within 15 calendar days from the date of the appointment of the last arbitrator.

R-6. Changes of Claim

The arbitrator(s) will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation.

R-7. Disclosure

- (a) Any person appointed or to be appointed as an arbitrator shall disclose to the Arbitration Provider any circumstance likely to give rise to justifiable doubt as to the arbitrator's impartiality or independence, including any bias or any interest in the result of the arbitration or any relationship with the parties or their representatives. Such obligation shall remain in effect throughout the arbitration.
- (b) Upon receipt of such information from the arbitrator or another source, the Arbitration Provider shall communicate the information to the parties and, if it deems it appropriate to do so, to the arbitrator and others.
- (c) In order to encourage disclosure by arbitrators, disclosure of information pursuant to this Section R-6 is not to be construed as an indication that the arbitrator considers that the disclosed circumstances are likely to affect impartiality or independence.
- (d) In no case shall an arbitrator be employed by, affiliated with, or have consultive or business connection with the claimant Contractor or CDOT. An arbitrator shall not have assisted either in the evaluation, preparation, or presentation of the claim case either for the Contractor or the Department or have rendered an opinion on the merits of the claim for either party, and shall not do so during the proceedings of arbitration.

R-8. Disqualification of Arbitrator

- (a) Any arbitrator shall be impartial and independent and shall perform his or her duties with diligence and in good faith, and shall be subject to disqualification for: (i) partiality or lack of independence, (ii) inability or

refusal to perform his or her duties with diligence and in good faith; and/or (iii) any grounds for disqualification provided by applicable law.

- (b) Upon objection of a party to the continued service of an arbitrator, or on its own initiative, the Arbitration Provider shall determine whether the arbitrator should be disqualified under the grounds set out above, and shall inform the parties of its decision, which decision shall be conclusive.

R-9. Communication with Arbitrator

No party and no one acting on behalf of any party shall communicate *ex parte* with an arbitrator or a candidate for arbitrator concerning the arbitration.

R-10. Vacancies

- (a) If for any reason an arbitrator is unable to perform the duties of the office, the Arbitration Provider may, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules.
- (b) In the event of a vacancy in a panel of neutral arbitrators after the hearings have commenced, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.
- (c) In the event of the appointment of a substitute arbitrator, the panel of arbitrators shall determine in its sole discretion whether it is necessary to repeat all or part of any prior hearings.

R-11. Jurisdiction

- (a) The arbitrator shall have the power to rule on his or her own jurisdiction, including any objections with respect to the existence, scope or validity of the arbitration agreement.
- (b) The arbitrator shall have the power to determine the existence or validity of a contract of which an arbitration clause forms a part. Such an arbitration clause shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitrator that the contract is null and void shall not for that reason alone render invalid the arbitration clause.
- (c) A party must object to the jurisdiction of the arbitrator or to the arbitrability of a claim or counterclaim no later than 15 days after the Arbitration Provider confirms its retention to the parties. The arbitrator may rule on such objections as a preliminary matter or as part of the final award.

R-12. Administrative Conference

At the request of any party or upon the Arbitration Provider's own initiative, the Arbitration Provider may conduct an administrative conference, in person or by telephone, with the parties and/or their representatives. The conference may address such issues as arbitrator selection, potential exchange of information, a timetable for hearings and any other administrative matters.

R-13. Preliminary Hearing

- (a) At the request of any party or at the discretion of the arbitrator or the Arbitration Provider, the arbitrator may schedule as soon as practicable a preliminary hearing with the parties and/or their representatives. The preliminary hearing may be conducted by telephone at the arbitrator's discretion.
- (b) During the preliminary hearing, the parties and the arbitrator should discuss the future conduct of the case, including clarification of the issues and claims, a schedule for the hearings and any other preliminary matters.

R-14. Exchange of Information

- (a) At the request of any party or at the discretion of the arbitrator, consistent with the expedited nature of arbitration, the arbitrator may direct: (i) the production of documents and other information; (ii) short depositions, particularly with regard to experts; and/or (iii) the identification of any witnesses to be called.
- (b) At least five business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing.
- (c) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (d) Additional discovery may be ordered by the arbitrator in extraordinary cases when the demands of justice require it.

R-15. Date, Time, and Place of Hearing

- (a) The arbitrator shall set the date, time, and place for each hearing and/or conference. The parties shall respond to requests for hearing dates in a timely manner, be cooperative in scheduling the earliest practicable date, and adhere to the established hearing schedule.
- (b) The parties may mutually agree on the locale where the arbitration is to be held. Absent such agreement, the arbitration shall be held in the City and County of Denver.
- (c) The Arbitration Provider shall send a notice of hearing to the parties at least ten calendar days in advance of the hearing date, unless otherwise agreed by the parties.

R-16. Attendance at Hearings

The arbitrator and the Arbitration Provider shall maintain the privacy of the hearings unless the law provides to the contrary. Any person having a direct interest in the arbitration is entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any person other than a party and its representative.

R-17. Representation

Any party may be represented by counsel or other authorized representative. A party intending to be so represented shall notify the other party and the Arbitration Provider of the name and address of the representative at least three calendar days prior to the date set for the hearing at which that person is first to appear.

R-18. Oaths

Before proceeding with the first hearing, each arbitrator may take an oath of office and, if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person and, if it is required by law or requested by any party, shall do so.

R-19. Stenographic Record

Any party desiring a stenographic record shall make arrangements directly with a stenographer and shall notify the other parties of these arrangements at least three days in advance of the hearing. The requesting party or parties shall pay the cost of the record. If the transcript is agreed by the parties, or determined by the arbitrator to be the official record of the proceeding, it must be provided to the arbitrator and made available to the other parties for inspection, at a date, time, and place determined by the arbitrator.

R-20. Interpreters

Any party wishing an interpreter shall make all arrangements directly with the interpreter and shall assume the costs of the service.

R-21. Postponements

The arbitrator for good cause shown may postpone any hearing upon agreement of the parties, upon request of a party, or upon the arbitrator's own initiative.

R-22. Arbitration in the Absence of a Party or Representative

Unless the law provides to the contrary, the arbitration may proceed in the absence of any party or representative who, after due notice, fails to be present or fails to obtain a postponement. An award shall not be made solely on the default of a party. The arbitrator shall require the party who is present to submit such evidence as the arbitrator may require for the making of an award.

R-23. Conduct of Proceedings

- (a) The Contractor shall present evidence to support its claim. CDOT shall then present evidence supporting its defense. Witnesses for each party shall also submit to questions from the arbitrator and the adverse party. The arbitrator has the discretion to vary this procedure; provided that the parties are treated with equality and that each party has the right to be heard and is given a fair opportunity to present its case.
- (b) The arbitrator, exercising his or her discretion, shall conduct the proceedings with a view to expediting the resolution of the dispute and may direct the order of proof, bifurcate proceedings, and direct the parties to focus their presentations on issues the decision of which could dispose of all or part of the case. The arbitrator shall entertain motions, including motions that dispose of all or part of a claim or that may expedite the proceedings, and may also make preliminary rulings and enter interlocutory orders.
- (c) The parties may agree to waive oral hearings in any case.

R-24. Evidence

- (a) The arbitrators shall consider all written information available in the claim record and all oral presentations in support of that record by the Contractor and CDOT. Conformity to legal rules of evidence shall not be necessary.
- (b) The arbitrators shall not consider any written documents or arguments which have not previously been made a part of the claim record, other than clarification and data supporting previously submitted documentation. The arbitrators shall not consider an increase in the amount of the claim, or any new claims.
- (c) The arbitrator shall determine the admissibility, relevance, and materiality of any evidence offered. The arbitrator may request offers of proof and may reject evidence deemed by the arbitrator to be cumulative, unreliable, unnecessary, or of slight value compared to the time and expense involved. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where: (i) any of the parties is absent, in default, or has waived the right to be present, or (ii) the parties and the arbitrators agree otherwise.
- (d) The arbitrator shall take into account applicable principles of legal privilege, such as those involving the confidentiality of communications between a lawyer and client.
- (e) An arbitrator or other person authorized by law to subpoena witnesses or documents may do so upon the request of any party or independently.

R-25. Evidence by Affidavit and Post-hearing Filing of Documents or Other Evidence

- (a) The arbitrator may receive and consider the evidence of witnesses by declaration or affidavit, but shall give it only such weight as the arbitrator deems it entitled to after consideration of any objection made to its admission.
- (b) If the parties agree or the arbitrator directs that documents or other evidence be submitted to the arbitrator after the hearing, the documents or other evidence, unless otherwise agreed by the parties and the arbitrator, shall be filed with the Arbitration Provider for transmission to the arbitrator. All parties shall be afforded an opportunity to examine and respond to such documents or other evidence.

R-26. Inspection or Investigation

An arbitrator finding it necessary to make an inspection or investigation in connection with the arbitration shall direct the Arbitration Provider to so advise the parties. The arbitrator shall set the date and time and the Arbitration Provider shall notify the parties. Any party who so desires may be present at such an inspection or investigation. In the event that one or all parties are not present at the inspection or investigation, the arbitrator shall make an oral or written report to the parties and afford them an opportunity to comment.

R-27. Interim Measures

- (a) The arbitrator may take whatever interim measures he or she deems necessary, including injunctive relief and measures for the protection or conservation of property and disposition of perishable goods.
- (b) A request for interim measures addressed by a party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate or a waiver of the right to arbitrate.

R-28. Closing of Hearing

When satisfied that the presentation of the parties is complete, the arbitrator shall declare the hearing closed.

If documents or responses are to be filed as provided in Section R-24, or if briefs are to be filed, the hearing shall be declared closed as of the final date set by the arbitrator for the receipt of documents, responses, or briefs. The time limit within which the arbitrator is required to make the award shall commence to run, in the absence of other agreements by the parties and the arbitrator, upon the closing of the hearing.

R-29. Reopening of Hearing

The hearing may be reopened on the arbitrator's initiative, or by direction of the arbitrator upon application of a party, at any time before the award is made. If reopening the hearing would prevent the making of the award within the specific time agreed to by the parties in the arbitration agreement, the matter may not be reopened unless the parties agree to an extension of time. When no specific date is fixed by agreement of the parties, the arbitrator shall have 15 calendar days from the closing of the reopened hearing within which to make an award.

R-30. Waiver of Rules

Any party who proceeds with the arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state an objection in writing shall be deemed to have waived the right to object.

R-31. Extensions of Time

The parties may modify any period of time by mutual agreement. The Arbitration Provider or the arbitrator may for good cause extend any period of time established by these rules, except the time for making the award. The Arbitration Provider shall notify the parties of any extension.

R-32. Serving of Notice

- (a) Any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith, or for the entry of judgment on any award made under these rules, may be served on a party by mail addressed to the party or its representative at the last known address or by personal service, in or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.
- (b) The Arbitration Provider, the arbitrator and the parties may also use overnight delivery, electronic facsimile transmission (fax), or electronic mail (email) to give the notices required by these rules.

- (c) Unless otherwise instructed by the Arbitration Provider or by the arbitrator, any documents submitted by any party to the Arbitration Provider or to the arbitrator shall simultaneously be provided to the other party or parties to the arbitration.

R-33. Majority Decision

When the panel consists of more than one arbitrator, unless required by law or by the arbitration agreement, a majority of the arbitrators must make all decisions.

R-34. Time of Award

The award shall be made promptly by the arbitrator and, unless otherwise agreed by the parties or specified by law, no later than 30 calendar days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

R-35. Form of Award

After complete review of the facts associated with the claim, the arbitrators shall render a written explanation of their decision. When three arbitrators are used, and only two arbitrators agree then the award shall be signed by the two arbitrators. The arbitrator's decision shall include:

- (a) A summary of the issues and factual evidence presented by the Contractor and the Department concerning the claim;
- (b) Decisions concerning the validity of the claim;
- (c) Decisions concerning the value of the claim as to cost impacts if the claim is determined to be valid;
- (d) The contractual and factual bases supporting the decisions made including an explanation as to why each and every position was accepted or rejected;
- (e) Detailed and supportable calculations which support any decisions.

R-36. Scope of Award

- (a) The arbitrator may grant any remedy or relief that the arbitrator deems just and equitable and within the scope of the agreement of the parties, including, but not limited to, equitable relief and specific performance of a contract.
- (b) In addition to the final award, the arbitrator may make other decisions, including interim, interlocutory, or partial rulings, orders, and awards. (c) The award of the arbitrator may include interest at the statutory rate and from such date as the arbitrator may deem appropriate.

R-37. Delivery of Award to Parties

Parties shall accept as notice and delivery of the award the placing of the award or a true copy thereof in the mail addressed to the parties or their representatives at the last known address, personal or electronic service of the award, or the filing of the award in any other manner that is permitted by law.

R-38. Modification of Award

Within 10 calendar days after the transmittal of an award, the arbitrator on his or her initiative, or any party, upon notice to the other parties, may request that the arbitrator correct any clerical, typographical, technical or computational errors in the award. The arbitrator is not empowered to redetermine the merits of any claim already decided.

If the modification request is made by a party, the other parties shall be given 10 calendar days to respond to the request. The arbitrator shall dispose of the request within 25 calendar days after transmittal by the Arbitration Provider to the arbitrator of the request.

If applicable law provides a different procedural time frame, that procedure shall be followed.

R-39. Appeal of Award

Appeal of the arbitrators' decision concerning the merit of the claim is governed by the Colorado Uniform Arbitration Act, C.R.S. §§ 13-22-202 to -230. Either party may appeal the arbitrator's decision on the value of the claim to the Colorado State District Court in and for the City and County of Denver for trial de novo.

R-40. Release of Documents for Judicial Proceedings

The Arbitration Provider shall, upon the written request of a party, furnish to the party, at its expense, certified copies of any papers in the Arbitration Provider's possession that may be required in judicial proceedings relating to the arbitration.

R-41. Applications to Court and Exclusion of Liability

- (a) No judicial proceeding by a party relating to the subject matter of the arbitration shall be deemed a waiver of the party's right to arbitrate.
- (b) Neither the Arbitration Provider nor any arbitrator in a proceeding under these rules is a necessary or proper party in judicial proceedings relating to the arbitration.
- (c) Parties to these rules shall be deemed to have consented that judgment upon the arbitration award may be entered in any federal or state court having jurisdiction thereof.
- (d) Parties to an arbitration under these rules shall be deemed to have consented that neither the Arbitration Provider nor any arbitrator shall be liable to any party in any action for damages or injunctive relief for any act or omission in connection with any arbitration under these rules.

R-42. Administrative Fees

The Arbitration Provider shall prescribe filing and other administrative fees and service charges to compensate it for the cost of providing administrative services. The fees in effect when the fee or charge is incurred shall be applicable. Such fees and charges shall be borne equally by the parties.

The Arbitration Provider may, in the event of extreme hardship on the part of any party, defer or reduce the administrative fees.

R-43. Expenses

The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the arbitration, including required travel and other expenses of the arbitrator, Arbitration Provider representatives, and any witness and the cost of any proof produced at the direct request of the arbitrator, shall be borne equally by the parties.

R-44. Neutral Arbitrator's Compensation

Arbitrators shall be compensated a rate consistent with the arbitrator's stated rate of compensation.

If there is disagreement concerning the terms of compensation, an appropriate rate shall be established with the arbitrator by the Arbitration Provider and confirmed to the parties.

Such compensation shall be borne equally by the parties.

R-45. Deposits

The Arbitration Provider may require the parties to deposit in advance of any hearings such sums of money as it deems necessary to cover the expense of the arbitration, including the arbitrator's fee, if any, and shall render an accounting to the parties and return any unexpended balance at the conclusion of the case.

R-46. Interpretation and Application of Rules

The arbitrator shall interpret and apply these rules insofar as they relate to the arbitrator's powers and duties by a majority vote. If that is not possible, either an arbitrator or a party may refer the question to the Arbitration Provider for final decision. All other rules shall be interpreted and applied by the Arbitration Provider.

R-45. Suspension for Nonpayment

If arbitrator compensation or administrative charges have not been paid in full, the Arbitration Provider may so inform the parties in order that the parties may advance the required payment. If such payments are not made, the arbitrator may order the suspension or termination of the proceedings. If no arbitrator has yet been appointed, the Arbitration Provider may suspend the proceedings.

FAST TRACK PROCEDURES

F-1. Limitations on Extensions

In the absence of extraordinary circumstances, the Arbitration Provider or the arbitrator may grant a party no more than one seven-day extension of the time in which to respond to the demand for arbitration or counterclaim as provided in Section R-3.

F-2. Changes of Claim

The arbitrator will not consider any information that was not previously made a part of the claim record as transmitted by the Chief Engineer, other than clarification and data supporting previously submitted documentation

F-3. Serving of Notice

In addition to notice provided above, the parties shall also accept notice by telephone. Telephonic notices by the Arbitration Provider shall subsequently be confirmed in writing to the parties. Should there be a failure to confirm in writing any such oral notice, the proceeding shall nevertheless be valid if notice has, in fact, been given by telephone.

F-4. Appointment and Qualification of Arbitrator

Immediately after the retention of the Arbitration Provider, the Arbitration Provider will simultaneously submit to each party a listing and biographical information from its panel of arbitrators knowledgeable in construction who are available for service in Fast Track cases. The parties are encouraged to agree to an arbitrator from this list, and to advise the Arbitration Provider of their agreement, or any factual objections to any of the listed arbitrators, within 7 calendar days of the transmission of the list. The Arbitration Provider will appoint the agreed-upon arbitrator, or in the event the parties cannot agree on an arbitrator, will designate the arbitrator from among those names not stricken for factual objections.

The parties will be given notice by the Arbitration Provider of the appointment of the arbitrator, who shall be subject to disqualification for the reasons specified above. Within the time period established by the Arbitration Provider, the parties shall notify the Arbitration Provider of any objection to the arbitrator appointed. Any objection by a party to the arbitrator shall be for cause and shall be confirmed in writing to the Arbitration Provider with a copy to the other party or parties.

F-5. Preliminary Telephone Conference

Unless otherwise agreed by the parties and the arbitrator, as promptly as practicable after the appointment of the arbitrator, a preliminary telephone conference shall be held among the parties or their attorneys or representatives, and the arbitrator.

F-6. Exchange of Exhibits

At least 2 business days prior to the hearing, the parties shall exchange copies of all exhibits they intend to submit at the hearing. The arbitrator is authorized to resolve any disputes concerning the exchange of exhibits.

F-7. Discovery

There shall be no discovery, except as provided in Section F-4 or as ordered by the arbitrator in extraordinary cases when the demands of justice require it.

F-8. Date, Time, and Place of Hearing

The arbitrator shall set the date and time, and place of the hearing, to be scheduled to take place within 30 calendar days of confirmation of the arbitrator's appointment. The Arbitration Provider will notify the parties in advance of the hearing date. All hearings shall be held within the City and County of Denver.

F-9. The Hearing

- (a) Generally, the hearing shall not exceed 1 day. Each party shall have equal opportunity to submit its proofs and complete its case. The arbitrator shall determine the order of the hearing, and may require further submission of documents within two business days after the hearing. For good cause shown, the arbitrator may schedule 1 additional hearing day within 7 business days after the initial day of hearing.
- (b) Generally, there will be no stenographic record. Any party desiring a stenographic record may arrange for one pursuant to the provisions above.

F-10. Time of Award

Unless otherwise agreed by the parties, the award shall be rendered not later than 14 calendar days from the date of the closing of the hearing or, if oral hearings have been waived, from the date of the Arbitration Provider's transmittal of the final statements and proofs to the arbitrator.

F-11. Time Standards

The arbitration shall be completed by settlement or award within 60 calendar days of confirmation of the arbitrator's appointment, unless all parties and the arbitrator agree otherwise or the arbitrator extends this time in extraordinary cases when the demands of justice require it.

F-12. Arbitrator's Compensation

Arbitrators will receive compensation at a rate to be suggested by the Arbitration Provider regional office.

PROCEDURES FOR LARGE, COMPLEX CONSTRUCTION DISPUTES

L-1. Large, Complex Construction Disputes

The procedures for large, complex construction disputes shall apply to any claim with a value exceeding \$500,000 or as agreed to by the parties.

L-2. Administrative Conference

Prior to the dissemination of a list of potential arbitrators, the Arbitration Provider shall, unless the parties agree otherwise, conduct an administrative conference with the parties and/or their attorneys or other representatives by conference call. The conference call will take place within 14 days after the retention of the Arbitration Provider. In the event the parties are unable to agree on a mutually acceptable time for the conference, the Arbitration Provider may contact the parties individually to discuss the issues contemplated herein. Such administrative conference shall be conducted for the following purposes and for such additional purposes as the parties or the Arbitration Provider may deem appropriate:

- (a) To obtain additional information about the nature and magnitude of the dispute and the anticipated length of hearing and scheduling;
- (b) To discuss the views of the parties about the technical and other qualifications of the arbitrators;
- (c) To obtain conflicts statements from the parties; and
- (d) To consider, with the parties, whether mediation or other non-adjudicative methods of dispute resolution might be appropriate.

L-3. Arbitrators

- (a) Large, Complex Construction Cases shall be heard and determined by three arbitrators.
- (b) The Arbitration Provider shall appoint arbitrator(s) in the manner provided in the Regular Construction Industry Arbitration Rules.

L-4. Preliminary Hearing

As promptly as practicable after the selection of the arbitrator(s), a preliminary hearing shall be held among the parties and/or their attorneys or other representatives and the arbitrator(s). Unless the parties agree otherwise, the preliminary hearing will be conducted by telephone conference call rather than in person.

At the preliminary hearing the matters to be considered shall include, without limitation:

- (a) Service of a detailed statement of claims, damages and defenses, a statement of the issues asserted by each party and positions with respect thereto, and any legal authorities the parties may wish to bring to the attention of the arbitrator(s);
- (b) Stipulations to uncontested facts;
- (c) The extent to which discovery shall be conducted;
- (d) Exchange and premarking of those documents which each party believes may be offered at the hearing;
- (e) The identification and availability of witnesses, including experts, and such matters with respect to witnesses including their biographies and expected testimony as may be appropriate;
- (f) Whether, and the extent to which, any sworn statements and/or depositions may be introduced;
- (g) The extent to which hearings will proceed on consecutive days;
- (h) Whether a stenographic or other official record of the proceedings shall be maintained;
- (i) The possibility of utilizing mediation or other non-adjudicative methods of dispute resolution; and
- (j) The procedure for the issuance of subpoenas.

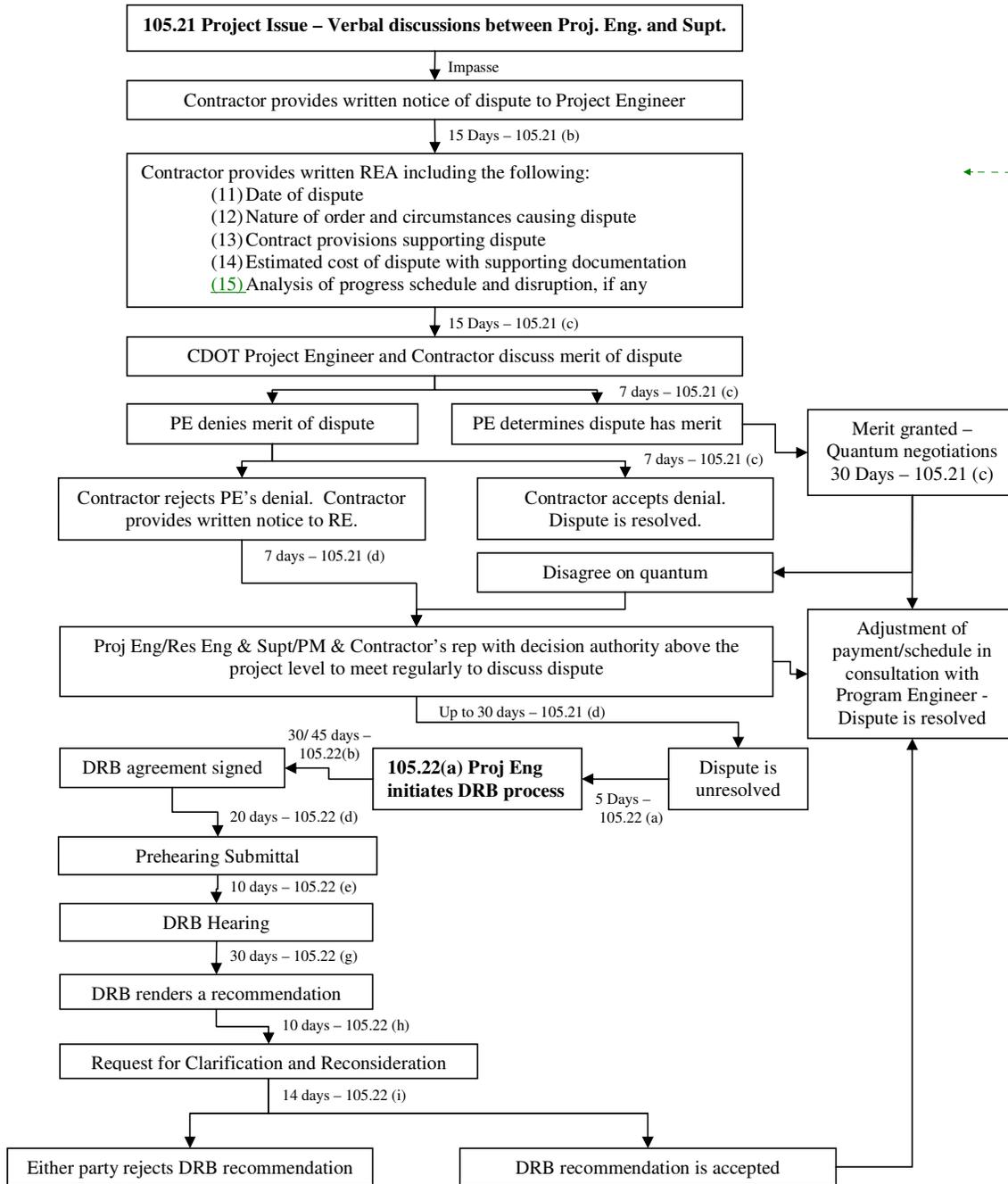
By agreement of the parties and/or order of the arbitrator(s), the pre-hearing activities and the hearing procedures that will govern the arbitration will be memorialized in a Scheduling and Procedure Order.

L-5. Management of Proceedings

- (a) Arbitrator(s) shall take such steps as they may deem necessary or desirable to avoid delay and to achieve a just, speedy and cost-effective resolution of Large, Complex Construction Cases.

- (b) Parties shall cooperate in the exchange of documents, exhibits and information within such party's control if the arbitrator(s) consider such production to be consistent with the goal of achieving a just, speedy and cost effective resolution of a Large, Complex Construction Case.
- (c) The parties may conduct such discovery as may be agreed to by all the parties provided, however, that the arbitrator(s) may place such limitations on the conduct of such discovery as the arbitrator(s) shall deem appropriate. If the parties cannot agree on production of document and other information, the arbitrator(s), consistent with the expedited nature of arbitration, may establish the extent of the discovery.
- (d) At the discretion of the arbitrator(s), upon good cause shown and consistent with the expedited nature of arbitration, the arbitrator(s) may order depositions of, or the propounding of interrogatories to such persons who may possess information determined by the arbitrator(s) to be necessary to a determination of the matter.
- (e) The parties shall exchange copies of all exhibits they intend to submit at the hearing 10 business days prior to the hearing unless the arbitrator(s) determine otherwise.
- (f) The exchange of information pursuant to this rule, as agreed by the parties and/or directed by the arbitrator(s), shall be included within the Scheduling and Procedure Order.
- (g) The arbitrator is authorized to resolve any disputes concerning the exchange of information.
- (h) Generally hearings will be scheduled on consecutive days or in blocks of consecutive days in order to maximize efficiency and minimize costs.

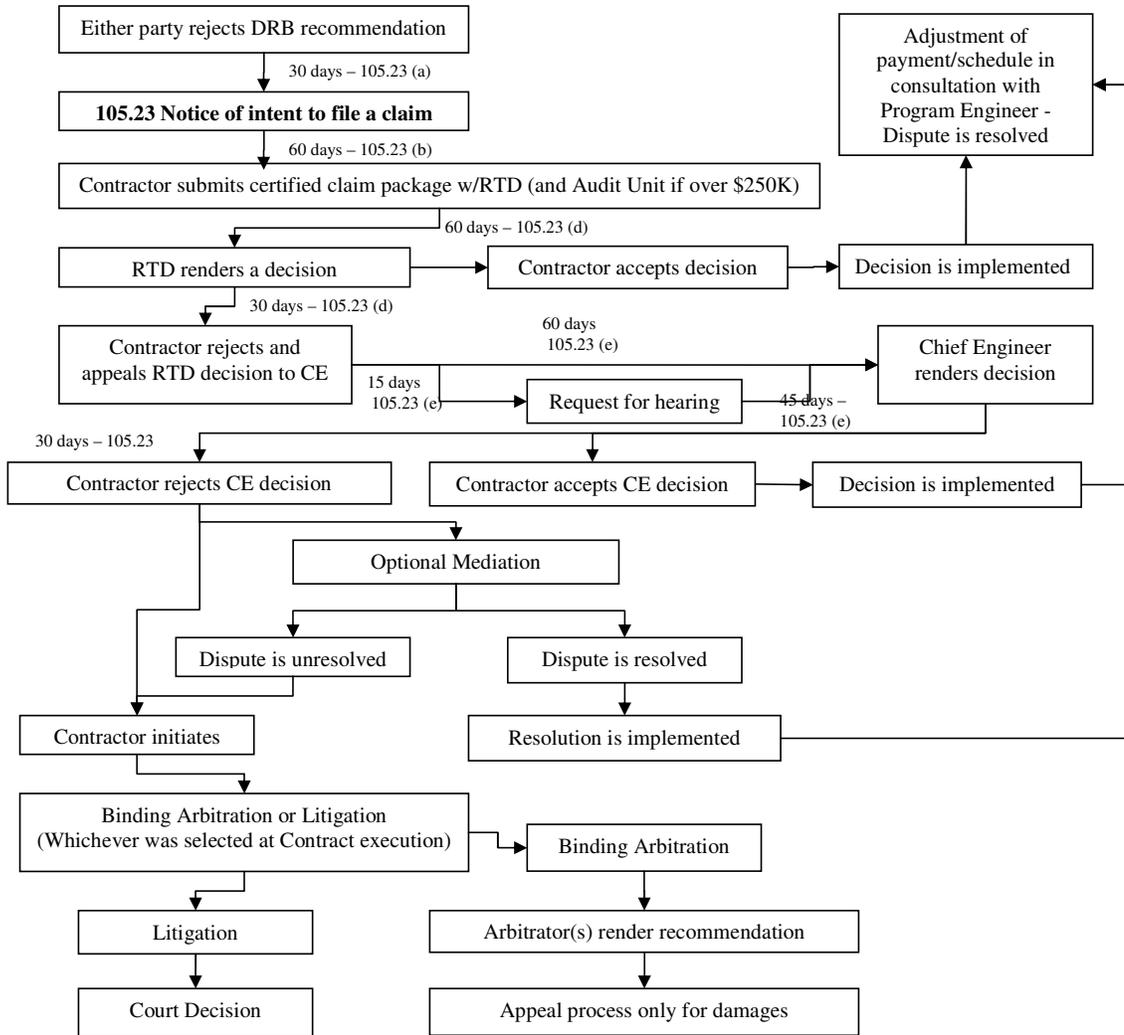
**Figure 105-1
DISPUTES AND CLAIMS FLOW CHART**



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Figure 105-1 continued on next page

Figure 105-1 (continued)



January 17, 2008

REVISION OF SECTION 105

CONFORMITY TO THE CONTRACT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions issued unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on projects having HMA.

REVISION OF SECTION 105
CONFORMITY TO THE CONTRACT

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Subsection 105.03 shall include the following, after the first paragraph:

All Hot Mix Asphalt (HMA) materials or work will be evaluated for conformity to the Contract in accordance with subsection 105.05 except HMA that is used for patching and temporary pavement.

In subsection 105.03 (c), delete the Table of Price Reduction Factors and replace with the following:

TABLE OF PRICE REDUCTION FACTORS

Element	Factor "F"
100 percent size sieve	1
12.5 mm (½") sieve and larger	1
150 µm (No. 100) sieve to 9.5 mm (3/8") sieve inclusive (except 100 percent size sieve)	3
75 µm (No. 200) sieve	6
75µm (No. 200) sieve (cover coat material)	25
Liquid Limit	3
Plasticity Index	10
Asphalt penetration	1
Asphalt residue	3
Portland Cement Concrete Pavement Fine Aggregate Sand Equivalent	0.3
Hydrated Lime Gradation	0.3
Toughness, inch-pounds, minimum	0.8
Tenacity, inch-pounds, minimum	0.8
Elastic Recovery, 25 °C, percent minimum	1.25
Ductility, 4 °C (5cm/min) cm, minimum	1.25

In subsection 105.03 (c), delete the seventh paragraph, including the table of the multiplier for price reductions, and replace with the following:

If the P for aggregate gradation for Items 206, 304, or the gradation of hydrated lime for item 403 is 3 or greater the reduction will apply to the contract price multiplied by the Multipliers (M) listed in the following table:

MULTIPLIER FOR PRICE REDUCTIONS FOR MISCELLANEOUS ITEMS

Item Number-Name	Element	Multiplier (M)
206- Structural Backfill	Gradation	0.60
304-Aggregate Base Course	Gradation	0.60
403-Hot Mix Asphalt*	Hydrated Lime Gradation	0.60

* The P value for hydrated lime shall be applied to the price of the HMA item when asphalt cement is not paid for separately. Lime gradation P values will not be combined with Pay Factors for other elements.

2. November 3, 2008

REVISION OF SECTIONS 105 AND 106
CONFORMITY TO THE CONTRACT OF HOT MIX ASPHALT
(LESS THAN 5000 TONS)

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions regarding its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies that use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on projects having less than 5000 Tons of Hot Mix Asphalt (HMA).

Sections 105 and 106 of the Standard Specifications are hereby revised for this project as follows:

Delete subsection 105.05 and replace with the following:

105.05 Conformity to the Contract of Hot Mix Asphalt. Conformity to the Contract of all Hot Mix Asphalt, Item 403, except Hot Mix Asphalt (Patching) and temporary pavement will be determined by tests and evaluations of elements that include asphalt content, gradation, in-place density and joint density in accordance with the following:

All work performed and all materials furnished shall conform to the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown in the Contract.

For those items of work where working tolerances are not specified, the Contractor shall perform the work in a manner consistent with reasonable and customary manufacturing and construction practices.

When the Engineer finds the materials or work furnished, work performed, or the finished product are not in conformity with the Contract and has resulted in an inferior or unsatisfactory product, the work or material shall be removed and replaced or otherwise corrected at the expense of the Contractor.

Materials will be sampled randomly and tested by the Department in accordance with Section 106 and with the applicable procedures contained in the Department's Field Materials Manual. The approximate maximum quantity represented by each sample will be as set forth in Section 106. Additional samples may be selected and tested as set forth in Section 106 at the Engineer's discretion.

A process will consist of either a single test value or a series of test values resulting from related tests of an element of the Contractor's work and materials. An element is a material or workmanship property that can be tested and evaluated for quality level by the Department approved sampling, testing, and analytical procedures. All materials produced will be assigned to a process. A change in process is defined as a change that affects the element involved. For any element, with the exception of the process for joint density element, a process normally will include all produced materials associated with that element prior to a change in the job mix formula (Form 43). For joint density, a new process will be established for each new layer of pavement or for changes in joint construction. Density measurements taken within each compaction test section will be a separate process. The Engineer may separate a process in order to accommodate small quantities or unusual variations.

Evaluation of materials for pay factors (PF) will be done using only the Department's acceptance test results. Each process will have a PF computed in accordance with the requirements of this Section. Test results determined to have sampling or testing errors will not be used.

Except for in-place density measurements taken within a compaction test section, any test result for an element greater than the distance $2 \times V$ (see Table 105-2) outside the tolerance limits will be designated as a separate process and the pay factor will be calculated in accordance with subsection 105.05(a). An element pay factor less than

zero shall be zero. The calculated PF will be used to determine the Incentive/Disincentive Payment (I/DP) for the process.

In the case of in-place density or joint density the Contractor will be allowed to core the exact location (or immediately adjacent location for joint density) of a test result more than $2 \times V$ outside the tolerance limit. The core must be taken and furnished to the Engineer within eight hours after notification by the Engineer of the test result. The result of this core will be used in lieu of the previous test result. Cores not taken within eight hours after notification by the Engineer will not be used in lieu of the test result. All costs associated with coring will be at the Contractor s expense.

(a) *Representing Small Quantities.* When it is necessary to represent a process by only one or two test results, PF will be the average of PFs resulting from the following:

If the test result is within the tolerance limits then $PF = 1.00$

If the test result is above the maximum specified limit, then

$$PF = 1.00 - [0.25(T_O - T_U)/V]$$

If the test result is below the minimum specified limit, then

$$PF = 1.00 - [0.25(T_L - T_O)/V]$$

Where: PF = pay factor.
V = V factor from Table 105-2.
 T_O = the individual test result.
 T_U = upper specification limit.
 T_L = lower specification limit.

The calculated PF will be used to determine the I/DP for the process.

(b) *Determining Quality Level.* Each process with three or more test results will be evaluated for a quality level (QL) in accordance with Colorado Procedure 71.

(c) *Gradation Element.* Each specified sieve, with the exception of 100 percent passing sieves, will be evaluated for QL separately. The lowest calculated QL for a sieve will be designated as the QL for gradation element for the process.

(d) *Joint Density Element.* Joint Density will be tested according to subsection 401.17.

(e) *Process Pay Factor.* Using the calculated QL for the process, compute PF as follows: The final number of random samples (Pn) in each process will determine the final pay factor. . . As test values are accumulated for each process, Pn will change accordingly. When the process has been completed, the number of random samples it contains will determine the computation of PF, based on Table 105-3 and formula (1) below. When Pn is from 3 to 9, or greater than 200, PF will be computed using the formulas designated in Table 105-3.

Where Pn is equal to or greater than 10 and less than 201, PF will be computed by formula (1):

$$(1) PF = \frac{(Pn_2 - Pn_x)}{Pn_2} + \left[\frac{(PF_1 + PF_2)}{Pn_2} + \frac{(PF_2 + PF_3)}{Pn_3} \right] \times \frac{(PF_1)}{Pn_x}$$

Where, when referring to Table 105-3:

PF₁= PF determined at the next lowest Pn formula using process QL

PF₂= PF determined using the Pn formula shown for the process QL

PF₃= PF determined at the next highest Pn formula using process QL

Pn₂= the lowest Pn in the spread of values listed for the process Pn

formula

Pn₃= the lowest Pn in the spread of values listed for the next highest Pn

formula

Pn_x= the actual number of test values in the process

When evaluating the item of Furnish Hot mix asphalt, the PF for the element of In-Place Density shall be 1.0.

Regardless of QL, the maximum PF in relation to Pn is limited in accordance with Table 105-3.

As test results become available, they will be used to calculate accumulated QL and PF numbers for each process. The process I/DP's will then be calculated and accumulated for each element and for the item. The test results and the accumulated calculations will be made available to the Contractor upon request.

Numbers from the calculations will be carried to significant figures and rounded according to AASHTO Standard Recommended Practice R-11, Rounding Method.

(f) *Evaluation of Work.* When the PF of a process is 0.75 or greater, the finished quantity of work represented by the process will be accepted at the appropriate pay factor. If the PF is less than 0.75, the Engineer may:

1. Require complete removal and replacement with specification material at the Contractor's expense;

or

2. Where the finished product is found to be capable of performing the intended purpose and the value of the finished product is not affected, permit the Contractor to leave the material in place.

If the material is permitted to remain in place the PF for the process will not be greater than 0.75. When condition red, as described in Section 106, exists for any element, resolution and correction will be in accordance with Section 106. Material, which the Engineer determines is defective, may be isolated and rejected without regard to sampling sequence or location within a process.

If removal and replacement is required because the joint density PF for a process is below 0.75, the Contractor shall remove and replace the full lane width adjacent to and including at least 6 inches beyond the visible joint line for the entire length of joint representing the process. If the lane removed is adjacent to another joint, that joint shall also be removed to a point 6 inches beyond the visible joint line. When a single joint density core is more than 2V outside the tolerance limits, the removal and replacement limits shall be identified by coring the failing joint at 25 foot intervals until two successive cores are found to be 1V or less below the minimum tolerance limit. If removal and replacement is required, the Contractor shall submit documentation identifying the process to be used to correct the area in question in writing. The process will be approved by the Engineer before commencing the corrective work.

**Table 105-2
“W” AND “V” FACTORS FOR VARIOUS ELEMENTS**

Hot Mix Asphalt		
Element	V Factor	W Factor
2.36 mm (No. 8) mesh and larger sieves	2.80	N/A
600 µm (No. 30) mesh sieve	1.80	N/A
75 µm (No. 200) mesh sieve	0.80	N/A
Gradation	N/A	15
Asphalt Content	0.20	25
In-place Density	1.10	45
Joint Density	1.60	15

**Table 105-3
FORMULAS FOR CALCULATING PF BASED ON PN**

Pn	When Pn as shown at left is 3 to 9, or greater than 200, use designated formula below to calculate Pay Factor, PF = ..., when Pn is 10 to 200, use formula (1) above:	Maximum PF
3	$0.31177 + 1.57878 (QL/100) - 0.84862 (QL/100)^2$	1.025
4	$0.27890 + 1.51471 (QL/100) - 0.73553 (QL/100)^2$	1.030
5	$0.25529 + 1.48268 (QL/100) - 0.67759 (QL/100)^2$	1.030
6	$0.19468 + 1.56729 (QL/100) - 0.70239 (QL/100)^2$	1.035
7	$0.16709 + 1.58245 (QL/100) - 0.68705 (QL/100)^2$	1.035
8	$0.16394 + 1.55070 (QL/100) - 0.65270 (QL/100)^2$	1.040
9	$0.11412 + 1.63532 (QL/100) - 0.68786 (QL/100)^2$	1.040
10 to 11	$0.15344 + 1.50104 (QL/100) - 0.58896 (QL/100)^2$	1.045
12 to 14	$0.07278 + 1.64285 (QL/100) - 0.65033 (QL/100)^2$	1.045
15 to 18	$0.07826 + 1.55649 (QL/100) - 0.56616 (QL/100)^2$	1.050
19 to 25	$0.09907 + 1.43088 (QL/100) - 0.45550 (QL/100)^2$	1.050
26 to 37	$0.07373 + 1.41851 (QL/100) - 0.41777 (QL/100)^2$	1.055
38 to 69	$0.10586 + 1.26473 (QL/100) - 0.29660 (QL/100)^2$	1.055
70 to 200	$0.21611 + 0.86111 (QL/100)$	1.060
≥ 201	$0.15221 + 0.92171 (QL/100)$	1.060

(g) Process I/DP Computation.

$$I/DP = (PF - 1)(QR)(UP)(W/100)$$

Where: I/DP = Incentive/Disincentive Payment

PF = Pay Factor

QR = Quantity in Tons of HMA

Represented by the Process

UP = Unit Bid Price of Asphalt Mix

W = Element Factor from Table 105-2

When AC is paid for separately UP shall be:

$$UP = [(Ton_{HMA})(UP_{HMA}) + (Ton_{AC})(UP_{AC})]/Ton_{HMA}$$

$$\begin{array}{lcl}
 \text{Where:} & \text{Ton}_{\text{HMA}} & = \text{Tons of Asphalt Mix} \\
 & \text{UP}_{\text{HMA}} & = \text{Unit Bid Price of Asphalt Mix} \\
 & \text{Ton}_{\text{AC}} & = \text{Tons of Asphalt Cement} \\
 & & \text{UP}_{\text{AC}} = \text{Unit Bid Price of Asphalt Cement}
 \end{array}$$

For the joint density element:

$$\text{UP} = \text{UP}_{\text{HMA}}$$

Where: UP_{HMA} is as defined above.

When AC is paid for separately UP shall be:

$$\text{UP} = [(\text{BTon}_{\text{HMA}})(\text{BUP}_{\text{HMA}}) + (\text{BTon}_{\text{AC}})(\text{BUP}_{\text{AC}})]/\text{BTon}_{\text{HMA}}$$

$$\begin{array}{lcl}
 \text{Where:} & \text{BTon}_{\text{HMA}} & = \text{Bid Tons of Asphalt Mix} \\
 & \text{BUP}_{\text{HMA}} & = \text{Unit Bid Price of Asphalt Mix} \\
 & \text{BTon}_{\text{AC}} & = \text{Bid Tons of Asphalt Cement} \\
 & & \text{BUP}_{\text{AC}} = \text{Unit Bid Price of Asphalt Cement}
 \end{array}$$

- (h) *Element I/DP.* The I/DP for an element shall be computed by accumulating the process I/DP's for that element.
- (i) *I/DP for a Mix Design.* The I/DP for a mix design shall be computed by accumulating the individual I/DP's for the asphalt content, in-place density, and gradation elements for that mix design. The accumulated quantities of materials for each element must be the same at the end of I/DP calculations for a mix design.
- (j) *Project I/DP.* The I/DP for the project shall be computed by accumulating the mix design I/DP's and the joint density I/DP's. The accumulated quantities of materials for each element must be the same at the end of I/DP calculations for the project.

Delete subsection 106.05 and replace with the following:

106.05 Sampling and Testing of Hot Mix Asphalt. All hot mix asphalt, Item 403, except Hot Mix Asphalt (Patching) and temporary pavement shall be tested in accordance with the following program of process control testing and acceptance testing:

The Contract will specify whether process control testing by the Contractor is mandatory or voluntary.

(a) *Process Control Testing.*

1. **Mandatory Process Control.** When process control testing is mandatory the Contractor shall be responsible for process control testing on all elements and at the frequency

listed in Table 106-1. Process control testing shall be performed at the expense of the Contractor.

After completion of compaction, in-place density tests for process control shall be taken at the frequency

shown in Table 106-1. The results shall be reported in writing to the Engineer on a daily basis.

Daily

plots of the test results with tonnage represented shall be made on a chart convenient for viewing

by the

Engineer. All of the testing equipment used for in-place density testing shall conform to the

requirements

of acceptance testing standards, except nuclear testing devices need not be calibrated on the

Department's calibration blocks.

For elements other than in-place density, results from quality control tests need not be plotted, or routinely reported to the Engineer. This does not relieve the Contractor from the responsibility of performing such testing along with appropriate plant monitoring as necessary to assure that produced material conforms to the applicable specifications. Quality control test data shall be made available to the Engineer upon request.

2. Voluntary Process Control. The Contractor may conduct process control testing. Process control testing is not required, but is recommended on the elements and at the frequency listed in Table 106-1.

All of the testing equipment used for in-place density testing shall conform to the requirements of acceptance testing standards, except nuclear testing devices need not be calibrated on the Department's calibration blocks.

- (b) *Acceptance Testing.* Acceptance testing is the responsibility of the Department. For acceptance testing the Department will determine the locations where samples or measurements are to be taken and as designated in Section 403. The maximum quantity of material represented by each test result, the elements, the frequency of testing and the minimum number of test results will be in accordance with Table 106-1. The location or

time of sampling will be based on the stratified random procedure as described in CP 75. Acceptance sampling and testing procedures will be in accordance with the Schedule for Minimum Materials Sampling, Testing and Inspection in the Department's Field Materials Manual. Samples for project acceptance testing shall be taken by the Contractor in accordance with the designated method. The samples shall be taken in the presence of the Engineer. Where appropriate, the Contractor shall reduce each sample to the size designated by the Engineer. The Contractor may retain a split of the each sample which cannot be included as part of the Contractor's process control testing. All materials being used are subject to inspection and testing at any time prior to or during incorporation into the work.

**Table 106-1
SCHEDULE FOR MINIMUM SAMPLING AND TESTING**

Element	Process Control	Acceptance
Asphalt Content	1/500 tons	1/1000 tons
Theoretical Maximum Specific Gravity	1.1000 tons, minimum 1/day	1/1000 tons, minimum 1/day
Gradation	1/Day	1/2000 tons
In-Place Density	1/500 tons	1/500 tons
Joint Density	1 core/2500 linear feet of joint	1 core /5000 linear feet of joint
Aggregate Percent Moisture ⁽³⁾	1/2000 tons or 1/Day if less than 2000 tons	1/2000 tons
Percent Lime ^{(3) (4)}	1/Day	Not applicable

Notes:

- (1) The minimum number of in-place density tests for acceptance will be 5.
- (2) Process control tests for gradation are not required if less than 250 tons are placed in a day. The minimum number of process control tests for gradation shall be one test for each 1000 tons or fraction thereof.
- (3) Not to be used for incentive/disincentive pay. Test according to CP 60B and report results from Form 106 or Form 565 on Form 6.
- (4) Verified per Contractor's QC Plan.

(c) *Reference Conditions*. Three reference conditions can exist determined by the Moving Quality Level (MQL). The MQL will be calculated in accordance with the procedure in CP 71 for Determining Quality Level (QL). The MQL will be calculated using only acceptance tests. The MQL will be calculated on tests 1 through 3, then tests 1 through 4, then tests 1 through 5, then thereafter on the last five consecutive test results. The MQL will not be used to determine pay factors. The three reference conditions and actions that will be taken are described as follows:

1. Condition green will exist for an element when an MQL of 90 or greater is reached, or maintained, and the past five consecutive test results are within the specification limits.
2. Condition yellow will exist for all elements at the beginning of production or when a new process is established because of changes in materials or the job-mix formula, following an extended suspension of work, or when the MQL is less than 90 and equal to or greater than 65. Once an element is at condition green, if the MQL falls below 90 or a test result falls outside the specification limits, the condition will revert to yellow or red as appropriate.
3. Condition red will exist for any element when the MQL is less than 65. The Contractor shall be notified immediately in writing and the process control sampling and testing frequency increased to a minimum rate of 1/250 tons for that element. The process control sampling and testing frequency shall remain at 1/250 tons until the process control QL reaches or exceeds 78. If the QL for the next five process control tests is below 65, production will be suspended.

If gradation is the element with MQL less than 65, the Department will test one randomly selected sample in the first 1250 tons produced in condition red. If this test result is outside the tolerance limits, production will be suspended. (This test result will not be included as an acceptance test.)

After condition red exists, a new MQL will be started. Acceptance testing will stay at the frequency shown in Table 106-1. After three acceptance tests, if the MQL is less than 65, production will be suspended.

Production will remain suspended until the source of the problem is identified and corrected. Each time production is suspended, corrective actions shall be proposed in writing by the Contractor and approved in writing by the Engineer before production may resume.

Upon resuming production, the process control sampling and testing frequency for the elements causing the condition red shall remain at 1/250 tons. If the QL for the next five process control tests is below 65, production will be suspended again. If gradation is the element with MQL less than 65, the Department will test one randomly selected sample in the first 1250 tons produced in condition red. If this test result is outside the tolerance limits, production will be suspended.

June 29, 2006

REVISION OF SECTION 106
CERTIFICATES OF COMPLIANCE AND
CERTIFIED TEST REPORTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions issued unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on all projects.

REVISION OF SECTION 106
CERTIFICATES OF COMPLIANCE AND
CERTIFIED TEST REPORTS

Section 106 of the Standard Specifications is hereby revised for this project as follows:

In subsection 106.12 delete item (11) of the list following the first paragraph and replace with the following:

(11) The following certification, signed by a person having legal authority to act for the Contractor:

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents _____ (quantity and units) of pay item _____ (pay item number and Description) that will be installed on project number _____.	
_____ Contractor	_____ Date

In subsection 106.12, delete the second paragraph and replace with the following:

The original Certificate of Compliance shall include the Contractor's original signature as directed above, and the original signature (including corporate title), under penalty of perjury, of a person having legal authority to act for the manufacturer. It shall state that the product or assembly to be incorporated into the project has been sampled and tested, and the samples have passed all specified tests. One copy or facsimile of the fully signed Certificate of Compliance shall be furnished to the Engineer prior to installation of material. The original shall be provided to the Engineer before payment for the represented item will be made. Failure to comply may result in delays to the project or rejection of the materials.

In subsection 106.13, delete item (11) of the list following the first paragraph and replace with the following:

(11) The following certification, signed by a person having legal authority to act for the Contractor:

I hereby certify under penalty of perjury that the material listed in this Certified Test Report represents _____ (quantity and units) of pay item _____ (pay item number and Description) that will be installed on project number _____.	
_____ Contractor	_____ Date

In subsection 106.13, delete the second paragraph and replace with the following:

The original Certified Test Report shall include the Contractor's original signature as directed above, and the original signature (including corporate title), under penalty of perjury, of a person having legal authority to act for the manufacturer or the independent testing laboratory. It shall state that the test results show that the product or assembly to be incorporated into the project has been sampled and tested, and the samples have passed all specified tests. One copy or facsimile of the fully signed Certified Test Report shall be furnished to the Engineer prior to installation of material. The original shall be provided to the Engineer before payment for the represented item will be made. Failure to comply may result in delays to the project or rejection of the materials.

April 30, 2009

REVISION OF SECTIONS 106 AND 601
CONCRETE SAMPLING AND PUMPING

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects having any type of concrete work.

REVISION OF SECTIONS 106 AND 601
CONCRETE SAMPLING AND PUMPING

Sections 106 and 601 of the Standard Specifications are hereby revised for this project as follows:

In subsection 106.03, delete the fifth paragraph and replace with the following:

Samples will be taken by the Department except that the Contractor shall take samples of Portland Cement Concrete in accordance with CP 61; samples of asphalt cement, in accordance with AASHTO T 40; hot mix asphalt, in accordance with CP 41 and a composite of aggregates for hot bituminous mixtures, in accordance with CP 30. The Engineer will determine the sampling locations, and the samples shall be taken in the presence of the Engineer. The Contractor may retain a split of each sample.

Delete subsection 601.08 and replace with the following:

601.08 Air Content Adjustment. When a batch of concrete delivered to the project does not conform to the minimum specified air content, an air entraining admixture conforming to subsection 711.02 may be added in accordance with subsection 601.17. After the admixture is added, the concrete shall be re-mixed for a minimum of 20 revolutions of the mixer drum at mixing speed. The concrete will then be re-tested by QC.

Subsection 601.12(d) shall include the following:

The Contractor shall not use pipes, chutes, troughs, spouts, or tremies that are fabricated of aluminum materials for pumping, conveying, or placing concrete.

Subsection 601.12(g) shall include the following:

When concrete is placed by pumping, the pumping equipment shall be thoroughly cleaned prior to concrete placement. Excess form release agent shall be removed from the hopper. The pump shall be primed at the Contractor's expense by pumping and discarding enough concrete to produce a uniform mix exiting the pump. At least 0.25 cubic yard of concrete shall be pumped and discarded to prime the pump. Water shall not be added directly into the concrete pump hopper after placement has commenced. If water is added to the concrete pump hopper, all concrete in the concrete pump hopper and the line shall be discarded and the pump re-primed at the Contractor's expense.

The pump operator shall have a valid operator's certification from the American Concrete Pumping Association, or approved equal. Boom pumps shall have a documented current inspection as required by ASME B30.27. Equipment added to the pump shall meet the pump manufacturer's specifications. The Contractor shall submit the specifications of the pumping equipment and the qualifications of the operator to the Engineer for review at least two weeks prior to pumping concrete. Equipment and operators rejected by the Engineer shall be replaced at the Contractor's expense.

The pump shall be operated so that a continuous stream of concrete is produced. The pump equipment shall use a minimum of one of the following to maintain concrete uniformity:

- (1) A 360 degree loop immediately prior to the delivery end of the pump line.
- (2) A minimum one inch reducer installed at the entry to the delivery hose.
- (3) A minimum one inch reducing delivery hose.
- (4) A cable attached to the pump boom creating a minimum 90 degree bend in the steel braded flexible hose. The point of discharge from the flexible hose at the end of the boom shall be at or above the lowest point of the bend.
- (5) On horizontal pours a 10-foot minimum horizontal delivery system placed on the deck.
- (6) Other approved methods.

2
REVISION OF SECTIONS 106 AND 601
CONCRETE SAMPLING AND PUMPING

Metal pump lines or couplings shall not rest directly on epoxy coated reinforcing steel.

The point of discharge of the pump shall be as close to the bridge deck elevation as possible.

Subsection 601.17 shall include the following:

The Contractor shall sample 601 pay items for both QC and QA in accordance with CP 61. The Engineer will witness the sampling and take possession of the QA samples at a mutually agreed upon location.

Delete subsection 601.17(a) and replace with the following:

(a) *Air Content.* The first three batches at the beginning of production shall be tested by QC and QA for air content. When air content is below the specified limit, it may be adjusted in accordance with subsection 601.08. Successive batches shall be tested by QC and witnessed by the Engineer until three consecutive batches are within specified limits. After the first three batches, CDOT will follow the random minimum testing schedule. Air content shall not be adjusted after a QA test.

At any time during the placement of the concrete, when a QA test on a batch deviates from the minimum or maximum percent of total air content specified, the following procedure will be used to analyze the acceptability of the concrete.

1. A batch that deviates from the specified air content by more than 1 percent and all Class D, DT, HT and H concrete placed in bridge decks with air content exceeding 8 percent will be rejected. Portions of loads incorporated into structures prior to determining test results which indicate rejection as the correct course of action shall be subject to acceptance at reduced price, no payment, or removal as determined by the Engineer.
2. A batch that deviates from the specified air content by 1 percent or less may be accepted at a reduced price using Table 601-3.

April 2, 2009

REVISION OF SECTION 107
ARRA PROJECTS
AUTHORITY OF THE US COMPTROLLER GENERAL
AND THE US INSPECTOR GENERAL

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects funded with *American Recovery and Reinvestment Act* (ARRA) funds.

REVISION OF SECTION 107
ARRA PROJECTS
AUTHORITY OF THE US COMPTROLLER GENERAL
AND THE US INSPECTOR GENERAL

Section 107 of the Standard Specifications is hereby revised for this project as follows:

Add subsection 107.18 which shall include the following:

107.18 Authority of the US Comptroller General and the US Inspector General. Pursuant to Sections 902 and 1515 of the American Recovery and Reinvestment Act (ARRA) the Contractor and his subcontractors shall cooperate fully with the US Comptroller General and the US Inspector General in fulfilling their responsibilities outlined therein. This includes promptly providing copies of all records requested by the US Comptroller General and the US Inspector General for inspection and responding promptly to all requests for interviews.

(a) *US Comptroller General.* The following provisions provided by FHWA apply to this project:

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 requires that each contract awarded using ARRA funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

“(1) to examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and

(2) to interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.”

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

(b) *US Inspector General.* The following provisions provided by FHWA apply to this project:

Section 1515(a) of the ARRA provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

July 30, 2009

**REVISION OF SECTION 107
PROJECT SAFETY PLANNING**

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects, including Local Agency (LA) administered projects.

1
REVISION OF SECTION 107
PROJECT SAFETY PLANNING

Section 107 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 107.06 and replace with the following:

107.06. Safety, Health, and Sanitation Provisions.

- (a) *Project Safety Management Plan.* Prior to the start of construction, the Contractor's Project Safety Manager shall prepare a written Project Safety Management Plan (Plan) which shall be specific to the project. The Plan shall include:
- (1) Designation of a Project Safety Manager and an alternate, including names and contact information, and competent persons for each construction activity as described below.
 - (2) A list of all significant and/or high-risk construction activities and safety considerations as described below, and a hazard assessment for each.
 - (3) Direction as to whether engineering, administrative, personal protection measures, training, or a combination thereof, shall be implemented to address the hazards identified in (2) above.
 - (4) Provisions for field safety meetings. The Contractor shall conduct field safety meetings (also known as Toolbox or Tailgate meetings) at the frequency specified in the Plan, which shall be once per week at a minimum. The Contractor shall encourage participation by all persons working at the project site. Participants at these meetings shall discuss specific construction activities for that work period, results from safety inspections, required personal protective equipment, and all other necessary safety precautions.
 - (5) Provisions for project safety meetings. In the event of a safety stand-down, the Contractor shall conduct a project safety meeting to discuss the circumstances leading to the stand-down, and the measures that shall be taken to prevent a recurrence. The Contractor shall notify the Engineer of the time, date, and location of these meetings, shall require participation by all persons (including Department personnel and consultants) working at the project site, and shall track attendance through sign-up lists.
 - (6) At the Contractor's option, portions of the Plan may be prepared by the subcontractor(s) that will be performing that subcontracted work. The Contractor shall remain responsible for the overall project Plan, and for incorporating portions prepared by subcontractors. Portions of the plan prepared by subcontractors shall be as stringent as the Contractor's overall Plan.
 - (7) Procedures for assuring compliance by subcontractors, suppliers, and authorized visitors to the project. In addition, the Plan shall specify the measures that will be taken to discourage unauthorized personnel from entering the site.
 - (8) Procedures to be followed in cases where workers are suspected of drug or alcohol impairment.
 - (9) Provisions for project safety inspections. The Project Safety Manager shall conduct regular project safety inspections at the frequency specified in the Plan, once per month at a minimum. The Contractor shall notify the Engineer in advance of these inspections. Documentation of the inspections shall include the date of the inspection, the participants, the findings, and the corrective measures taken to address the findings. Within one week after these inspections, the Contractor shall provide a copy of the documentation to the Engineer and shall maintain a copy on the project site.
 - (10) Procedures to be followed to correct violations of the Plan by any personnel.
 - (11) The notification, investigation, and implementation procedures that the Contractor shall follow in the case of a safety stand down.
 - (12) The Contractor's certification shall be as follows:

REVISION OF SECTION 107
PROJECT SAFETY PLANNING

By authorized signature below, (Contractor name), hereinafter referred to as 'the Contractor', hereby certifies that this Project Safety Management Plan (Plan) complies with and meets applicable Federal, State, and local laws, rules, regulations and guidelines governing safety, health and sanitation, including but not limited to the Occupational Safety and Health Act, 29 CFR 1910, 29 CFR 1926, 23 CFR 634, Mine Safety and Health Administration (MSHA), Title 30 CFR, the "Colorado Work Zone Best Practices Safety Guide", CFR 49, national consensus standards, and the Drug-Free Workplace Act (Public Law 100-690 Title V, subtitle D, 41 USC 701 et seq.), and the Revision of Section 107 – Project Safety Planning standard special provision. All operations and work practices of the Contractor shall comply with this Plan. The Contractor requires that all subcontractors, suppliers and Department personnel and consultants comply with this Plan.

(Signature of Contractor's Project Safety Manager or alternate)

Title

Date

Prior to the start of construction, the Contractor shall submit the Plan to the Engineer for the project records, and shall provide updates to the Plan as necessary, and as work conditions or personnel change. The Contractor shall review the Plan for sufficiency and accuracy at least once per twelve months of contract time. The Engineer will review the Plan for general compliance with subsection 107.06 and notify the Contractor in writing that the plan has been received and addresses items 1 thru 12 above. An up-to-date copy of the Plan shall be on the project site in the Contractor's possession at all times.

- (b) *Contractor Responsibilities.* The Contractor shall ensure compliance with applicable Federal, State, and local laws, rules, regulations, and guidelines governing safety, health and sanitation, including but not limited to the Plan, the Occupational Safety and Health Act, 29 CFR 1910, 29 CFR 1926, 23 CFR 634, Mine Safety and Health Administration (MSHA), Title 30 CFR, the "Colorado Work Zone Best Practices Safety Guide", CFR 49, national consensus standards, and the Drug-Free Workplace Act (Public Law 100-690 Title V, subtitle D, 41 USC 701 et seq.). The Contractor shall provide all safeguards, safety devices, and protective equipment, and shall take all other actions necessary to protect the life, safety and health of persons working at or visiting the project site, and of the public and property in connection with the performance of the work covered by the Contract. In the case of conflicting requirements, the more stringent of the requirements shall apply. The Contractor shall require that all operations and work practices by Contractor, subcontractor, supplier, and Department personnel and consultants comply with the provisions of the Plan. The Contractor shall respond in writing to all safety issues raised by the Engineer.
- (c) *Project Safety Manager.* Prior to the start of construction, the Contractor shall designate a Project Safety Manager and an alternate, who shall be responsible for the coordination of safety activities, and preparation, certification, and implementation of the Plan.
- (d) *Competent Persons.* Prior to the start of construction, the Contractor shall designate at least one competent person for each of the construction activities being completed. A competent person is an individual who, by way of training, experience, or combination thereof, is knowledgeable of applicable standards, is capable of identifying existing and predictable workplace hazards relating to a specific construction activity, is designated by the employer, and has authority to take prompt, appropriate actions. Construction activities and safety

considerations that must be addressed by the Plan and by designation of a competent person shall include, but are not limited to (if applicable to the project):

REVISION OF SECTION 107
PROJECT SAFETY PLANNING

rotomilling and paving operations, concrete paving, concrete placement, lead abatement, hearing protection, respiratory protection, rigging, assured grounding, scaffolding, fall protection, cranes, trenching and excavating, steel erection, underground construction (including caissons and cofferdams), demolition, blasting and the use of explosives, stairways and ladders, asbestos, and confined space. The appropriate competent persons shall be present on the project site at all times during the specific construction activities that require those competent persons.

- (e) *Project Safety & Health Requirements.* All personnel on the project site shall wear the following personal protective equipment (PPE) at all times when in the Highway Right of Way, except when in their vehicles:
- (1) Head protection and high visibility apparel, reflectorized for night use conforming to ANSI/ISEA 107 – 2004, and appropriate, sturdy footwear, all of which shall comply with the latest appropriate national consensus standards.
 - (2) All other PPE that is stipulated by the Plan. All PPE shall comply with the latest appropriate national consensus standards.
- (f) *Safety Stand-Down.* The Engineer may immediately suspend all or part of any work in the case of an accident (including property damage), or catastrophe (three or more persons hospitalized in a single incident), or other situation presenting an imminent danger to life or health, such as a near miss, violation of the Plan, or presence of a hazardous situation. In the case of a worksite fatality directly related to the Contractor's or any subcontractor's work operations, the safety stand-down shall be mandatory. In the case of a traffic fatality unrelated to a work-zone incident in the opinion of the Engineer, the safety stand-down will not be mandatory. During any mandatory safety stand-down due to a fatality, all work on the project shall cease, except that work deemed immediately necessary by the Engineer to make the project safe. The Contractor will be allowed to resume operations only after providing written documentation, certified by the Project Safety Manager or alternate, regarding the corrective actions taken to prevent recurrence.
- (g) *Regulatory Enforcement Actions.* The Contractor shall provide written notifications of all Regulatory agency actions relating to safety to the Engineer.

Failure to comply with the requirements of subsection 107.06 shall be grounds for withholding of progress payments, project suspension, or both.

All costs associated with the preparation and implementation of the Plan, and complying with all safety, health, and sanitation provisions and requirements will not be measured and paid for separately, but shall be included in the work.

AUGUST 1, 2005

**3. REVISION OF SECTION 107
RESPONSIBILITY FOR DAMAGE CLAIMS,
INSURANCE TYPES AND COVERAGE LIMITS**

NOTICE

ICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions regarding its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies that use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on all projects.

1
REVISION OF SECTION 107
RESPONSIBILITY FOR DAMAGE CLAIMS,
INSURANCE TYPES AND COVERAGE LIMITS

Section 107 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 107.15 and replace with the following:

107.15 Responsibility for Damage Claims, Insurance Types and Coverage Limits. The Contractor shall indemnify and save harmless the Department, its officers, and employees, from suits, actions, or claims of any type or character brought because of any and all injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or failure to comply with the provisions of the Contract; or on account of or in consequence of neglect of the Contractor in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of the Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright, unless the design, device, material or process involved is specifically required by the Contract; or from any claims or amounts arising or recovered under the Worker's Compensation Act, or other law, ordinance, order, or decree. The Department may retain as much of any moneys due the Contractor under any Contract as may be determined by the Department to be in the public interest.

(a) The Contractor shall obtain, and maintain at all times during the term of this Contract, insurance in the following kinds and amounts:

(1) Workers' Compensation Insurance as required by state statute, and Employer's Liability

Insurance covering all of Contractor's employees acting within the course and scope of their employment.

(2) Commercial General Liability Insurance written on ISO occurrence form CG 00 01 10/93 or equivalent, covering premises operations, fire damage, independent Contractors, products and completed operations, blanket contractual liability, personal injury, and advertising liability with minimum limits as follows:

- (i) \$1,000,000 each occurrence;
- (ii) \$2,000,000 general aggregate;
- (iii) \$2,000,000 products and completed operations aggregate; and
- (iv) \$50,000 any one fire.

(v) Completed Operations coverage shall be provided for a minimum period of one year following final acceptance of work.

If any aggregate limit is reduced below \$1,000,000 because of claims made or paid, the

Contractor shall immediately obtain additional insurance to restore the full aggregate limit and furnish to CDOT a certificate or other document satisfactory to CDOT showing compliance with this provision.

(3) Automobile Liability Insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit as follows: \$1,000,000 each accident combined single limit.

(4) Professional liability insurance with minimum limits of liability of not less than \$1,000,000 Each Claim and \$1,000,000 Annual Aggregate for both the Contractor or any subcontractors when:

- (i) Contract items 625, 629, or both are included in the Contract
- (ii) Plans, specifications, and submittals are required to be signed and sealed by the Contractor's Professional Engineer, including but not limited to:
 - (A) Shop drawings and working drawings as described in subsection 105.02
 - (B) Mix Designs

August 1, 2005

2
REVISION OF SECTION 107
RESPONSIBILITY FOR DAMAGE CLAIMS,
INSURANCE TYPES AND COVERAGE LIMITS

- (C) Contractor performed design work as required by the plans and specifications
- (D) Change Orders
- (E) Approved Value Engineering Change Proposals

(iii) The Contractor and any included subcontractor shall renew and maintain Professional Liability Insurance as outlined above for a minimum of one year following final acceptance of work.

(5) Umbrella or Excess Liability Insurance with minimum limits of \$1,000,000. This policy shall become primary (drop down) in the event the primary Liability Policy limits are impaired or exhausted. The Policy shall be written on an Occurrence form and shall be following form of the primary. The following form Excess Liability shall include CDOT as an additional insured.

- (b) CDOT shall be named as additional insured on the Commercial General Liability and Automobile Liability Insurance policies. Completed operations additional insured coverage shall be on endorsements CG 2010 11/85, CG 2037, or equivalent. Coverage required of the contract will be primary over any insurance or self-insurance program carried by the State of Colorado.
- (c) The Insurance shall include provisions preventing cancellation or non-renewal without at least 30 days prior notice to CDOT by certified mail.
- (d) The Contractor will require all insurance policies in any way related to the contract and secured and maintained by the Contractor to include clauses stating that each carrier will waive all rights of recovery, under subrogation or otherwise, against CDOT, its agencies, institutions, organizations, officers, agents, employees and volunteers.
- (e) All policies evidencing the insurance coverages required hereunder shall be issued by insurance companies satisfactory to CDOT.
- (f) The Contractor shall provide certificates showing insurance coverage required by this contract to CDOT prior to execution of the contract. No later than 15 days prior to the expiration date of any such coverage, the Contractor shall deliver CDOT certificates of insurance evidencing renewals thereof. At any time during the term of this contract, CDOT may request in writing, and the Contractor shall thereupon within ten days supply to CDOT, evidence satisfactory to CDOT of compliance with the provisions of this section.
- (g) Notwithstanding subsection 107.15(a), if the Contractor is a "public entity" within the meaning of the Colorado Governmental Immunity Act CRS 24-10-101, et seq., as amended ("Act"), the Contractor shall at all times during the term of this contract maintain only such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the Act. Upon request by CDOT, the Contractor shall show proof of such insurance satisfactory to CDOT. Public entity Contractors are not required to name CDOT as an Additional Insured.
- (h) When the Contractor requires a subcontractor to obtain insurance coverage, the types and minimum limits of this coverage may be different than those required, as stated above, for the Contractor, except for the Commercial General Liability Additional Insured endorsement and those that qualify as needing Professional Liability Insurance.

April 12, 2007

REVISION OF SECTION 107
TON-MILE TAXES

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects.

April 12, 2007

REVISION OF SECTION 107
TON-MILE TAX

Section 107 of the Standard Specifications is hereby revised for this project as follows:

In subsection 107.02, delete the third paragraph.

REVISION OF SECTION 108
LIQUIDATED DAMAGES

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects.

REVISION OF SECTION 108
LIQUIDATED DAMAGES

Section 108 of the Standard Specifications is hereby revised for this project as follows:

In subsection 108.08, delete the schedule of liquidated damages and replace with the following:

Original Contract Amount (\$)		Liquidated Damages per Calendar Day (\$)
From More Than	To And Including	
0	150,000	300
150,000	250,000	500
250,000	500,000	600
500,000	1,000,000	1200
1,000,000	2,000,000	1800
2,000,000	4,000,000	2700
4,000,000	10,000,000	3400
10,000,000	-----	3400 plus 250 Per Each Additional 1,000,000 Contract Amount or Part Thereof Over 10,000,000

October 11, 2006

REVISION OF SECTION 108

PAYMENT SCHEDULE

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on all projects.

6. REVISION OF SECTION 108
7. PAYMENT SCHEDULE

Section 108 of the Standard Specifications is hereby revised for this project as follows:

Add subsection 108.031, immediately following subsection 108.03, which shall include the following:

108.031 Payment Schedule. The Contractor shall prepare a payment schedule which shall show the dollar amount of work the Contractor expects to complete by the progress estimate date each month for the duration of construction. The schedule shall cover the period from the commencement of work to the expected completion date as shown on the Contractor's progress schedule. The payment schedule may be prepared using standard spreadsheet software such as MS Excel and submitted in electronic format. A sample MS Excel format is available from the Engineer.

(a) *Initial Payment Schedule.* The Contractor shall submit the initial payment schedule at the preconstruction conference. The payment schedule shall consist of two parts: (1) a tabulation, and (2) a bar chart.

1. *Part 1.* Part 1 shall be a tabulation which shows:

- (1) the salient features listed in the Contractor's progress schedule
- (2) the dollar amount of work in each salient feature expected to be completed by each month's progress estimate date
- (3) the dollar amount of all other work not included in the salient features expected to be completed by each month's progress estimate date
- (4) the total dollar amount of work expected to be completed by each month's progress estimate date

The amounts shown shall include planned force account work and expected incentive payments.

2. *Part 2.* Part 2 shall be a bar chart which shows the expected total dollar amount of work to be completed by each month's progress estimate date.

(b) *Payment Schedule Updates.* Once each month the Contractor shall submit a payment schedule update to the Engineer. The schedule update shall be in the same two part format as the initial schedule and shall be submitted to the Engineer by the first day of each month. In each payment schedule update, estimated monthly dollar amounts shall be revised to match actual progress payments made to the Contractor to date. Each payment schedule update shall show corrected dollar amounts of work to be completed each month through the expected completion date as shown on the Contractor's progress schedule.

(c) *Failure to Submit Payment Schedule.* If the Contractor fails to submit the initial payment schedule or a payment schedule update by the required date, the Engineer will withhold further progress payments until such time as the Contractor has submitted a current payment schedule.

November 3, 2008

REVISION OF SECTION 108
PROGRESS SCHEDULE

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision in all projects.

REVISION OF SECTION 108
PROGRESS SCHEDULE

Section 108 of the Standard Specifications is hereby revised for this project as follows:

In subsection 108.03 delete the first paragraph and replace with the following:

Schedule. The Contractor shall plan, schedule, and report the progress of the work to ensure timely completion of the work as called for in the Contract. The Contractor shall prepare a Project Schedule that shall be used for coordination, for evaluation of progress, and for the evaluation of changes to the Contract. The Schedule shall show the logical progression of all activities required to complete the Contract work, including those of subcontractors, Contractor's engineers and surveyors, and suppliers. Seasonal and weather constraints, utility coordination, railroad restrictions, right of way restrictions, traffic constraints, environmental constraints, other project interfaces, expected job learning curves and other constraints shall be considered when preparing the Project Schedule. Days scheduled as no work days shall be indicated. A CPM schedule is required unless the Commencement and Completion of work special provision allows a bar chart schedule. The Schedule shall show all work completed within the contract time.

In subsection 108.03 (c), delete the third paragraph and replace with the following:

The progress schedule shall show the logical progression of all activities required to complete the Contract work, including subcontracted work, delivery dates for critical material, submittal and review periods, milestone requirements and no work periods. Where the project has specific phases, each phase shall be described separately for each applicable required activity.

June 5, 2009

REVISION OF SECTION 109
ASPHALT CEMENT COST ADJUSTMENT
(ASPHALT CEMENT INCLUDED IN THE WORK)

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

- Use this standard special provision in all projects with items 403 Hot Mix Asphalt and/or 403 Stone Matrix Asphalt in which the cost of AC is included in the work.
- The designer should add a Planned Force Account item called F/A Asphalt Cement Cost Adjustment, Pay Item 700-70019 to the plans and project special provisions to account for the possibility that an adjustment will be required. The amount of this Force Account item to be included in the project budget can be calculated using the AC Cost Adjustment Worksheet provided on the Design and Construction Support - Asphalt Cement Cost Adjustment website. Input the following data in the worksheet
 - Price index for the current month (BP)
 - BP + 10%
 - Estimated Percent AC to be in the mix in decimal, i.e. 0.05 for 5%
 - Planned tonnage
 - This will calculate an estimated dollar amount assuming a 10% increase in price. This should be used as the minimum FA budget amount.
 - Follow the same instructions but use BP + 50% for the estimated maximum amount the project would pay in AC Cost Adjustment
 - This will calculate an estimated dollar amount assuming a 50% increase in price. This should be used as the maximum FA budget amount.
 - The Region may determine an amount between these two figures for the final FA budget amount.
- Contact your Area Engineer if you have any questions.
- If the amount of actual Asphalt Cement Adjustments exceeds the funding allotted in the Planned Force Account, the remainder of the adjustments should be made using

funding from Minor Contract Revisions (MCRs), or by adding funding to the project.

1
 REVISION OF SECTION 109
 ASPHALT CEMENT COST ADJUSTMENT
 (ASPHALT CEMENT INCLUDED IN THE WORK)

Section 109 of the Standard Specifications is hereby revised for this project as follows:

Subsection 109.06 shall include the following:

- (i) *Asphalt Cement Cost Adjustments.* Contract price adjustments will be made to reflect increases or decreases in the monthly average price of asphalt cement from the average price for the month preceding the month in which bids were received for the Contract.
1. Price adjustments will be based on the asphalt cement price index established by the Department and calculated as shown in subsection 109.06(i)2.D below. The index will be the average for the month of the daily postings of the spot price per barrel of Western Canadian Select (WCS) as published on <http://www.encana.com/doingbusiness/crudeoilpricing/index.htm>. The index from this source will be converted to US Dollars using the currency converter at <http://finance.yahoo.com/currency> by converting the posted price of Canadian Dollars per cubic meter of WCS on Encana.com to US Dollars per cubic meter. A conversion factor of 0.89 cubic meter per Ton will be used to convert the posted price from cubic meter to tons. The converted daily prices and the average index number for the month will be posted on the CDOT website as soon as they are available at: <http://www.dot.state.co.us/DesignSupport/Construction/Fuel%20Cost%20Adjustments/EnCana%20Asphalt%20Cement%20Cost%20Adjustments/Asphalt%20Cement%20Cost%20Adjustment%20Index.htm>
 2. Price adjustments will be made on a monthly basis with the following conditions:
 - A Adjustment will be based on the pay quantities on the monthly partial pay estimate for the following pay items when asphalt cement is included in the pay items:
 - 403 Hot Mix Asphalt
 - 403 Stone Matrix Asphalt
 - B A price adjustment will be made only when the asphalt cement price index varies by more than 5 percent from the asphalt cement price index at the time of bid, and only for that portion of the variance in excess of 5 percent. Price adjustments may be either positive or negative dollar amounts.
 - C Asphalt cement cost adjustments will not be made for any partial estimate falling wholly after the expiration of contract time.
 - D Adjustment formula:
 - EP greater than BP:
 $ACCA = (EP - 1.05 BP)(PA) (Q)$
 - EP less than BP:
 $ACCA = (EP - 0.95 BP) (PA) (Q)$

Where:

BP = Average Asphalt Cement price index for the calendar month prior to the calendar month in which bids are opened

EP = Average Asphalt Cement price index for the calendar month prior to the calendar month in which the partial estimate pay period ends

ACCA = Asphalt Cement Cost Adjustment

REVISION OF SECTION 109
ASPHALT CEMENT COST ADJUSTMENT
(ASPHALT CEMENT INCLUDED IN THE WORK)

- PA = Percent of the paving mixture that is asphalt cement. Asphalt Cement content will be determined by the weighted average of all asphalt cement content percentages obtained from the field acceptance tests for that item (Use decimal in formula, e.g.: 0.05.). If Reclaimed Asphalt Pavement (RAP) is used the percent of Virgin Asphalt Cement added to the mix will be determined by subtracting the percent of asphalt cement in the Reclaimed Asphalt Pavement (RAP) from the percent of asphalt cement in the mix as calculated from Revision of Section 401 Reclaimed Asphalt Pavement.
- Q = Increased pay quantity for all 403 items shown above on the monthly partial pay estimate in Tons.

Example: Bids are opened on July 16. The BP will be the average of the daily postings for June 1 through June 30. For an estimate cut-off date selected by the Contractor at the Pre-Construction Conference of the 20th of the month a February estimate will include HMA quantities measured from the 21st of January through the 20th of February, and the EP index used to calculate ACCA will be the average of the daily postings for January 1 through January 31 as established by CDOT)

- E No adjustment will be allowed for the quantity of any item that is left in place at no pay or for material removed and replaced at the Contractor's expense.
- F The asphalt cement cost adjustment will be the sum of the individual adjustments for each of the pay items shown above. No adjustment will be made for asphalt cement costs on items other than those shown above.
- G Asphalt cement cost adjustments resulting in an increased payment to the Contractor will be paid for under the planned force account item: Asphalt Cement Cost Adjustment. Asphalt cement cost adjustments resulting in a decreased payment to the Contractor will be deducted from monies owed the Contractor.

January 17, 2008

REVISION OF SECTION 109
COMPENSATION OF COMPENSABLE DELAYS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special project on all projects.

1
REVISION OF SECTION 109
COMPENSATION FOR COMPENSABLE DELAYS

Section 109 of the Standard Specifications is hereby revised for this project as follows:

In subsection 109.10 delete the first paragraph and replace with the following:

109.10 Compensation for Compensable Delays. If the Engineer determines that a delay is compensable in accordance with either subsection 105.21, 105.22, 105.23, or 108.07, monetary compensation will be determined in accordance with this subsection.

Delete subsection 109.10(a) and replace with the following:

- (a) These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
- (1) Actual wages and benefits, including FICA, paid for additional non-salaried labor;
 - (2) Costs for additional bond, insurance and tax;
 - (3) Increased costs for materials;
 - (4) Equipment costs calculated in accordance with subsection 109.04(c) for Contractor owned equipment and based on invoice costs for rented equipment;
 - (5) Costs of extended job site overhead;
 - (6) Salaried employees assigned to the project;
 - (7) Claims from subcontractors and suppliers at any level (the same level of detail as specified herein is required for all such claims);
 - (8) An additional 16 percent will be added to the total of items (1) through (7) as compensation for items for which no specific allowance is provided, including profit and home office overhead.

March 20, 2009

REVISION OF SECTION 109
ESTIMATE CUT-OFF DATE ON ARRA PROJECTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects funded with *American Recovery and Reinvestment Act* (ARRA) funds.

March 20, 2009

REVISION OF SECTION 109
ESTIMATE CUT-OFF DATE ON ARRA PROJECTS

Section 109 of the Standard specifications is hereby revised for this project as follows:

In subsection 109.06, delete the first paragraph and replace it with the following:

109.06 Partial Payments. Partial payments will be made once each month as the work progresses, when the Contractor is performing satisfactorily under the Contract. Payments will be based upon progress estimates prepared by the Engineer, of the value of work performed, materials placed in accordance with the Contract, and the value of the materials on hand in accordance with subsection 109.07. At the preconstruction conference the Contractor shall select the regular monthly estimate cut-off date. The estimate cut-off date shall be on or prior to the 25th day of each month. The amount of the progress estimate paid to the Contractor will be subject to the following:

NOTICE

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Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

- Use this standard special provision on all projects.
- The Contractor shall indicate on Form 85, which is part of their proposal, whether they are accepting or rejecting the Fuel Cost Adjustment on each project.
- The designer should add a Planned Force Account called F/A Fuel Cost Adjustment, Pay Item 700-70016 to the plans and project special provisions to account for the possibility that the awarded bidder will accept this adjustment. The amount of this Force Account should be 0.5 to 1.0 percent of the project budget.
- If the amount of actual Fuel Cost Adjustments exceeds the funding allotted in the Planned Force Account, the remainder of the adjustments should be made using funding from Minor Contract Revisions (MCRs), or by adding funding to the project.

1
REVISION OF SECTION 109
FUEL COST ADJUSTMENT

Section 109 of the Standard Specifications is hereby revised for this project as follows:

Subsection 109.06 shall include the following:

(h) *Fuel Cost Adjustments*. Contract price adjustments will be made to reflect increases or decreases in the monthly average prices of gasoline, diesel and other fuels from the average prices for the month preceding the month in which bids were received for the Contract. When bidding, the Contractor shall specify on the Form 85 whether the price adjustment will apply to the Contract. After bids are submitted, the Contractor will not be given any other opportunity to accept or reject this adjustment. If the Contractor fails to indicate a choice on the Form 85, the price adjustment will not apply to the Contract. If the fuel cost adjustment is accepted by the Contractor, the adjustment will be made in accordance with the following criteria:

1. Price adjustments will be based on the fuel price index established by the Department and calculated as shown in subsection 109.06(h)2.D below. The index will be the monthly average of the rates posted by the Oil Price Information Service (OPIS) for Denver No. 2 Diesel. The rate used will be the *OPIS Average* taken from the OPIS Standard Rack table for *Ultra-Low Sulfur w/Lubricity Gross Prices* (ULS column), expressed in dollars per gallon and rounded to two decimal places.
2. Price adjustments will be made on a monthly basis with the following conditions:
 - A. Adjustment will be based on the pay quantities on the monthly partial pay estimate for the following pay items for which fuel factors have been established:

Item	Fuel Factor (FF)
202-Removal of Asphalt Mat (Planing)	0.006 Gal/SY/Inch depth
203-Excavation (muck, unclassified), Embankment, Borrow,	0.29 Gal/CY
203-Excavation (rock)	0.39 Gal/CY
206-Structure Excavation and Backfill [applies only to quantities paid for by separate bid item; no adjustment will be made for pay items that include structure excavation & backfill, such as RCP(CIP)]	0.29 Gal/CY
304-Aggregate Base Course (if ABC is paid for by the CY) (if ABC is paid for by the ton, convert to CY by multiplying the quantity in tons by 0.557)	0.85 Gal/CY
307-Lime Treated Subgrade	0.12 Gal/SY
310-Full Depth Reclamation	0.06 Gal/SY
403-Hot Mix Asphalt (HMA)	2.47 Gal/Ton
403-Stone Mastic Asphalt	2.47 Gal/Ton
405-Heating and Scarifying Treatment	0.44 Gal/SY
406-Cold Bituminous Pavement Recycle	0.01 Gal/SY/Inch depth
412-Portland Cement Concrete Pavement	0.03 Gal/SY/Inch thickness

- B. A price adjustment will be made only when the current fuel price index varies by more than 5 percent from the price index at the time of bid, and only for that portion of the variance in excess of 5 percent. Price adjustments may be either positive or negative dollar amounts.
- C. No fuel price adjustments will be made for any partial estimate falling wholly after the expiration of contract time.

2
 REVISION OF SECTION 109
 FUEL COST ADJUSTMENT

D. Adjustment formula:

EP greater than BP:

$$FA = (EP - 1.05 BP)(Q)(FF)$$

EP less than BP:

$$FA = (EP - 0.95 BP)(Q)(FF)$$

Where:

BP = Average fuel price index for the calendar month prior to the calendar month in which bids are opened

EP = Average fuel price index for the calendar month prior to the calendar month in which the partial estimate pay period ends

FA = Adjustment for fuel costs in dollars

FF = Fuel usage factor for the pay item

Q = Pay quantity for the pay item on the monthly partial pay estimate

Note: When the pay item is based on area, and the rate of fuel use varies with thickness,

Q should be determined by multiplying the area by the thickness. For example:

for 1000 square yards of 8-inch concrete pavement Q should be 8000.

Example: Bids are opened on July 16. The BP will be the average of the daily postings for June 1 through June 30. For an estimate cut-off date selected by the Contractor at the Pre-Construction Conference of the 20th of the month a February estimate will include HMA quantities measured from the 21st of January through the 20th of February, and the EP index used to calculate ACCA will be the average of the daily postings for January 1 through January 31 as established by CDOT)

E. No adjustment will be allowed for the quantity of any item that is left in place at no pay.

The fuel cost adjustment will be the sum of the individual adjustments for each of the pay items shown. No adjustment will be made for fuel costs on items other than those shown. The factors shown are aggregate adjustments for all types of fuels used, including but not limited to gasoline, diesel, propane, and burner fuel. No additional adjustments will be made for any type of fuel.

Fuel cost adjustments resulting in an increased payment to the Contractor will be paid for under the planned force account item: Fuel Cost Adjustment. Fuel cost adjustments resulting in a decreased payment to the Contractor will be deducted from monies owed the Contractor.

August 1, 2005

REVISION OF SECTION 109
MEASUREMENT OF QUANTITIES

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all federal aid projects.

August 1, 2005

REVISION OF SECTION 109
MEASUREMENT OF QUANTITIES

Section 109 of the Standard Specifications is hereby revised for this project as follows:

In subsection 109.01, following paragraph 15, add the following:

The Engineer will randomly verify the accuracy of the certified weigher on every project where the weights are manually entered on the scale ticket. This verification will consist of at least one comparison check on the project. Additional verification checks may be required as determined by the Engineer. The Engineer will randomly select a loaded truck after the truck has been issued a scale ticket by the certified weigher. The loaded truck will then be reweighed, in the presence of the Engineer, on the same scale and the weight compared with the weight on the scale ticket. Reweighed loads shall be within the tolerance of 200 pounds plus or minus.

The Engineer will also verify the accuracy of computerized scales. Computerized scales are scales that automatically print weights on the scale ticket. This verification will consist of at least one comparison check when the project requires more than 2500 tons of material to be weighed. This comparison check shall be made by reweighing a loaded vehicle. The Contractor shall either provide a second certified scale or select a second certified scale in the vicinity to be used for the comparison check. Comparison checks shall be performed using the following procedures:

- (1) Hopper Scale. A loaded truck will be randomly selected by the Engineer. The loaded truck shall be weighed on a certified platform scale to record the gross weight. The truck shall be unloaded and weighed again on the same scale to record the tare weight. The tare weight shall be subtracted from the gross weight and compared against the net weight recorded on the scale ticket.
- (2) Platform Scales. A loaded truck will be randomly selected by the Engineer. The loaded truck shall be reweighed on a second certified scale and the gross weight shall be compared against the gross weight on the first scale ticket.

Should a comparison check reveal a weight difference of more than one percent, a second comparison check shall be performed immediately. If the weight differences of both comparison checks exceed the one percent limit, the Contractor shall immediately stop weighing and the scale shall be recertified and resealed at the Contractor's expense. The necessary adjustments as indicated by the recertification will be made to all scale tickets issued since the last certification or on the entire project, whichever occurred later, unless the Contractor demonstrates to the satisfaction of the Engineer that the defect in the scale was present for a lesser period of time.

If it is necessary to recertify a scale, and more than 2500 tons of material remain to be weighed, another scale comparison check shall be made.

All comparison checks shall be made at the Contractor's expense.

October 25, 2007

REVISION OF SECTION 203
EMBANKMENT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects having any type of concrete construction.

Designers should include a general note on the plans that states the sulfate level for the project.

1
REVISION OF SECTION 203
EMBANKMENT

Section 203 of the Standard Specifications is hereby revised for this project as follows:

Subsection 203.03 (a) shall include the following:

Embankment imported onto the project will be tested for water soluble sulfates using CP-L 2103 Method B. The average of three consecutive tests shall show that the sulfate content is not greater than that corresponding to the sulfate exposure level specified on the plans. No single test shall have a sulfate content more than 20 percent greater than that corresponding to the sulfate exposure level specified on the plans. A single failing test shall have the remaining sample split into four equal portions. CDOT Region Lab shall receive one portion, the Contractor shall receive one portion and the remaining two portions shall go to the CDOT Central lab. The CDOT Region Lab, CDOT Central Lab and the Contractor's Lab shall retest the sample. If the results from the three Labs are within 10 percent of each other, the results will be averaged. The averaged result will be used for Contract compliance. If the results from the Labs are not within 10 percent of each other, the remaining split sample will be sent to an independent laboratory for testing using CP-L 2103. The independent laboratory will be mutually agreed upon by the Department and the Contractor. The Independent Lab's test result will be used for Contract compliance.

If the water soluble sulfate content is less than that corresponding to the sulfate exposure level specified on the plans, CDOT will bear all costs associated with the independent lab test. If the soluble sulfate content is greater than that corresponding to the sulfate exposure level specified on the plans, all costs associated with independent lab testing shall be at the Contractor's expense.

Embankment represented by failing tests shall be removed from the project and replaced at the Contractor's expense.

October 25, 2007

REVISION OF SECTIONS 208, 420, 605 AND 712
GEOSYNTHETICS AND GEOTEXTILES

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects having geotextiles or geosynthetics.

REVISION OF SECTIONS 208, 420, 605 AND 712
 GEOSYNTHETICS AND GEOTEXTILES

Sections 208, 420, 605 and 712 of the Standard Specifications are hereby revised for this project as follows:

Delete subsection 208.02(b) and replace with the following:

- (b) *Silt Fence*. Silt fence posts shall be metal or wood with a minimum length of 42 inches. Metal posts shall be “studded tee” or “U” type with minimum weight of 1.33 pounds per linear foot. Wood posts shall have a minimum diameter or cross section dimension of 1.5 inches nominal. Geotextile shall be attached to wood posts with three or more staples per post, or to metal posts with three or more wires per post.

Silt fence geotextile shall conform to the following requirements:

PHYSICAL REQUIREMENTS FOR SILT FENCE GEOTEXTILES

Property	Wire Fence Supported Requirements	Self Supported Requirements Geotextile elongation 50% minimum	Test Method
Grab Strength, lbs	90 minimum	124 minimum	ASTM D 4632
Permittivity sec-1	0.05	0.05	ASTM D 4491
Ultraviolet stability	minimum 70% Strength Retained	minimum 70% Strength Retained	ASTM D 4355

Delete subsection 208.02(g) and replace with the following:

- (g) *Outlet Protection*. Outlet protection riprap shall conform to section 506. Erosion control geotextile shall be a minimum Class 2, conforming to subsection 712.08.

Delete subsection 420.02 and replace with the following:

420.02 Geotextiles and geomembranes shall meet the applicable requirements of subsections 712.07 and 712.08 for the use intended. Geotextiles for erosion control for drainage or for separators may be Class 1, Class 2, or Class 3, conforming to subsection 712.08, if the class is not specified on the plans.

Asphalt cement binder for the paving geotextile shall be the same grade as the asphalt cement used for Item 403.

Paving geotextile shall be a minimum Class 3, conforming to subsection 712.08.

Subsection 420.08 shall include the following:

Geotextile for landscape weed barrier shall be a minimum Class 3, conforming to subsection 712.08.

In subsection 605.03, delete the second sentence of the first paragraph and replace with the following:

Sufficient Geotextile (Drainage) (Class 3) shall be placed along the bottom and sides of the trench as shown on the plans to provide the required overlap over the top of the filter material.

REVISION OF SECTIONS 208, 420, 605 AND 712
GEOSYNTHETICS AND GEOTEXTILES

In subsection 605.05, delete the second sentence and replace with the following:

The trench shall be lined with Geotextile (Drainage) (Class 3) and filled with the designated filter material to the depth shown on the plans.

Delete subsection 712.07 and replace with the following:

712.07 Geosynthetics. Geosynthetic rolls shall be furnished with suitable wrapping to protect against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled to provide product identification sufficient for inventory and quality control purposes. Rolls shall be stored in a manner which protects them from the elements. If stored outdoors, they shall be elevated and protected with a waterproof cover. The Contractor shall submit a certified test report from the manufacturer in accordance with subsection 106.13 including all data necessary to verify compliance with this specification.

Securing pins shall be made from galvanized steel wire or other approved wire material, 0.091 inch or larger in diameter. They shall be U-shaped, with legs 6 inches long and a 1 inch crown.

Physical requirements of geosynthetics shall meet or exceed what is shown in Table 712-1. Unless otherwise stated, all property values represent minimum average roll values (MARV) in the weakest principle direction. Stated values are for non-critical, non-severe conditions. Lots shall be sampled in accordance with ASTM D 4354.

- (a) *Geomembrane.* Geomembrane shall be manufactured for stopping seepage loss. The lining shall consist of virgin polyvinyl chloride (PVC) resins, plasticizers, stabilizers, and other necessary materials that, when compounded, shall meet or exceed the physical requirements for the thickness specified in Table 712-1.

Individual widths of PVC materials shall be fabricated into large sections by dielectric sealing into a single piece, or into a minimum number of panels, up to 100 feet wide, as required to fit the facility. Lap joints with a minimum joint width of ½ inch shall be used. After fabrication, the lining shall be accordion folded in both directions and packaged for minimum handling in the field. Shipping boxes shall be substantial enough to prevent damage to contents.

3
 REVISION OF SECTIONS 208, 420, 605 AND 712
 GEOSYNTHETICS AND GEOTEXTILES

**Table 712-1
 PHYSICAL REQUIREMENTS FOR GEOMEMBRANE**

Property	Thickness			Test Method
	0.25 mm (10 mil)	0.51 mm (20 mil)	0.76 mm (30 mil)	
Thickness, % Tolerance	±7	±5	±5	ASTM D 1593
Tensile Strength, kN/m (lbs./in.) width	3.50 (20)	8.75 (50)	12.25 (70)	ASTM D 882, Method B
Modulus @ 100% Elongation, kN/m (lbs./in.)	1.58 (9)	3.50 (20)	5.25 (30)	ASTM D 882, Method B
Ultimate Elongation, %	350	350	350	ASTM D 882, Method A
Tear Resistance: N (lbs)	18 (3.2)	29 (6.5)	38 (8.5)	ASTM D 1004
Low Temperature Impact, °C (°F)	-23 (-13)	-26 (-15)	-29 (-20)	ASTM D 1790
Volatile loss, % max.	1.5	0.9	0.7	ASTM D 1203, Method A
Pinholes, No. /8 m ² (No. Per 10 sq. Yds.) max.	1	1	1	
Bonded Seam Strength, % of tensile strength	80	80	80	

Delete subsection 712.08 and replace with the following:

712.08 Geotextiles. Geotextile rolls shall be furnished with suitable wrapping to protect against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled to provide product identification sufficient for inventory and quality control purposes. Rolls shall be stored in a manner which protects them from the elements. If stored outdoors, they shall be elevated and protected with a waterproof cover. The Contractor shall submit a certified test report from the manufacturer in accordance with subsection 106.13 including all data necessary to verify compliance with this specification.

Securing pins shall be made from galvanized steel wire or other approved wire material, 0.091 inch or larger in diameter. They shall be U-shaped, with legs 6 inches long and a 1 inch crown.

REVISION OF SECTIONS 208, 420, 605 AND 712
GEOSYNTHETICS AND GEOTEXTILES

Physical requirements for all geotextiles shall conform to the requirements of AASHTO M-288. Materials shall be selected from the New York Department of Transportation's Approved Products List of Geosynthetic materials that meet the National Transportation Product Evaluation Program (NTPEP) and AASHTO M-288 testing requirements. The current list of products that meet these requirements is located at:

www.dot.state.ny.us

The Geotextile Approved Products List may be accessed by clicking on the following tabs once on the NYDOT site to:

- (1) Publications
- (2) more
- (3) site index tab
- (4) approved list of Materials & Equipment
- (5) geosynthetics for Highway Construction
- (6) geotextiles

Table 712-2
TYPICAL VALUES OF PERMEABILITY COEFFICIENTS¹

Turbulent Flow	Particle Size Range Millimeters (inches)		Effective Size	Permeability Coefficient cm/s
	D max	D min	D 20 mm (inches)	
Derrick STONE	3000 (120)	900 (36)	1200 (48)	100
One-man STONE	300 (12)	100 (4)	150 (6)	30
Clean, fine to coarse GRAVEL	80 (3)	10 (1/4)	13 (1/2)	10
Fine, uniform GR-AVEL	8 (3/4)	1.5 (1/16)	3 (1/4)	5
Very coarse, clean, uniform SAND	3 (1/4)	0.8 (1/32)	1.5 (1/16)	3

Continued on Page 5

5
 REVISION OF SECTIONS 208, 420, 605 AND 712
 GEOSYNTHETICS AND GEOTEXTILES

Table 712-2(continued)
TYPICAL VALUES OF PERMEABILITY COEFFICIENTS¹

Laminar Flow	Particle Size Range Millimeters (inches)		Effective Size	Permeability Coefficient-k cm/s
	D max	D min	D 10 mm	
Uniform, coarse SAND	2 (1/8)	0.5 (1/64)	0.6	0.4
Uniform, medium SAND	0.5	0.25	0.3	0.1
Clean, well-graded SAND & GRAVEL	10	0.05	0.1	0.01
Uniform, fine SAND	0.25	0.05	0.06	40 x 10 ⁻⁴
Well-graded, silty SAND & GRAVEL	5	0.01	0.02	4 x 10 ⁻⁴
Silty SAND	2	0.005	0.01	1.0 x 10 ⁻⁴
Uniform SILT	0.05	0.005	0.006	0.5 x 10 ⁻⁴
Sandy CLAY	1.0	0.001	0.002	0.05 x 10 ⁻⁴
Silty CLAY	0.05	0.001	0.0015	0.01 x 10 ⁻⁴
CLAY (30% to 50% clay sizes)	0.05	0.0005	0.0008	0.001 x 10 ⁻⁴
Colloidal CLAY (-2 µm 50%)	0.01	10	40	10 ⁻⁹

¹ Basic Soils Engineering, R.K. Hough, 2nd Edition, Ronald Pess Co.; 1969, Page 76.

Note: Since the permeability coefficient of the soil will be unknown in most non-critical, non-severe applications for erosion control and drainage, the soil-permeability coefficients listed in Table 712-2 may be used as a guide for comparing the permeability coefficient of the fabric with that of the in-place soil.

In subsection 712.12, second paragraph, delete the first sentence and replace with the following:

Drainage geotextile shall be a minimum Class 3, conforming to AASHTO M 288.

REVISION OF SECTION 208
STORM DRAIN INLET PROTECTION

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects requiring storm drain inlet protection.

REVISION OF SECTION 208
STORM DRAIN INLET PROTECTION

Section 208 of the Standard Specifications is hereby revised for this project as follows:

Subsection 208.01 shall include the following:

This work consists of the installation of storm drain inlet protection at locations as shown on the plans.

Subsection 208.02 shall include the following:

(m) *Storm Drain Inlet Protection.* Storm drain inlet protection shall consist of aggregate filled fabric with the following dimensions:

	Type I	Type II
Diameter	4 in.	4 in.
Minimum Section Length	7 ft.	5 ft.
Apron Insert	---	30 in. or sized to grate

The inlet protection device shall consist of a woven geotextile fabric with the following properties:

Grab tensile strength	ASTM D 4632	lbs.	90 minimum
Trapezoid Tear Strength	ASTM D 4533	lbs.	25 minimum
Percent Open Area	COE-22125-86	%	10
Water Flow Rate	ASTM D 4491	gal./min./ft.	145
Ultraviolet Resistance	ASTM D 4355	%	70

Storm drain inlet protection shall be capable of remaining in place during a storm event and have an approximate weight of 7 to 10 pounds per linear foot of device. The device shall be capable of conforming to the shape of the curb. Aggregate contained in the storm drain inlet device shall consist of gravel or crushed stone conforming to Table 703-7 for Class C.

Subsection 208.05 shall include the following:

(p) *Storm Drain Inlet Protection.* Prior to installation, the Contractor shall prepare the surface of the areas in which the Storm Drain Inlet Protection devices are to be installed such that they are free of materials greater than 2 inches in diameter and are suitably smooth for the installation of the Storm Drain Inlet Protection, as approved. The ends of the inlet protection shall extend a minimum of 1 foot past each end of the inlet.

Subsection 208.07 shall include the following:

Storm drain inlet protection will be measured by the linear foot of storm drain inlet protection device installed and accepted.

Subsection 208.08 shall include the following:

9. Pay Item Pay Unit

Storm Drain Inlet Protection (Type____) Linear Foot

Payment will be full compensation for all work, materials and equipment required to complete the item, including surface preparation, maintenance throughout the project, and removal upon completion of the work.

Aggregate will not be measured and paid for separately, but shall be included in the work.

April 12, 2007

REVISION OF SECTION 212
SEEDING SEASONS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects having seeding

REVISION OF SECTION 212
SEEDING SEASONS

Section 212 of the Standard Specifications is hereby revised for this project as follows:

In subsection 212.03 delete the seeding seasons table and replace it with the following:

Zone	Spring Seeding	Fall Seeding
<i>Areas other than the Western Slope</i>		
Below 6000'	Spring thaw to June 1	September 15 until consistent ground freeze
6000' to 7000'	Spring thaw to June 1	September 1 until consistent ground freeze
7000' to 8000'	Spring thaw to July 15	August 1 until consistent ground freeze
Above 8000'	Spring thaw to consistent ground freeze	
<i>Western Slope</i>		
Below 6000'	Spring thaw to May 1	August 1 until consistent ground freeze
6000' to 7000'	Spring thaw to June 1	September 1 until consistent ground freeze
Above 7000'	Spring thaw to consistent ground freeze	

April 12, 2007

REVISION OF SECTION 214
LANDSCAPE ESTABLISHMENT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects having landscape establishment.

REVISION OF SECTION 214
LANDSCAPE ESTABLISHMENT

Section 214 of the Standard Specifications is hereby revised for this project as follows:

Subsection 214.04 shall include the following:

The beginning of the Landscape Establishment period depends upon receipt of the written "Notice of Substantial Landscape Completion" from the Engineer. Substantial Landscape Completion occurs when all plant materials in the Contract have been planted and all work under Sections 212, 213, 214 and 623 has been performed, except for the Section 214 pay item, Landscape Maintenance. If the Notice of Substantial Landscape Completion is issued during the spring planting season, the Landscape Establishment period begins immediately and lasts for a period of 12 months. If the Notice of Substantial Landscape Completion is issued at any other time, the Landscape Establishment period begins at the start of the next spring planting season and lasts for a period of 12 months.

In subsection 214.04(a) delete the second paragraph and replace it with the following:

Dead, dying or rejected material shall be removed each month during the Landscape Establishment period as directed. Plant replacement shall be performed during the spring planting seasons at the beginning and end of the Landscape Establishment Period. Plant replacement stock shall be planted in accordance with the Contract and is subject to all requirements specified for the original material. Plant replacement shall be at the Contractor's expense.

Section 214.04(b) shall include the following:

During the landscape establishment period, the Contractor shall water, cultivate, and prune the plants and repair, replace, or readjust guy material, stakes, and posts as required or directed by the Engineer. The Contractor shall reshape plant saucers, repair washouts and gullies, replace lost wood chip mulch, keep all planting sites free from weeds and do other work necessary to maintain the plants in a healthy and vigorous growing condition. This includes seasonal spraying or deep root watering with approved insecticides or fungicides as required.

October 25, 2007

REVISION OF SECTION 401
COMPACTION OF HOT MIX ASPHALT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects having any type of HMA.

October 25, 2007

REVISION OF SECTION 401
COMPACTION OF HOT MIX ASPHALT

Section 401 of the Standard Specifications is hereby revised for this project as follows:

In subsection 401.17, delete the third paragraph and replace with the following:

Pavement shall be compacted to a density of 92 to 96 percent of the daily theoretical maximum specific gravity, determined according to CP 51. If more than one theoretical maximum specific gravity test is taken in a day, the average of the theoretical maximum specific gravity results will be used to determine the percent compaction. Field density determinations will be made in accordance with CP 44 or 81.

10. October 19, 2006

REVISION OF SECTION 401
COMPACTION PAVEMENT TEST SECTION (CTS)

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of Project Development. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects having hot mix asphalt.

October 19, 2006

REVISION OF SECTION 401
COMPACTION PAVEMENT TEST SECTION (CTS)

Section 401 of the Standard Specifications is hereby revised for this project as follows:

In subsection 401.17, delete the fourteenth paragraph and replace with the following:

Two sets of random cores shall be taken within the last 200 tons of the CTS. Each set shall consist of a minimum of seven random corings. The Engineer will determine the coring locations using a stratified random sampling process. The locations of these cores will be such that one set can serve as a duplicate of the other. One set of these cores shall be immediately submitted to the Engineer. This set will be used for determining acceptance of the CTS and determining density correction factors for nuclear density equipment. Densities of the random samples will be determined by cores according to CP 44. Density correction factors for nuclear density equipment will be determined according to CP 81. Coring shall be performed under CDOT observation. Coring will not be measured and paid for separately but shall be included in the work.

October 25, 2007

REVISION OF SECTION 401
LONGITUDINAL JOINTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects having any grade of hot mix asphalt.

October 25, 2007

REVISION OF SECTION 401
LONGITUDINAL JOINTS

Section 401 of the Standard Specifications is hereby revised for this project as follows:

In subsection 401.17, delete the fourth and fifth paragraphs and replace with the following:

The longitudinal joints shall be compacted to a target density of 92 percent of the theoretical maximum specific gravity. The tolerance shall be ± 4 percent. The theoretical maximum specific gravity used to determine the joint density will be the average of the daily theoretical maximum specific gravities for the material that was placed on either side of the joint. Density (percent relative compaction) will be determined in accordance with CP 44.

The Contractor shall obtain one 6-inch diameter core at a random location within each longitudinal joint sampling section for determination of the joint density. The Contractor shall mark and drill the cores at the location directed by the Engineer and in the presence of the Engineer. The Engineer will take possession of the cores for testing. The Contractor may take additional cores at his own expense. . Coring locations shall be centered on the visible line where the joint between the two adjacent lifts abut the surface. The center of all joint cores shall be within 1 inch of this visible joint line. Core holes shall be repaired by the Contractor using materials and methods approved by the Engineer. QC and QA joint coring shall be completed within five calendar days of joint construction.

Longitudinal joint coring applies to all pavement lifts. When constructing joints in an echelon paving process, the joints shall be clearly marked to ensure consistent coring location. In small areas, such as intersections, where the Engineer prescribes paving and phasing methods, the Engineer may temporarily waive the requirement for joint density testing.

January 17, 2008

REVISION OF SECTION 401
PROCESSING OF ASPHALT MIX DESIGN

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Used on projects having HMA.

January 17, 2008

REVISION OF SECTION 401
PROCESSING OF ASPHALT MIX DESIGN

Section 401 of the Standard Specifications is hereby revised for this project as follows:

In subsection 401.02 (a), delete the third paragraph

REVISION OF SECTION 401
TEMPERATURE SEGREGATION

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects having Hot Mix Asphalt.

October 25, 2007

REVISION OF SECTION 401
TEMPERATURE SEGREGATION

Section 401 of the Standard Specifications is hereby revised for this project as follows:

Subsection 401.16 shall include the following:

The Engineer will perform a systematic segregation check in accordance with CP 58 as early in the project as is feasible to determine if temperature segregation problems exist. Temperature segregation will be of concern on the project if, across the width of the mat, temperatures vary by 25 °F or more. Densities will not need to be taken in the systematic segregation study. The Engineer will discuss the temperature findings of the systematic segregation check with the Contractor.

The Engineer may evaluate the HMA for low density due to temperature segregation any time industry best practices, as detailed on Form 1346, are not being followed or the Engineer suspects temperature segregation is occurring. The Engineer will first meet with the Contractor to discuss the paving practices that are triggering the temperature investigation. Areas across the mat, excluding the outside 1 foot of both edges of the mat, that are more than 25 °F cooler than other material across the width may be marked for density testing. Material for temperature comparison will be evaluated in 3-foot intervals behind the paver across the width of the mat. The material shall be marked and tested in accordance with CP 58. If four or more areas within a lot of 500 tons have densities of less than 92 percent of the material's maximum specific gravity, a 5 percent price disincentive will be applied to the 500 ton lot. The 500 ton count begins when the Engineer starts looking for cold areas, not when the first cold area is detected. This price disincentive will be in addition to those described in Sections 105 and 106. Only one area per delivered truck will be counted toward the number of low density areas. Temperature segregation checks will be performed only in areas where continuous paving is possible.

January 17, 2008

REVISION OF SECTION 401
TOLERANCES FOR HOT MIX ASPHALT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of Project the Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on projects with hot mix asphalt when acceptance is based on asphalt content, gradation, and in-place density.

REVISION OF SECTION 401
TOLERANCES FOR HOT MIX ASPHALT

Section 401 of the Standard Specifications is hereby revised for this project as follows:

In subsection 401.02(b) delete Table 401-1 and replace with the following:

Asphalt Content	± 0.3%
Asphalt Recycling Agent	± 0.2%
¹ Hot Mix Asphalt – Item 403	
² Passing the 9.5 mm (3/8 inch) and larger sieves	± 6%
² Passing the 4.75 mm (No. 4) and 2.36 mm (No. 8) sieves	± 5%
² Passing the 600 µm (No. 30) sieve	± 4%
² Passing the 75 µm (No. 200) sieve	± 2%
¹ When 100% passing is designated, there shall be no tolerance. When 90 – 100% passing is designated, 90% shall be the minimum; no tolerance shall be used.	
² These tolerances apply to the Contractor's Quality Control Testing.	

Table 401-1
TOLERANCES FOR HOT MIX ASPHALT

Testing.

12. REVISION OF SECTION 412
CONCRETE PAVEMENT JOINTS

E

a. NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions regarding its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies that use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on projects having portland cement concrete pavement.

REVISION OF SECTION 412
CONCRETE PAVEMENT JOINTS

Section 412 of the Standard Specifications is hereby revised for this project as follows:

Subsection 412.13, first paragraph, shall include the following:

When a joint is saw cut more than 3 inches from the designated location, the pavement shall be removed and replaced to the nearest correct joints. When portions of concrete pavement are removed and replaced, the portion removed shall be the full width of the lane and length of the affected slabs. This corrective action shall be at the Contractor's expense.

Delete Subsection 412.13(a)2., first paragraph, and replace with the following:

Transverse Construction Joints. Transverse construction joints shall be constructed as specified in the Contract. Transverse construction joints shall be constructed when the concrete placement is interrupted for more than 30 minutes and initial set is imminent. No transverse joint shall be constructed within 6 feet of another transverse joint. If sufficient concrete has not been mixed at the time of interruption to form a slab at least 6 feet long, the concrete back to the preceding joint shall be removed and the bulkhead placed in accordance with the requirements for a standard transverse contraction joint.

Subsection 412.13(b)2., first paragraph, shall include the following:

Horizontal support wires or shipping braces shall be non-deformed bars or wires with a diameter less than or equal to 0.307 inches (gauge 0 wire). The number of horizontal support wires or shipping braces shall be limited to five per assembly. The horizontal support wires or shipping braces shall not be cut prior to concrete placement.

REVISION OF SECTION 412
PORTLAND CEMENT CONCRETE PAVEMENT
CONSOLIDATING AND FINISHING

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects having portland cement concrete pavement.

1
REVISION OF SECTION 412
PORTLAND CEMENT CONCRETE PAVEMENT CONSOLIDATING AND FINISHING

Section 412 of the Standard Specifications is hereby revised for this project as follows:

In subsection 412.07(b) delete the second paragraph and replace with the following:

The full width and depth of concrete requiring a finishing machine shall be consolidated by a single pass of an approved internal vibrator. Internal vibrators shall be operated within a frequency range of 4,000 to 8,000 vibrations per minute (VPM). Vibrators shall not be operated in a manner to cause a separation of the mix ingredients, either a downward displacement of large aggregate particles or an accumulation or laitance on the surface of the concrete. Avoidance of separation of the mix may require reduction in the vibrator frequency when forward motion of the paver is reduced. Paving machine operations shall stop if any vibrator fails to operate within specifications. Vibration shall be stopped whenever forward motion of the paver is stopped.

The use of surface vibrators shall be approved by the Engineer prior to use. Surface vibrators shall be operated within a frequency range of 3,500 to 6,000 VPM.

Delete subsection 412.12 and replace with the following:

412.12 Finishing. The sequence of operations shall be strike-off and consolidation, floating, and final surface finish.

Water shall not be added to the surface of the concrete to assist in finishing operations. The surface shall be finished to a uniform texture, true to grade and cross section, and free from porous areas. When the finishing machine, either form or slip form, or hand finishing method, leaves a surface that is not acceptable, the operation shall stop and corrective action shall be taken. Inability of the finish machine to provide an acceptable surface finish, after corrective action, will be cause for requiring replacement of the finish machine.

Wastewater generated from concrete finishing operations shall be contained and disposed of in accordance with subsection 107.25.

(5) *Hand Finishing.* Unless otherwise specified, hand finishing methods will be permitted only when performed under the direct supervision of a Craftsman holding the following certificate: ACI Concrete Flatwork Finisher and Technician (ACICFFT) or other Flatwork Finisher certification program approved by the Department. A minimum of one certified Craftsman is required at each finishing operation. A minimum of one certified Craftsman is required for each three or fewer finishers (non-certified ACICFFTs) at each operation.

Hand finished concrete shall be struck off and screeded with a portable screed that is at least 2 feet longer than the maximum width of the slab to be struck off. It shall be sufficiently rigid to retain its shape. Concrete shall be thoroughly consolidated by hand vibrators. Hand finishing shall not be allowed after concrete has been in-place for more than 30 minutes or when initial set has begun unless otherwise approved by the Engineer.

(6) *Floating.* Hand floating will be permitted only as specified in paragraph (a) above. The Contractor shall not use floats made of aluminum.

(7) *Final Finish.* For the final finish a strip of plastic turf shall be dragged longitudinally over the full width of pavement after a strip of burlap or other approved fabric has been dragged longitudinally over the full width of pavement to produce a uniform surface of gritty texture.

The plastic turf drag shall be made of material at least 3 feet wide and be maintained in such a condition that the resultant surface finish is of uniform appearance and reasonably free from grooves over $\frac{1}{16}$ inches in depth. Where more than one layer of burlap drag is used, the bottom layer shall be approximately 6 inches wider than the layer above. Drags shall be maintained clean and free from encrusted mortar. Drags that cannot be cleaned shall be discarded and new drags installed.

REVISION OF SECTION 412
PORTLAND CEMENT CONCRETE PAVEMENT CONSOLIDATING AND FINISHING

- (8) *Tining and Stationing.* Where posted speeds are 40 mph or higher, the surface shall be given a longitudinal metal tine finish immediately following turf drag. Tining is not required where posted speeds are less than 40 mph. Tining shall produce grooves of $\frac{1}{8}$ inch by $\frac{1}{8}$ inch spaced $\frac{3}{4}$ inch apart and parallel to the longitudinal joint. Longitudinal tining shall stop at the edge of travel lanes. Tining devices shall be maintained clean and free from encrusted mortar and debris to ensure uniform groove dimensions. The tining finish shall not be performed too early whereby the grooves may close up.

Before paving the Contractor shall provide in writing a tining plan showing tining locations and describing methods that will be used for hand tining. Paving shall not commence until the Engineer has approved the tining plan in writing.

The tining grooves shall be neat in appearance, parallel with the longitudinal joint, uniform in depth and in accordance with what is shown in the plans and these specifications. Any time that the tining grooves do not meet these requirements, the concrete paving operation shall be immediately stopped and will not resume until the problem has been resolved.

Stationing shall be stamped into the outside edge of the pavement, as shown on the plans.

REVISION OF SECTION 601
FORMS AND FALSEWORK

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects requiring forms or falsework. This specification should be used in conjunction with the Revision of Section 509, Erection of Steel Structures or the Revision of Section 618, Erection of Pre-cast Concrete Members, as appropriate.

REVISION OF SECTION 601
FORMS AND FALSEWORK

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.09 (b) shall include the following:

Forms for the placement of deck concrete or other concrete work associated with structural steel girders shall be constructed so that any concentrated loads applied to girder webs shall be within 6 inches of a flange or stiffener. Where loads are applied to steel girder webs, they shall be applied in a manner that will not produce distortion to the web.

For structural steel girders, temporary struts and ties shall be provided as necessary to resist lateral loads applied to the girder flanges and to prevent appreciable relative movement between the edge of deck form and the adjacent steel girder.

In subsection 601.11 (a), delete the first three paragraphs and replace with the following:

(a) *General.* The Contractor shall be responsible for designing and constructing falsework.

The Contractor's Engineer shall determine whether falsework is necessary. When the Contractor's Engineer determines falsework is unnecessary, the Contractor shall submit a written statement signed by the Contractor's Engineer so stating. All falsework drawings, including revisions, shall be prepared by the Contractor's Engineer, shall meet the requirements of subsection 601.11, and shall be provided by the Contractor to the Engineer for record purposes only. The drawings shall be signed and sealed by the Contractor's Engineer. These drawings shall be stamped "Approved for Construction" and signed by the Contractor prior to providing them to the Engineer. The drawings will not be approved by the Engineer.

In subsection 601.11 (d), delete the second and third paragraphs and replace with the following:

Falsework and formwork for the placement of deck concrete or other concrete work associated with structural steel girders shall be constructed so that any concentrated loads applied to girder webs shall be within 6 inches of a flange or stiffener. Where loads are applied to steel girder webs, they shall be applied in a manner that will not produce distortion to the web.

For structural steel girders, temporary struts and ties shall be provided as necessary to resist lateral loads applied to the girders and to prevent movement between adjacent steel girders. Where the deck overhang exceeds 1/3 of the distance between steel girders, bracing shall be provided to prevent rotation of the exterior girder due to the weight of the overhang falsework and formwork and concrete placement operations. Struts and ties shall also be provided between interior steel girders to prevent movement between girders. Falsework drawings for bracing, struts, and ties shall be submitted and conform to the requirements of subsection 601.11(a).

REVISION OF SECTIONS 601, 606, 608, 609 AND 618
CONCRETE FINISHING

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects having any type of concrete construction

REVISION OF SECTIONS 601, 606, 608, 609, AND 618
CONCRETE FINISHING

Sections 601, 606, 608, 609, and 618 of the Standard Specifications are hereby revised for this project as follows:

Subsection 601.12 (a) shall include the following:

Unless otherwise specified, hand finishing methods will be permitted only when performed under the direct supervision of a Craftsman holding the following certificate: ACI Concrete Flatwork Finisher and Technician (ACICFFT) or other Flatwork Finisher certification program approved by the Department. A minimum of one certified Craftsman is required at each finishing operation. A minimum of one certified Craftsman is required for each three or fewer finishers (non-certified ACICFFTs) at each operation.

Subsection 601.14(a) shall include the following:

The finishing of hardened concrete surfaces shall not require a certified Concrete Flatwork Finisher as described in subsection 601.12(a).

Subsection 606.04(a), second paragraph, shall include the following:

When hand finishing is allowed, it shall be performed under the supervision of a certified Concrete Flatwork Finisher in conformance with revised subsection 601.12(a).

Subsection 606.04(b), first paragraph, shall include the following:

All required hand finishing shall be performed under the supervision of a certified Concrete Flatwork Finisher in conformance with revised subsection 601.12(a).

Subsection 608.03(d), first paragraph, shall include the following:

All required hand finishing shall be performed under the supervision of a certified Concrete Flatwork Finisher in conformance with revised subsection 601.12(a).

Subsection 609.03 shall include the following:

All required hand finishing shall be performed under the supervision of a certified Concrete Flatwork Finisher in conformance with revised subsection 601.12(a).

Subsection 618.11(f), first paragraph, shall include the following:

All required hand finishing shall be performed under the supervision of a certified Concrete Flatwork Finisher in conformance with revised subsection 601.12(a).

REVISION OF SECTIONS 601 AND 701
STRUCTURAL CONCRETE

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this special provision in projects having any type of concrete construction.

Designers will include a general note on the plans that states the sulfate level for the project.

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 REVISION OF SECTIONS 601 AND 701
 STRUCTURAL CONCRETE

Sections 601 and 701 of the Standard Specifications are hereby revised for this project as follows:

Delete subsection 601.02 and replace with the following:

601.02 Classification. The classes of concrete shown in Table 601-1 shall be used when specified in the Contract.

**Table 601-1
 CONCRETE TABLE**

Concrete Class	Required Field Compressive Strength (psi)	Cementitious Content: Minimum or Range (lbs/yd ³)	Air Content: % Range (Total)	Water Cementitious Ratio: Maximum or Range
B	4500 at 28 days	N/A	5 - 8	0.45
BZ	4000 at 28 days	610	N/A	0.45
D	4500 at 28 days	615 to 660	5 - 8	0.45
DT	4500 at 28 days	700	5 - 8	0.44
E	4200 at 28 days	660	4 - 8	0.44
H	4500 at 56 days	580 to 640	5 - 8	0.38 - 0.42
HT	4500 at 56 days	580 to 640	5 - 8	0.38 - 0.42
P	4200 at 28 days	660	4 - 8	0.44
S35	5000 at 28 days	615 to 720	5 - 8	0.42
S40	5800 at 28 days	615 to 760	5 - 8	0.40
S50	7250 at 28 days	615 to 800	5 - 8	0.38

Class B concrete is an air entrained concrete for general use. Class D, H or P concrete may be substituted for Class B concrete. Additional requirements are: The coarse aggregate shall have a nominal maximum size of 1½ inches or smaller.

Class BZ concrete is concrete for drilled piers. Additional requirements are: Entrained air is not required unless specified in the Contract. When entrained air is specified in the Contract, the air content shall be 5-8 percent. High range water reducers may be added to obtain desired slump and retardation. Slump shall be a minimum of 5 inches and a maximum of 8

inches. The concrete mix shall be made with AASHTO M 43 size No. 67, No. 7 or No. 8 coarse aggregate.

Class D concrete is a dense medium strength structural concrete. Class H may be substituted for Class D concrete. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall be made with AASHTO M 43 sizes No. 57, No. 6 or No. 67 coarse aggregate. When placed in a bridge deck, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 67 coarse aggregate by weight of total aggregate.

Class DT concrete may be used for deck resurfacing and repairs. Class HT may be substituted for Class DT concrete. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall consist of a minimum 50 percent AASHTO M 43 size No. 7 or No. 8 coarse aggregate by weight of total aggregate.

Class E concrete may be used for fast track pavements needing early strength in order to open a pavement to service soon after placement. Additional requirements are: Type III cement may be used. The concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 357 or No. 467 coarse aggregate by weight of total aggregate. If all transverse joints are doweled, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 sizes No. 57, No. 6, No. 67, No. 357, or No. 467 coarse aggregate by weight of total aggregate. The laboratory trial mix shall produce a minimum average 28 day flexural strength of 650 psi. Class E concrete shall contain a minimum of 10 percent pozzolan by weight of total cementitious material.

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STRUCTURAL CONCRETE

Class H concrete is used for bare concrete bridge decks that will not receive a waterproofing membrane. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall consist of a minimum of 55 percent AASHTO M 43 size No. 67 coarse aggregate by weight of total aggregate. Class H concrete shall contain cementitious materials in the following ranges: 450 to 500 pounds per cubic yard Type II portland cement, 90 to 125 pounds per cubic yard fly ash and 20 to 30 pounds per cubic yard silica fume. The total content of Type II portland cement, fly ash and silica fume shall be 580 to 640 pounds per cubic yard. The laboratory trial mix must not exceed permeability of 2000 coulombs at 56 days (ASTM C 1202) and must not exhibit a crack at or before 14 days in the cracking tendency test (AASHTO T334).

Class HT concrete is used as the top layer for bare concrete bridge decks that will not receive a waterproofing membrane. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall consist of a minimum of 50 percent AASHTO M 43 size No. 7 or No. 8 coarse aggregate by weight of total aggregate. Class HT concrete shall contain cementitious materials in the following ranges: 450 to 500 pounds per cubic yard Type II portland cement, 90 to 125 pounds per cubic yard fly ash and 20 to 30 pounds per cubic yard silica fume. The total content of Type II portland cement, fly ash and silica fume shall be 580 to 640 pounds per cubic yard. The laboratory trial mix must not exceed permeability of 2000 coulombs at 56 days (ASTM C 1202) and must not exhibit a crack at or before 14 days in the cracking tendency test (AASHTO T334).

Class P concrete is used in pavements. Additional requirements are: The concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 357 or No. 467 coarse aggregate by weight of total aggregate. If all transverse joints are doweled, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 sizes No. 57, No. 6, No. 67, No. 357, or No. 467 coarse aggregate by weight of total aggregate. The laboratory trial mix shall produce a minimum average 28 day flexural strength of 650 psi. Class P concrete shall contain a minimum of 10 percent pozzolan by weight of total cementitious. If acceptance is based on flexural strength, the total weight of cementitious shall not be less than 520 pounds per cubic yard.

Class S35 concrete is a dense high strength structural concrete. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall be made with AASHTO M 43 sizes No. 57, No. 6, No. 67, No. 7 or No. 8 coarse aggregate. When placed in a bridge deck, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 67 coarse aggregate by weight of total aggregate.

Class S40 concrete is a dense high strength structural concrete. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall be made with AASHTO M 43 sizes No. 57, No. 6, No. 67, No. 7 or No. 8 coarse aggregate. When placed in a bridge deck, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 67 coarse aggregate.

Class S50 concrete is a dense high strength structural concrete. Additional requirements are: An approved water reducing admixture shall be incorporated in the mix. The concrete mix shall be made with AASHTO M 43 sizes No. 57, No. 6, No. 67, No. 7 or No. 8 coarse aggregate. When placed in a bridge deck, the concrete mix shall consist of a minimum 55 percent AASHTO M 43 size No. 67 coarse aggregate by weight of total aggregate.

The laboratory trial mix must not exhibit a crack at or before 14 days in the cracking tendency test (AASHTO T334).

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 STRUCTURAL CONCRETE

Subsection 601.04 shall include the following:

601.04 Sulfate Resistance. The Contractor shall provide protection against sulfate attack on concrete structures and pavements by providing concrete manufactured with requirements according to Table 601-4. The sulfate exposure for all concrete shall be Class 2 unless otherwise stated on the plans. A higher level of requirements may be used for a lower level of exposure.

If the Contractor can provide a test report that shows another class of exposure exists at a structure location, then the Engineer may accept a concrete mix for that location that meets the corresponding sulfate protection requirements in addition to other requirements shown in this section.

**Table 601-4
 REQUIREMENTS TO PROTECT AGAINST DAMAGE TO
 CONCRETE BY SULFATE ATTACK FROM EXTERNAL SOURCES OF SULFATE**

Severity of sulfate exposure	Water-soluble sulfate (SO ₄) in dry soil, percent,	Sulfate (SO ₄) in water, ppm	Water cementitious ratio, maximum	Cementitious material requirements
Class 0	0.00 to 0.10	0 to 150	0.45	Class 0
Class 1	0.11 to 0.20	151 to 1500	0.45	Class 1
Class 2	0.21 to 2.00	1501 to 10,000	0.45	Class 2
Class 3	2.01 or greater	10,001 or greater	0.40	Class 3

Cementitious material requirements are as follows:

Class 0 requirements for sulfate resistance shall be one of the following:

2. ASTM C 150 Type I, II or V
3. ASTM C 595 Type IP, IP(MS) or IP(HS)
4. ASTM C 1157 Type GU, MS or HS
5. ASTM C 150 Type III cement if it is allowed, as in Class E concrete

Class 1 requirements for sulfate resistance shall be one of the following:

14. ASTM C 150 Type II or V; Class C fly ash shall not be substituted for cement
15. ASTM C 595 Type IP(MS) or IP(HS); Class C fly ash shall not be substituted for cement.
16. ASTM C 1157 Type MS or HS; Class C fly ash shall not be substituted for cement.
17. When ASTM C 150 Type III cement is allowed, as in Class E concrete, it shall have no more than 8 percent C₃A. Class C fly ash shall not be substituted for cement

Class 2 requirements for sulfate resistance shall be one of the following:

- (13) ASTM C 150 Type V with a minimum of a 20 percent substitution of Class F fly ash by weight
- (14) ASTM C 150 Type II or III with a minimum of a 20 percent substitution of Class F fly ash by weight. The Type II or III cement shall have no more than 0.040 percent expansion at 14 days when tested according ASTM C 452
- (15) ASTM C 1157 Type HS; Class C fly ash shall not be substituted for cement.

- (16) ASTM C 1157 Type MS plus Class F fly ash where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion at 12 months when tested according to ASTM C 1012
- (17) A blend of portland cement meeting ASTM C 150 Type II or III with a minimum of 20 percent Class F fly ash by weight, where the blend has less than 0.05 percent expansion at 6 months or 0.10 percent expansion at 12 months when tested according to ASTM C 1012.
- (18) ASTM C 595 Type IP(HS); Class C fly ash shall not be substituted for cement.

Class 3 requirements for sulfate resistance shall be one of the following:

- (9) A blend of portland cement meeting ASTM C 150 Type II, III, or V with a minimum of a 20 percent substitution of Class F fly ash by weight, where the blend has less than 0.10 percent expansion at 18 months when tested according to ASTM C 1012.
- (10) ASTM C 1157 Type HS having less than 0.10 percent expansion at 18 months when tested according to ASTM C 1012. Class C fly ash shall not be substituted for cement
- (11) ASTM C 1157 Type MS or HS plus Class F fly ash where the blend has less than 0.10 percent expansion at 18 months when tested according to ASTM C 1012.

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- (12) ASTM C 595 Type IP(HS) having less than 0.10 percent expansion at 18 months when tested according to ASTM C 1012. Class C fly ash shall not be substituted for cement.

When fly ash is used to enhance sulfate resistance, it shall be used in a proportion greater than or equal to the proportion tested in accordance to ASTM C1012 and it shall have a calcium oxide content no more than 2.0 percent greater than the fly ash tested according to ASTM 1012.

Delete subsection 601.05 and replace with the following:

601.05 Proportioning. The Contractor shall submit a Concrete Mix Design for each class of concrete being placed on the project. Concrete shall not be placed on the project before the Concrete Mix Design Report has been reviewed and approved by the Engineer. The Concrete Mix Design will be reviewed and approved following the procedures of CP 62. The Concrete Mix Design will not be approved when the laboratory trial mix data are the results from tests performed more than two years in the past or aggregate data are the results from tests performed more than two years in the past. The concrete mix design shall show the weights and sources of all ingredients including cement, pozzolan, aggregates, water, additives and the water cementitious ratio (w/cm). When determining the w/cm, cementitious (cm) shall be the sum of the weight of the cement, the weight of the fly ash and the weight of silica fume.

The laboratory trial mix data shall include results of the following:

- (34) AASHTO T 119 (ASTM C 143) Slump of Hydraulic Cement Concrete.
- (35) AASHTO T 121 (ASTM C 138) Weight per Cubic Foot, Yield, and Air Content (Gravimetric) of Concrete.
- (36) AASHTO T 152 (ASTM C 231) Air Content of Freshly Mixed Concrete by the Pressure Method

- (37) ASTM C 39 Compressive Strength of Cylindrical Concrete Specimens shall be performed with at least two specimens at 7 days and three specimens at 28 days. Three additional specimens tested at 56 days shall be required for Class H and HT concrete.
- (38) Class H and HT concrete shall include a measurement of permeability by ASTM C 1202 Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration. The concrete test specimens shall be two 2 inch thick disks sawed from the centers of two molded 4 inch diameter cylinders cured 56 days in accordance with ASTM C 192 Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory.
- (39) Class H, HT and S50 concrete shall include a measurement of cracking by AASHTO T334 Standard Practice for Estimating the Cracking Tendency of Concrete. The sample shall be cured at a temperature of 65 to 75 °F and relative humidity not exceeding 40 percent.
- (40) Class E and P concrete shall include AASHTO T 97 (ASTM C 78) Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading) performed with at least two specimens at seven days and four specimens at 28 days.

Prior to placement of Class E concrete, the Contractor shall provide the Engineer a report of maturity relationships in accordance with CP 69. The Contractor shall provide maturity meter and all necessary wire and connectors.

The Contractor shall be responsible for the placement and maintenance of the maturity meter and wire. Placement shall be as directed by the Engineer.

Except for class BZ concrete, the maximum slump of the delivered concrete shall be the slump of the approved concrete mix design plus 1½ inch. Except for class H and HT concrete, the laboratory trial mix must produce an average 28 day compressive strength at least 115 percent of the required 28 day field compressive strength. The laboratory trial mix for Class H or HT concrete must produce an average 56 day compressive strength at least 115 percent of the required 56 day field compressive strength.

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REVISION OF SECTIONS 601 AND 701
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When entrained air is specified in the Contract for Class BZ concrete, an air entraining admixture may be added to an approved Class BZ mix design. A new trial mix will not be required.

The laboratory trial mix shall have a relative yield of 0.99 to 1.02. When Portland Cement Concrete Pavement is paid with a volumetric pay quantity, the relative yield of the concrete produced on the project shall be 0.99 to 1.02.

If the produced concrete does not have a relative yield of 0.99 to 1.02 for two consecutive yield determinations, concrete production shall cease and the Contractor shall present a plan to correct the relative yield to the Engineer.

Aggregate data shall include the results of the following:

- (d) AASHTO T 11 (ASTM C 117) Materials Finer Than 75 um (No. 200) Sieve in Mineral Aggregates by Washing.
- (e) AASHTO T 19 (ASTM C 29) Unit Weight and Voids in Aggregate.
- (f) AASHTO T 21 (ASTM C 40) Organic Impurities in Fine Aggregate for Concrete.
- (g) AASHTO T 27 (ASTM C 136) Sieve Analysis of Fine and Coarse Aggregates.
- (h) AASHTO T 84 (ASTM C 128) Specific Gravity and Absorption of Fine Aggregate.
- (i) AASHTO T 85 (ASTM C 127) Specific Gravity and Absorption of Coarse Aggregate.
- (j) AASHTO T 96 (ASTM C 131) Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- (k) AASHTO T 104 (ASTM C 88) Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate.
- (l) CP 37 Plastic Fines in Graded Aggregates and Soils by use of the Sand Equivalent Test
- (m) ASTM C 535 Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- (n) ASTM C1260 Determining the Potential Alkali Reactivity of Aggregates (Accelerated Mortar-Bar Method).
When an aggregate source is known to be reactive, ASTM C1567 results may be submitted in lieu of ASTM C1260 results.

Any aggregate tested by ASTM C1260 with an expansion of 0.10 percent or more, or that is known to be reactive, shall not be used unless mitigative measures are included in the mix design. Mitigative measures shall be tested using ASTM C1567 and exhibit an expansion less than 0.10 percent by one of the following methods:

- 6. Combined Aggregates. The mix design sources of aggregates, cement and mitigative measures shall be tested. The proportions of aggregates and mitigative measures shall be those used in the mix design.
- 7. Individual Aggregates. Each source and size of individual aggregates shall be tested. The source of cement and mitigative measures shall be those used in the mix design. The highest level of mitigative measures for any individual aggregate shall be the minimum used in the mix design.

The Concrete Mix Design Report shall include Certified Test Reports showing that the cement, fly ash and silica fume meet the specification requirements and supporting this statement with actual test results. The certification for silica fume shall state the solids content if the silica fume admixture is furnished as slurry.

Approved fly ash may be substituted for ASTM C150 cement up to a maximum of 20 percent Class C or 30 percent Class F by weight of total cementitious.

For all concrete mix designs with ASTM C595 or C1157 cements, the total pozzolan content shall not exceed 30 percent by weight of the cementitious content.

Where the Contractor's use of fly ash results in any delay, necessary changes in admixture quantities or source, or unsatisfactory work, the cost of such delays, changes or corrective actions shall be borne by the Contractor.

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 REVISION OF SECTIONS 601 AND 701
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The Contractor shall submit a new Concrete Mix Design Report meeting the above requirements when a change occurs in the source, type, or proportions of cement, fly ash, silica fume or aggregate. When a change occurs in the source of approved admixtures, the Contractor shall submit a letter stamped by the Concrete Mix Design Engineer approving the changes to the existing mix design. The change will be approved by the Engineer prior to use.

The use of approved accelerating, retarding or hydration stabilizing admixtures to existing mix designs will be permitted at the discretion of the Engineer when documentation includes the following:

- (33) Manufacturers recommended dosage of the admixture
- (34) A letter stamped by the Concrete Mix Design Engineer approving the changes to the existing mix design.

Unless otherwise permitted by the Engineer, the product of only one type of hydraulic cement from one source of any one brand shall be used in a concrete mix design.

Review and approval of the Concrete Mix Design by the Engineer does not constitute acceptance of the concrete. Acceptance will be based solely on the test results of concrete placed on the project.

Subsection 601.12 (j), third paragraph, shall include the following:

When concrete is to be placed on or adjacent to hardened concrete surfaces, the surface shall be saturated surface dry. Saturated surface dry concrete has no water on its surface. The pores of the concrete beneath the surface are moist.

Delete subsection 701.01 and replace with the following:

701.01 Hydraulic Cement. Hydraulic cement shall conform to the requirements of the following specifications for the type specified or permitted:

Portland Cement	ASTM C 150
Blended Hydraulic Cement	ASTM C 595
Hydraulic Cement	ASTM C 1157

All concrete, including precast, prestressed and pipe shall be constructed with one of the following hydraulic cements unless permitted otherwise.

ASTM C 150 Type I
 ASTM C 150 Type II
 ASTM C 150 Type V
 ASTM C 595 Type IP consisting of no less than 70 percent portland cement,
 ASTM C 595 Type IP(MS) consisting of no less than 70 percent portland cement,
 ASTM C 595 Type IP(HS) consisting of no less than 70 percent portland cement,
 ASTM C 1157 Type GU, consisting of no more than 10 percent limestone,
 ASTM C 1157 Type MS, consisting of no more than 10 percent limestone,
 ASTM C 1157 Type HS, consisting of no more than 10 percent limestone,

Cement shall be from a preapproved source listed on the Department's Approved Products List. The cement intended for use on the project shall have been tested and accepted prior to its use. Certified Test Reports showing that the cement meets the specification requirements and supporting this statement with actual test results shall be submitted to the Engineer prior to the tested material being incorporated into the project. Certified Test Reports shall indicate the percentage of pozzolan and/or limestone incorporated into the cement.

The cement shall be subject to sampling and testing by the Department. Test results that do not meet the physical and chemical requirements may result in the suspension of the use of the cement until the corrections necessary have been taken to insure that the material meets the specifications.

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REVISION OF SECTIONS 601 AND 701
STRUCTURAL CONCRETE

The Contractor shall provide suitable means for storing and protecting the cement against dampness. Cement which, for an reason, has become partially set or which contains lumps of caked cement shall not be used.

Cement salvaged from discarded or used bags shall not be used.

Delete subsection 701.02 and replace with the following:

701.02 Fly Ash. Fly ash for concrete shall conform to the requirements of ASTM C 618, Class C or Class F with the following exceptions:

- (1) The loss on ignition shall not exceed 3.0 percent.
- (2) The CaO in Class F fly ash shall not exceed 18 percent.

Fly ash shall be from a preapproved source listed on the Department's Approved Products List. The fly ash intended for use on the project shall have been tested and accepted prior to its use. Certified Test Reports showing that the fly ash meets the specification requirements and supporting this statement with actual test results shall be submitted to the Engineer.

Preapproval shall include submission of a report from the supplier documenting the results of testing the fly ash from that source in accordance with the Toxicity Characteristic Leaching Procedure (TCLP) described in 40 CFR 261, Appendix II. The report shall include the results of TCLP testing for heavy metals and other contaminants found in the fly ash. The report shall list the contaminants tested, and the allowable levels for each contaminant tested. A new report shall be submitted for each preapproved source annually. Additional TCLP testing may be required when the Department suspects that the fly ash source may have been contaminated.

The fly ash shall be subject to sampling and testing by the Department. Test results that do not meet the physical and chemical requirements may result in the suspension of the use of fly ash until the corrections necessary have been taken to insure that the material meets the specifications.

April 7, 2006

REVISION OF SECTION 614
TUBULAR STEEL SIGN SUPPORT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects having steel sign posts, steel sign post sockets, or both.

REVISION OF SECTION 614
TUBULAR STEEL SIGN SUPPORT

Section 614 of the Standard Specifications is hereby revised for this project as follows:

Subsection 614.01 shall include the following:

This work includes the installation of single or double tubular steel sign posts, supporting tubular sockets, and concrete footings at locations as shown on the plans.

Subsection 614.02 shall include the following:

Tubular sockets shall be round 12 gauge galvanized steel that meet the requirements of ASTM 787.

Concrete footing shall be made of Class B Concrete. The Contractor may use an alternate material that meets the requirements for Class B concrete in Section 601, as approved by the Engineer.

Subsection 614.09, last paragraph, shall include the following:

- (4) Tubular Steel Sign Supports. Tubular steel sign post, slipbase or socket and wedge, footing, and mounting clamps shall be installed in accordance with Standard Plan S-614-8 and manufacturer's recommendations. The Contractor shall make all arrangements to have a manufacturer-trained installer of the manufacturer's products on-site during the construction of the entire assembly and associated signs to ensure proper installation. Prior to the placement of the posts, the Contractor shall submit to the Engineer, written documentation of the installer's qualifications and training in the construction of tubular steel sign supports. Upon completion of installation, the Contractor shall obtain and submit documentation from the trained installer that the installation of the sign posts was in accordance with manufacturer's recommendations.

Subsection 614.13 shall include the following:

Steel Sign Support (Post) will be measured by the actual number of linear feet of posts (not to include length of T-brackets or U-brackets) that are installed and accepted. T-brackets, U-brackets, wedges and mounting clamps that are required to complete the assembly as shown on the plans will not be measured and paid for separately, but shall be included in the work.

Steel Sign Support (Socket) will be measured by the actual number of sockets that are installed and accepted. Concrete footing will not be measured and paid for separately, but shall be included in the work.

When called for on the plans, sign posts, sockets and footings, wedges and mounting clamps will be regarded as a single assembly, and will be measured by the actual number of Steel Sign Support (Post and Socket) that are installed and accepted.

Steel Sign Support (Slipbase) will be measured by the actual number that are installed and accepted. Concrete footing will not be measured and paid for separately, but shall be included in the work.

When called for in the plans, sign posts, slipbases and footing will be regarded as a single assembly, and will be measured by the actual number of Steel Sign Supports (Post and Slipbase) that are installed and accepted.

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REVISION OF SECTION 614
TUBULAR STEEL SIGN SUPPORT

Subsection 614.14 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Steel Sign Support (2-Inch Round) (Post)	Linear Foot
Steel Sign Support (2-Inch Round) (Socket)	Each
Steel Sign Support (2-Inch Round) (Post and Socket)	Each
Steel Sign Support (2-1/2 Inch Round NP-40) (Post)	Linear Foot
Steel Sign Support (2-1/2 Inch Round NP-40) (Slipbase)	Each
Steel Sign Support (2-1/2 Inch Round NP-40) (Post and Slipbase)	Each
Steel Sign Support (2-1/2 Inch Round Sch 80) (Post)	Linear Foot
Steel Sign Support (2-1/2 Inch Round Sch 80) (Slipbase)	Each
Steel Sign Support (2-1/2 Inch Round Sch 80) (Post and Slipbase)	Each

All costs associated the manufacturer's representative and obtaining the required documentation will not be measured and paid for separately but shall be included in the work.

September 2, 2005

REVISION OF SECTIONS 614 AND 630
FLASHING BEACON

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects that have flashing beacons or solar powered flashing beacons.

REVISION OF SECTIONS 614 AND 630
FLASHING BEACON

Sections 614 and 630 of the Standard Specifications are hereby revised for this project as follows:

Subsection 614.06 shall include the following:

614.06 Flashing Beacon. Flashing beacon shall be as shown on the plans. If solar power is called for on the plans, or if the Engineer approves the use of solar power, then the beacon head shall be 12V LED type operated at 24 watts. The solar power system shall be capable of operating the flashing beacon continuously for ten days without any sunlight. The solar panel and battery power system shall be augmented to protect it from vandalism or theft. The solar power system shall be complete including all elements required for an operational installation.

Subsection 614.09 shall include the following:

The flashing beacon shall be installed as shown on the plans. The solar power system shall be placed outside the clear zone of the roadway or behind guardrail. Batteries shall be placed in a lockable container attached to a supplemental pole supporting the solar panels that is installed outside the clear zone, or behind guardrail.

Subsection 614.13, twelfth paragraph, shall include the following:

Solar power system for flashing beacons, poles, and lockable container will not be measured and paid for separately, but shall be included in the work.

Subsection 630.08, third paragraph, shall include the following:

The flashing beacon shall be in accordance with subsection 614.06.

Subsection 630.12 shall include the following:

The flashing beacon shall be installed in accordance with subsection 614.09. For solar powered flashing beacons, batteries may be placed in a lockable container attached to a supplemental pole supporting the solar panels that is installed outside the clear zone, or behind guardrail. If it is not possible to place this assembly outside the clear zone or behind guardrail, the batteries shall be placed in a lockable pull box and buried at the base of the pole. Other installations shall be as approved.

The Contractor shall ensure the proper operation of the flashing beacon throughout the duration of the project. If the beacon fails to operate properly, it shall be repaired or replaced at the Contractor's expense. The Contractor may propose an alternate method by submitting a revised MHT in accordance with subsection 630.09 for approval by the Engineer. All additional traffic control devices required during the time that the beacon is being repaired or the MHT is being prepared and reviewed shall be at the Contractor's expense.

Subsection 630.14, fourth paragraph, shall include the following:

Solar power system for Flashing Beacon (Portable), poles, and lockable container will not be measured and paid for separately, but shall be included in the work.

REVISION OF SECTION 627
PAVEMENT MARKING

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in projects having pavement marking.

1
REVISION OF SECTION 627
PAVEMENT MARKING

Section 627 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 627.03(b) and replace with the following:

(b) *Roadways Closed to Traffic During Construction.* Full-compliance final markings shall be in place prior to opening the roadway to traffic.

Pavement markings on detour routes shall be full-compliance markings.

Delete subsections 627.03(d) and 627.03(e) and replace with the following:

(d) *Temporary Pavement Markings.* Temporary pavement markings and control points for the installation of those pavement markings for roadways that are being constructed under traffic shall be installed as follows:

1. When one roadway of a normally physically divided highway is closed, and a crossover is constructed, full-compliance pavement markings shall be placed along the tapers and through the median crossovers to the two-way traffic section. Pavement markings through the two-way traffic section shall be as shown on the plans.

All temporary paved roadways shall have full-compliance center line, lane line, and edge line markings before they are open for traffic.

Markings applied to a final surface shall not leave a scar that conflicts with permanent markings.

2. The following criteria apply to all construction on roadways open to traffic other than (d)1. above:

Full-compliance center line, lane line, and edge line temporary markings shall be in place at the end of each work day.

No-passing zone restrictions shall be identified by full-compliance no-passing zone markings. No-passing zone markings shall be in place daily.

Temporary pavement stencils (SCHOOL, RR xing, etc) are not required unless specified in the plans.

Temporary pavement markings shall be installed according to the manufacturer's recommendations in such a way that the markings adequately follow the desired alignment.

3. Control Points consisting of 4 inch by 1 foot marks at 40-foot intervals may be placed as guide markers for the installation of temporary or final pavement markings. Raised flexible pavement markers may be substituted for these marks. Control points shall not be used as a substitute for any required marking.

2
REVISION OF SECTION 627
PAVEMENT MARKING

(e) *Pavement Marking for Seal Coats (Section 409).*

1. Raised flexible pavement markers, suitable for use on seal coats, shall be installed as follows:

No-passing zones shall be marked with two markers placed side-by-side at 40-foot intervals throughout the zone.

Passing zones shall be marked with one marker at 40-foot centers. Closer spacing shall be used on curves, as deemed appropriate.

Raised flexible pavement markers, installed on 40-foot centers, may also be used to mark lane lines through multi-lane roadway sections. Auxiliary lanes and shoulder lines may be marked with flexible markers on 80-foot centers or as appropriate.

2. Full-compliance final pavement markings shall be placed within one week of completion of the seal coat project.

Subsection 627.13 shall include the following:

Each authorized application of temporary pavement marking will be measured and paid for at the contract unit price for the type of material used.

Control points and Contractor pavement marking plans will not be measured and paid for separately, but shall be included in the work.

REVISION OF SECTIONS 627 AND 708
PAVEMENT MARKING WITH WATERBORNE PAINT
AND LOW VOC SOLVENT BASE PAINT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects having pavement marking paint.

REVISION OF SECTIONS 627 AND 708
PAVEMENT MARKING WITH WATERBORNE PAINT
AND LOW VOC SOLVENT BASE PAINT

Sections 627 and 708 of the Standard Specifications are hereby revised for this project as follows:

Delete subsection 627.04 and replace with the following:

627.04 Pavement Marking with Waterborne and Low Volatile Organic Compound (VOC) Solvent Base Paint. Striping shall be applied when the air and pavement temperatures are no less than 45 °F for waterborne paint and no less than 40 °F for low VOC solvent base paint on asphalt or portland cement concrete pavements. The pavement surface shall be dry and clean. Surface cleaning shall be required when there is deicing material on the road. Weather conditions shall be conducive to satisfactory results.

The Contractor shall utilize equipment that meets the following requirements, as approved:

- (1) Equipment shall permit traffic to pass safely within the limits of the roadway surface and shoulder while operating.
- (2) Equipment shall be designed for placement of both solid and broken line stripes with a reasonably clean-edged stripe of the width and location as shown on the contract and no overspray on the road surface.
- (3) Equipment shall have a glass bead dispenser directly behind, synchronized with the paint applicator. Each applicator shall have individual control and automatic skip control that will paint a strip with a gap as shown in the contract.
- (4) The equipment may be equipped with a heat exchanger to heat the paint to reduce drying time.
- (5) The operation shall include a trailing vehicle equipped with a flashing arrow board.

The Contractor shall prevent traffic from crossing a wet stripe. Stripes which have been marred or picked up by traffic before they have dried shall be repaired at the Contractor's expense. Removal of paint from vehicles that crossed wet paint shall be at the Contractor's expense.

The water-based paint and stripes shall fall within the following minimum and maximum ranges:

	DESCRIPTION	MINIMUM	MAXIMUM
Alignment	Lateral Deviation	N/A	2.0 inch per 200 ft
Paint	Coverage rate per gallon of paint	100 sq. ft	110 sq. ft
	Thickness	15 mil	N/A
	Width of painted lines	4 inch	N/A

	Width Variance	N/A	1/4 inch
Water-Based Paint	Dry time to no tracking conditions	N/A	90 seconds
Low VOC Paint	Dry time to no tracking conditions	N/A	5 minutes
Beads	Application rate per gallon of paint	5 lbs 3 oz	6 lbs 3 oz

2
REVISION OF SECTIONS 627 AND 708
PAVEMENT MARKING WITH WATERBORNE PAINT
AND LOW VOC SOLVENT BASE PAINT

Subsection 627.13 shall include the following:

Pay Item Pay Unit

Pavement Marking Paint (Waterborne)	Gallon
Pavement Marking Paint (Low VOC Solvent Base)	Gallon

Delete subsection 708.01 and replace with the following:

708.01 General. This specification covers ready-mixed paints and coatings. Paints and coatings shall be manufactured eight weeks or less prior to delivery to the project. Each paint container shall be labeled with the name and address of the manufacturer, trade name or trademark, type of paint, number of gallons, batch number, and date of manufacture.

Paints shall be free of foreign material that is capable of clogging screens, valves, pumps, and other parts of the application equipment. Paint shall not contain the following:

- (1) Benzene
- (2) Chlorinated solvents
- (3) Ethylene glycol ethers
- (4) Ethylene glycol acetates
- (5) Lead
- (6) Mercury
- (7) Chromium
- (8) Cadmium
- (9) Petroleum products

The Contractor shall obtain certification in writing from the manufacturer showing that the product is free of the materials described above and that it meets or exceeds the requirements of 29 CFR 1910.1200.

Paints shall not form a surface skin within 48 hours in three-quarter filled, tightly closed containers. Paint and coating pigments shall be lead free, and shall not thicken, become granular, or curdle in their containers.

Volatile Organic Compound (VOC) levels for paints and coatings shall comply with the most current EPA regulations. All product compositional proportions are specified by weight. Material Safety Data Sheets and manufacturer's recommended application instruction sheets

representing each paint and coating shall be submitted to the Engineer for the project records prior to use.

Delete subsection 708.05 and replace with the following:

708.05 Pavement Marking Materials. Pavement marking materials shall be selected from the Department's Approved Products List (APL). Prior to start of work, a Certified Test Report (CTR) for all pavement marking materials shall be submitted in accordance with subsection 106.13.

REVISION OF SECTIONS 627 AND 708
PAVEMENT MARKING WITH WATERBORNE PAINT
AND LOW VOC SOLVENT BASE PAINT

For white paint, the color after drying shall be a flat-white, free from tint, and shall provide the maximum amount of opacity and visibility under both daylight and artificial light. For yellow paint, the Federal Standard 595B shall be used to designate colors and the ASTM E308 shall be used to quantitatively define colors. After drying, the yellow paint shall visually match Federal Standard 595B color chip number 33538, and shall be within 6 percent of central color, PR-1 Chart, where $x = 0.5007$ and $y = 0.4555$ (The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65.) The Contractor shall submit the exact formulation of the paint for approval by the Engineer. The paint shall not be used until written approval has been received from the Engineer

- (a) *Low VOC Solvent Base Paint.* Low VOC Paint shall be ready mixed, and shall be capable of being applied to Asphalt or Portland Cement Concrete Pavements.
- (b) *Acrylic Waterborne Paint.* Acrylic waterborne paint shall be a lead-free, 100 percent Acrylic resin polymer waterborne product. The finished product shall maintain its consistency during application at temperatures compatible with conventional equipment.

Waterborne paint shall meet all of the following requirements:

Performance Requirements: The paint shall be water resistant and shall show no softening, blistering or loss in gloss.

REVISION OF SECTIONS 627 AND 708
PAVEMENT MARKING WITH WATERBORNE PAINT
AND LOW VOC SOLVENT BASE PAINT

ACRYLIC WATERBORNE PAINT

Property	Minimum	Maximum	18. Test Method
Composition Requirements			
Nonvolatile portion of vehicle (white and yellow), %	43.0		FTMS 141C - Method 4031 or Method 4053.1
Pigment Composition			
(white and yellow), % by weight♦	58.0	62.0	ASTM D 4451 ASTM D 3723
White Paint			
Titanium Dioxide Content,%	80		ASTM D 476, Type III
Total Carbonate,%	94		ASTM D 1199, Type GC
Yellow Paint			
Titanium Dioxide Content,%	80		ASTM D 476, Type III
Total Carbonate,%	94		ASTM D 1199, Type GC
Organic Yellow Pigments,%	5.0		
Yellow Iron Oxide, %	83		ASTM D 768
Properties of the Finished Paint			
Total Non-volatiles, (solids) % by weight			
White Paint, %	77.0		FTMS 141C - Method 4053.1, ASTM D 2369, or ASTM D 4758
Yellow Paint, %	76.0		
Density, lbs/gal ■			
White Paint	14.0		ASTM D 1475 using U.S. Standard weight per gallon cup as defined in U.S. Military Standard 4566A
Yellow Paint	13.7		
Consistency (Viscosity) White and Yellow, Krebs-Stormer Units			
	85	95	ASTM D 562
Freeze Thaw Stability	Shall complete 5 or more test cycles successfully		ASTM D 2243
Fineness of Grind, Cleanliness Rating B	3		ASTM D 1210
Hydrogen ion content: pH	9.6		ASTM E 70
Directional Reflectance: [15 mil Wet Film]			
White, dried	85		ASTM E 1347

Yellow, dried	50		
Dry Opacity (Contrast Ratio): [15 mil Wet Film]			ASTM D 2805
White Paint	0.95		
Yellow Paint	0.88		
<p>◆Percent by weight shall include percent of organic yellow pigment.</p> <p>■Density shall not vary more than 0.3 lbs/gal between batches.</p>			

November 3, 2008

REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects.

REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications is hereby revised for this project as follows:

Subsection 630.10 shall include the following after the first paragraph:

The Contractor's Superintendent and all others serving in a similar supervisory capacity shall have completed a CDOT-approved two-day Traffic Control Supervisor training as offered by the CCA. The one-day ATSSA Traffic Control Technician (TCT) training along with the two-day ATSSA Traffic Control Supervisor training will serve as an alternate. If the alternate is chosen, the Contractor shall provide written evidence that at least an 80 percent score was achieved in both of the two training classes. The certifications of completion or certifications of achievement for all appropriate staff shall be submitted to the Engineer at the preconstruction conference.

In subsection 630.11, delete the fourth paragraph and replace with the following:

All covering materials shall be plywood, hard-board, sheet metal, aluminum, corrugated polypropylene or rigid plastic, and shall be durable enough to resist deterioration due to weathering and atmospheric conditions for the duration of the project. Examples are aluminum at least 0.040 inch thick, corrugated polypropylene board, and plywood at least 3/8 inch thick. Adhesives, glues, tapes, or mechanical fasteners that mar the face of the panel to be masked shall not be used.

In subsection 630.15 delete the fifth paragraph and replace with the following:

The Contractor shall agree to quantities for the following items on a weekly basis when signing the Form 7:

Traffic Control Management	Day
Traffic Control Inspection	Day
Flagging	Hour
Pilot Car Operation	Hour

April 7, 2006

19. REVISION OF SECTION 630
METHOD OF HANDLING TRAFFIC

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions regarding its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies that use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use on all projects that were created in SAP prior to May 1, 2009. Do not use on projects that were created in SAP after May 1, 2009.

REVISION OF SECTION 630
METHOD OF HANDLING TRAFFIC

Section 630 of the Standard Specifications is hereby revised for this project as follows:

In subsection 630.09 (8), delete Table 630-2 and replace with the following:

Table 630-2

VERTICAL CLEARANCES TO STRUCTURES

	Highway Underpasses	Railway Underpasses	Overhead Wires
<i>Local Rural Roads</i> Local Urban Streets Rural Collectors Urban Collectors	<i>14 Feet</i>	<i>23 Feet²</i>	³
<i>Rural Arterial</i> Urban Arterial Freeways	<i>16 Feet¹</i>	<i>23 Feet²</i>	³
¹ Vertical clearance to sign trusses and pedestrian overpasses shall be 17 feet. ² Measured from top of rail to bottom of highway structure. All railway clearances are subject to the individual railroad's approval. ³ Communication and power lines of: 0 to 750 volts 18 Feet 750 to 22,000 volts 20 Feet 22,000 to 50,000 volts 22 Feet For voltages over 50,000 volts, increase clearance ½ inch for each 1000 volts.			

REVISION OF SECTION 630
NCHRP 350 REQUIREMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

20. Use this standard special provision on all projects.

August 2, 2007

REVISION OF SECTION 630
NCHRP 350 REQUIREMENTS

Section 630 of the Standard Specifications is hereby revised for this project as follows:

In subsection 630.01, first paragraph, delete the second sentence.

In subsection 630.08, delete the second paragraph and replace with the following:

Work zone devices designated by FHWA as Category I, II, or III, shall meet NCHRP 350 requirements. Devices designated as Category IV, including but not limited to portable or trailer-mounted devices such as flashing arrow panels, temporary traffic signals, area lighting supports, and changeable message signs, are not required to meet NCHRP 350 requirements.

Except for Category IV devices, the Contractor shall obtain and present to the Engineer the manufacturer's written NCHRP 350 certification for each work zone device before it is first used on the project.

REVISION OF SECTION 630
PAYMENT FOR CONSTRUCTION TRAFFIC CONTROL DEVICES

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use in all projects.

REVISION OF SECTION 630
PAYMENT FOR CONSTRUCTION TRAFFIC CONTROL DEVICES

Section 630 of the Standard Specifications is hereby revised for this project as follows:

In subsection 630.15 delete the second paragraph and replace with the following:

Construction traffic control devices, as determined by the project Traffic Control Plan (TCP), will be paid for as follows: 50 percent of the accepted amount upon first utilization, an additional 40 percent of the accepted amount when 75 percent of the original contract amount has been earned, and the final 10 percent when the project has been completed in accordance with subsection 105.20, exclusive of any maintenance periods. The percent of original contract amount earned will be determined by comparing the amount earned for bid items, other than traffic control devices and mobilization, with the original contract amount minus the amounts bid for traffic control devices and mobilization.

REVISION OF SECTIONS 630
PORTABLE SIGN STORAGE

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects.

August 1, 2005

REVISION OF SECTION 630
PORTABLE SIGN STORAGE

Section 630 of the Standard Specifications is hereby revised for this project as follows:

In subsection 630.12, first paragraph, delete the fifth sentence and replace with the following:

When storing portable signs or supports within the project they shall be removed beyond the clear zone and shall not be visible to traffic. All storage areas shall be approved. The minimum clear zone distance shall be 18 feet, measured from the edge of traveled way. If the signs cannot be stored at least 18 feet from the traveled way, they shall be removed. Signs shall not be stored on the paved surface.

January 17, 2008

REVISION OF SECTION 702
BITUMINOUS MATERIALS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use on projects having bituminous materials.

22. REVISION OF SECTION 702
BITUMINOUS MATERIALS

23. Section 702 of the Standard Specifications is hereby deleted for this project and replaced with the following:

702.01 Asphalt Cements.

- (a) *Superpave Performance Graded Binders.* Superpave Performance Graded Binders shall conform to the requirements listed in Table 702-1. (Taken from AASHTO M 320)

Asphalt cement shall not be acid modified or alkaline modified.

Asphalt cement shall not contain any used oils that have not been rerefined. Modifiers that do not comply with environmental rules and regulations including 40 CFR Part 261.6(a) (3) (IV), and part 266/Subpart C shall not be added. Modifiers shall not be carcinogenic.

The supplier of the PG binder shall be certified in accordance with CP 11.

24. 2
 25. REVISION OF SECTION 702
 BITUMINOUS MATERIALS

26. Table 702-1
SUPERPAVE PERFORMANCE GRADED BINDERS

Property	Requirement for PG Binder					AASHTO Test No.
	58-28	58-34	64-22	64-28	76-28	
Original Binder Properties						
Flash Point Temp., °C, minimum	230	230	230	230	230	T 48
Viscosity at 135 °C, Pa•s, maximum	3	3	3	3	3	T 316
Dynamic Shear, Temp. °C, where $G^*/\sin \delta @ 10 \text{ rad/s} \geq 1.00 \text{ kPa}$	58	58	64	64	76	T 315
Ductility, 4 °C (5 cm/min.), cm minimum	-	-	-	50	-	T 51
Toughness, joules (inch-lbs)	-	-	-	12.4 (110)	-	CP-L 2210
Tenacity, joules (inch-lbs)	-	-	-	8.5 (75)	-	CP-L 2210
Acid or Alkali Modification (pass-fail)	Pass	Pass	Pass	Pass	Pass	CP-L 2214
RTFO Residue Properties						CP-L 2215
Mass Loss, percent maximum	1.00	1.00	1.00	1.00	1.00	CP-L 2215
Dynamic Shear, Temp. °C, where $G^*/\sin \delta @ 10 \text{ rad/s} \geq 2.20 \text{ kPa}$	58	58	64	64	76	T 315
Elastic Recovery, 25 °C, percent min.	-	-	-	-	50	T 301
Ductility, 4 °C (5 cm/min.), cm minimum	-	-	-	20	-	T 51
PAV Residue Properties, Aging Temperature 100 °C						R 28
Dynamic Shear, Temp. °C, where $G^* \sin \delta @ 10 \text{ rad/s} \leq 5000 \text{ kPa}$	19	16	25	22	28	T 315
Creep Stiffness, @ 60 s, Test Temperature in °C	-18	-24	-12	-18	-18	T 315
S, maximum, MPa	300	300	300	300	300	T 313
m-value, minimum	0.300	0.300	0.300	0.300	0.300	T 313
**Direct Tension, Temperature in °C, @ 1 mm/min., where failure strain $\geq 1.0 \%$	-18	-24	-12	-18	-18	T 314
**Direct tension measurements are required when needed to show conformance to AASHTO M 320.						

29. REVISION OF SECTION 702
BITUMINOUS MATERIALS

Acceptance Samples of the PG binder will be taken on the project in accordance with the Schedule in the Field Materials Manual.

The Department will test for acid modification and alkaline modification during the binder certification process. Thereafter, the Department will randomly test for acid modification and alkaline modification.

- (b) *Dampproofing.* Asphalt for damp proofing shall conform to the requirements of ASTM D 449, and the asphaltic primer shall conform to the requirements of ASTM D 41.

702.02 Liquid Asphaltic Materials. Liquid asphaltic materials shall conform to the requirements of AASHTO M 81, M 82, and ASTM D 2026 for the designated types and grades.

702.03 Emulsified Asphalts. Emulsified asphalts shall conform to AASHTO M 140 or M 208 for the designated types and grades. Emulsified asphalt and aggregate used for seal coats shall be sampled and will be tested for information only in accordance with CP-L 2213.

When grade CSS-1h or SS-1h emulsified asphalt is used for tack coat, residue penetration test values shall be 40 to 120.

Emulsified asphalt (HFMS-2S) with a residual penetration greater than 300 dmm shall conform to all properties listed in AASHTO M 140, Table 1 except that ductility shall be reported for information only.

- (a) *Emulsion for Seal Coat.* Polymerized emulsions for seal coat shall conform to the requirements listed in Table 702-2. Emulsion for seal coat shall be an emulsified blend of polymerized asphalt, water, and emulsifiers. The asphalt cement shall be polymerized prior to emulsification and shall contain at least 3 percent polymer by weight of asphalt cement. The emulsion standing undisturbed for a minimum of 24 hours shall show no white, milky separation but shall be smooth and homogeneous throughout. The emulsion shall be pumpable and suitable for application through a distributor.

30.

31.

32. 4

33. REVISION OF SECTION 702
BITUMINOUS MATERIALS**Table 702-2**
POLYMERIZED EMULSIONS FOR SEAL COATS

<i>Property</i>	CRS-2P	CMS-2P	HFRS-2P	HFMS-2P	34. AASH TO Test No.	
Tests on Emulsion:						
Viscosity, at 50 °C, Saybolt-Furol, s	<u>min</u>	50	50	50	50	T 59
	max	450	450	450	450	
Storage stability, 24 hr, % max	1.0	1.0	1.0	1.0	T 59	
Particle charge test	Positive	Positive			T 59	
Sieve test, % max	0.10	0.10	0.10	0.10	T 59	
Demulsibility ¹ , % min	40		40		T 59	
Oil Distillate by volume, % max or range	3.0	3.0	3.0	3.0	T-59	
Residue by distillation/ evaporation, % min ³	65 ³	65 ³	65 ³	65 ³	T 59/ CP-L 2212 ²	
Tests on residue:						
Penetration, 25 °C, 100g, 5s, min, dmm	70	70	70	70	T 49	
Penetration, 25 °C, 100g, 5s, max, dmm	150	150	150	150		
Ductility, 25 °C, 5 cm/min, cm, min			75	75	T 51	
Solubility, in trichloroethylene% min	97.5	97.5	97.5	97.5	T 44	
Elastic Recovery, 25 °C min			58	58	T 301	
Float Test, 60 °C, s min			1200	1200	T 50	
Toughness, in-lbs, min	70	70			CP-L 2210	
Tenacity, in-lbs, min	45	45			CP-L 2210	
¹ If successful application is achieved in the field, the Engineer may wave this requirement.						
² CP-L 2212 is a rapid evaporation test for determining percent residue of an emulsion and providing material for tests on residue. CP-L 2212 is for acceptance only. If the percent residue or any test on the residue fails to meet specifications, the tests will be repeated using the distillation test in conformance with AASHTO T-59 to determine acceptability.						
³ For polymerized emulsions the distillation and evaporation tests will in be in conformance with AASHTO T-59 or CP-L 2212 respectively with modifications to include 205 ± 5 °C (400 ± 10 °F) maximum temperature to be held for 15 minutes.						

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39. BITUMINOUS MATERIALS

- (b) *Emulsion for Prime Coat.* Emulsion for prime coat shall conform to the requirements of Table 702-3. Circulate before use if not used within 24 hours.

**Table 702-3
ASPHALT EMULSION FOR PRIME COAT**

Property	Requirement	AASHTO Test No.
Viscosity, Saybolt Furol, at 50 °C (122 °F), s	20-150	T 59
% Residue	65% min.	T 59 to 260 °C (500 °F)
Oil Distillate by Volume, %	7% max.	T59
Tests on Residue from Distillation:		
Solubility in Trichloroethylene, %	97.5 min.	T 44

- (c) *Recycling Agent.* Recycling Agent for Item 406, Cold Bituminous Pavement (Recycle), shall be either a high float emulsified asphalt (polymerized) or an emulsified recycling agent as follows:
1. High Float Emulsified Asphalt (Polymerized). High Float Emulsified Asphalt (Polymerized) for Cold Bituminous Pavement (Recycle) shall be an emulsified blend of polymer modified asphalt, water, and emulsifiers conforming to Table 702-4 for HFMS-2sP. The asphalt cement shall be polymerized prior to emulsification, and shall contain at least 3 percent polymer.

The emulsion standing undisturbed for a minimum of 24 hours shall show no white, milky separation, and shall be smooth and homogeneous throughout.

The emulsion shall be pumpable and suitable for application through a pressure distributor.

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Table 702-4
HIGH FLOAT EMULSIFIED ASPHALT
(POLYMERIZED) (HFMS-2sP)

Property	Requirement		AASHTO Test
	Minimum	Maximum	
Tests on Emulsion:			
Viscosity, Saybolt Furol at 50 °C (122 °F), sec	50	450	T 59
Storage Stability test, 24 hours, %		1	T 59
Sieve test, %		0.10	T 59
% Residue ¹	65		T 59
Oil distillate by volume, %	1	7	T 59
Tests on Residue:			
Penetration, 25 °C (77 °F), 100g, 5 sec	150	300 ²	T 49
Float Test, 60 °C (140 °F), sec	1200		T 50
Solubility in TCE, %	97.5		T 44
Elastic Recovery, 4 °C (39.2 °F), %	50		T 301
¹ 400 ± 10° F maximum temperature to be held for 15 minutes. ² When approved by the Engineer, Emulsified Asphalt (HFMS-2sP) with a residual penetration greater than 300 dmm may be used with Cold Bituminous Pavement (Recycle) to address problems with cool weather or extremely aged existing pavement. Emulsified Asphalt (HFMS-2sP) with a residual penetration greater than 300 dmm shall meet all properties listed in Table 702-4 except that Elastic Recovery shall be reported for information only.			

2. *Emulsified Recycling Agent*. Emulsified Recycling Agent for use in Cold Bituminous Pavement (Recycle) shall conform to the requirements in Table 702-5.

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**Table 702-5
EMULSIFIED RECYCLING AGENT**

Property	Requirement		Test
	Minimum	Maximum	
Tests on Emulsion:			
Viscosity @ 25 °C, SFS	20	200	ASTM D 244
Pumping Stability	Pass		GB Method ¹
			ASTM D 244 ²
Sieve Test, %w		0.1	
Cement Mixing, %w		2.0	ASTM D 244
Particle Charge	Positive		ASTM D 244
Conc. Of Oil Phase	64		ASTM D 244 ³
Tests on Residue:			
Viscosity @ 60 °C , CST	2000	4000	ASTM D 2170
Flash Point, COC, °C (° F)	232		ASTM D 92
Maltenes Dist. Ratio ⁴ $\frac{PC+A_1}{S+A_2}$	0.3	0.6	ASTM D 2006
PC/S Ratio	0.4		ASTM D 2006
Asphaltenes, % max.		11.0	ASTM D 2006
¹ Pumping stability is determined by charging 450 ml of emulsion into a one liter beaker and circulating the emulsion through a gear pump (Roper 29.B22621) having a 6.3 mm (1/4 inch) inlet and outlet. The emulsion passes if there is no significant separation after circulating ten minutes. ² Test procedure identical with ASTM D 244 except that distilled water shall be used in place of 2 percent sodium oleate solution. ³ ASTM D 244 Evaporation Test for percent of residue is modified by heating 50 gram sample to 149°C (300 °F) until foaming ceases, then cooling immediately and calculating results. ⁴ In the Maltenes Distribution Ratio Test by ASTM Method D 2006. PC = Polar Compounds S = Saturates A ₁ = First Acidaffin A ₂ = Second Acidaffins			

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702.04 Asphalt Rejuvenating Agents. Asphalt rejuvenating agents (ARA) shall be composed of a petroleum resin-oil base uniformly emulsified with water and shall conform to the physical and chemical requirements of Table 702-6 or ASTM D 4552.

**54. Table 702-6
ASPHALT REJUVENATING AGENT**

Property	Test Method	Requirement
Viscosity, S.F., @ 25 °C (77 °F), s	ASTM D 244	20-40
¹ Residue, % min.	ASTM D 244	60-65
² Miscibility Test	ASTM D 244	No coagulation
³ Sieve Test, % max.	ASTM D 244	0.10
Particle Charge Test	ASTM D 244	Positive
ASTM D244 (Mod):		
Viscosity, 60 °C (140 °F), mm ² /s	ASTM D 445	100 - 200
Flash Point, COC, °C, min.	ASTM D 92	196
Asphaltenes, % max.	ASTM D2006	1.0
⁴ Maltenes Dist. Ratio $\frac{PC+A_1}{S+A_2}$	ASTM D 2006	0.3-0.6
Saturated Hydrocarbons, %	ASTM D 2006	21-28
¹ ASTM D244 Modified Evaporation Test for percent of residue is made by heating 50-gram sample to 149 °C (300 °F) until foaming ceases, then cooling immediately and calculating results. ² Test procedure identical with ASTM D244 except that 0.02 Normal Calcium Chloride solution shall be used in place of distilled water. ³ Test procedure identical with ASTM D244 except that distilled water shall be used in place of 2% sodium oleate solution. ⁴ In the Maltenes Distribution Ratio Test by ASTM Method D4124: PC = Polar Compounds S = Saturates A ₁ = First Acidaffin A ₂ = Second Acidaffins		

For hot-in-place recycling ARA-1P is an acceptable alternative to ARA. ARA-1P shall meet the requirements below:

Emulsified Polymer Modified Asphalt Rejuvenating Agent (ARA-1P) for use in hot-in-place recycling of bituminous pavements shall be modified with a minimum of 1.5 percent styrene-butadiene solution polymer. The finished product shall conform to the physical requirements listed in Table 702-7 below.

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60. BITUMINOUS MATERIALS

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62. Table 702-7
ARA-1P

Property	Test Method	Min	Max
Test on Emulsion			
Viscosity, Saybolt-Furol @ 77 °F, s	ASTM D 244		100
Residue @ 350 °F, %	ASTM D 244 Mod	60	
Sieve Test, %	ASTM D 244		0.10
Oil distillate, %	ASTM D 244		2.0
63. Test on Residue			
Penetration @ 39.2 °F, 100g, 5s, dmm	ASTM D-5 Modified	150	250
Asphaltenes, %	ASTM D 4124		15

702.05 (unused)

702.06 Hot Poured Joint and Crack Sealant. Hot poured material for filling joints and cracks shall conform to the requirements of ASTM D 6690, Type I or II. The concrete blocks used in the Bond Test shall be prepared in accordance with CP-L 4101.

Sealant material shall be supplied preblended, prereacted, and prepackaged. If supplied in solid form the sealant material shall be cast in a plastic or other dissolvable liner having the capability of becoming part of the crack sealing liquid. The sealant shall be delivered in the manufacturer's original sealed container.

Each container shall be legibly marked with the manufacturer's name, the trade name of the sealer, the manufacturer's batch or lot number, the application temperature range, the recommended application temperature, and the safe heating temperature.

The sealant shall be listed in CDOT's Approved Products List prior to use.

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Colorado Procedure – Laboratory CP-L 4101

Standard Practice for

**Preparing Concrete Blocks for Testing Sealants,
for Joints and Cracks**

ASTM Designation: D 1985-03

NOTE: Replace Subsections 5.1, 5.1.1, and 5.2 of ASTM D 1985-03 with the following:

- 5.1 Prepare the concrete in accordance with the procedure described in Test Method C 192/C102M using the following mix design:

Concrete Mix Proportions for 1 Cubic Yard
SSD Batch Weight

Cement, Type I/II	528 lb
Flyash, Class F	132 lb
Coarse Aggregate, Morrison Quarry, #57/67	1750 lb
Sand, Thornton Pit, Washed Sand	1100 lb

Note: Contact Aggregate Industries at 303.777.2592 to obtain the aggregates.

m/min. (10 000 ± 500 ft/min.). Each test block should be 25 by 50 by 75 mm (1 by 2 by 3-in.). Any face contacting the test material must be saw cut. While the blocks are still wet from the sawing operation, scrub the surfaces of the blocks lightly with a non-metallic stiff-bristle brush while holding under a stream of running water. Stocks of prepared blocks may be stored under standard conditions indefinitely, but store such blocks in a 100% humidity environment for not less than 7 days prior to use.

- 5.2. Use a metal or plastic mold provided with a metal or plastic base plate. Provide means for securing the base plate to the mold. Make the assembled mold and base plate water-tight and oil with mineral oil before use. Fill the mold with concrete prepared in accordance with 5.1 to overflowing and vibrate externally for 30 s. Screed (level) the concrete to a smooth surface with a wooden float and level off with a metal straightedge drawn across the top with a sawing motion. Cure as specified in Test Method C 192/C 192M. After curing for not less than 14 days, cut the slab of concrete into individual blocks using a 40 by 60-grit diamond saw blade rotating at a peripheral speed of 3050 ± 150

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69. January 17, 2008
REVISION OF SECTION 712
HYDRATED LIME

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects having HMA.

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REVISION OF SECTION 712
HYDRATED LIME

Section 712 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 712.03 and replace with the following:

712.03 Hydrated Lime. The hydrated lime for Hot Mix Asphalt (HMA) shall conform to the requirements of AASHTO M 303, Type I. In addition, the particle size requirements shall conform to AASHTO M 303 when tested in accordance with CP-L 4209 Physical Testing of Quicklime, Hydrated Lime, and Limestone.

August 1, 2005

AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects.

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**AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY**

A. AFFIRMATIVE ACTION REQUIREMENTS

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area are as follows:

Goals and Timetable for Minority Utilization

70. Timetable - Until Further Notice			
Economic Area	Standard Metropolitan Statistical Area (SMSA)	Counties Involved	Goal
157 (Denver)	2080 Denver-Boulder	Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, Jefferson.....	13.8%
	2670 Fort Collins	Larimer.....	6.9%
	3060 Greeley	Weld.....	13.1%
	Non SMSA Counties	Cheyenne, Clear Creek, Elbert, Grand, Kit Carson, Logan, Morgan, Park, Phillips, Sedgwick, Summit, Washington & Yuma.....	12.8%
158 (Colo. Spgs. - Pueblo)	1720 Colorado Springs	El Paso, Teller.....	10.9%
	6560 Pueblo	Pueblo.....	27.5%
	Non SMSA Counties	Alamosa, Baca, Bent, Chaffee, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Lake, Las Animas, Lincoln, Mineral, Otero, Prowers, Rio Grande, Saguache.....	19.0%

159 (Grand Junction)	Non SMSA	Archuleta, Delta, Dolores, Eagle, Garfield, Gunnison, Hinsdale, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel	10.2%
156 (Cheyenne - Casper WY)	Non SMSA	Jackson County, Colorado.....	7.5%
GOALS AND TIMETABLES FOR FEMALE UTILIZATION			
Until Further Notice.....6.9% -- Statewide			

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These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Par 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this specification, and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the Invitation for Bids and on the plans. In cases where the work is in two or more counties covered by differing percentage goals, the highest percentage will govern.

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AFFIRMATIVE ACTION REQUIREMENTS
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B. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION

CONTRACT SPECIFICATIONS

Standard Federal Equal Employment Opportunity Construction Contract Specifications
(Executive Order 11246)

1. As used in these Specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes;
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to

achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractor toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any office of Federal Contract Compliance Programs Office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

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5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following;
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and maintain a record of the organization's responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source of community organization and of what action was taken with respect to each individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the Contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

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- g. Review, at least annually, the Contractor's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc. such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and Contractor's activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of

solicitations to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligation.

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AFFIRMATIVE ACTION REQUIREMENTS
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8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goal and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports

relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

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AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY

C. SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES.

1. *General.*

- a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract. Provisions (Form FHWA 1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of Title 23, U.S.C., as established by Section 22 of the Federal-Aid highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract provisions.
- b. The Contractor will work with the State highway agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.
- c. The Contractor and all his/her subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The Contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

2. *Equal Employment Opportunity Policy.* The Contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program;

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include; employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.

3. *Equal Employment Opportunity Officer.* The Contractor will designate and make known to the State highway agency contracting officers and equal employment opportunity officer (herein after referred to as the EEO Officer) who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of

equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. *Dissemination of Policy.*

- a. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum;
 - (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the Contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

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- (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official, covering all major aspects of the Contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the Contractor.
 - (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the Contractor's procedures for locating and hiring minority group employees.
- b. In order to make the Contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Contractor will take the following actions:
- (1) Notices and posters setting forth the Contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - (2) The Contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
5. *Recruitment.*
- a. When advertising for employees, the Contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - b. The Contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the Contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the Contractor for employment consideration.
- In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same, such implementation violates Executive Order 11246, as amended.)
- c. The Contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.
6. *Personnel Actions.* Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken

without regard to race, color,²⁸ religion, sex, or national origin. The following procedures shall be followed;

- a. The Contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

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August 1, 2005

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AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY

- b. The Contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The Contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The Contractor will promptly investigate all complaints of alleged discrimination made to the Contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all of his avenues of appeal.

7. *Training and Promotion.*

- a. The Contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.
- c. The Contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The Contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. *Unions.* If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women with the unions, and to effect referrals by such unions of minority and female employees. Actions by the Contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

- a. The Contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and

women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

- b. The Contractor will use best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
- c. The Contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to the State highway department and shall set forth what efforts have been made to obtain such information.

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AFFIRMATIVE ACTION REQUIREMENTS
EQUAL EMPLOYMENT OPPORTUNITY

d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex or national origin; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such Contractor shall immediately notify the State highway agency.

9. *Subcontracting.*

- a. The Contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State highway agency personnel.
- b. The Contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. *Records and Reports.*

- a. The Contractor will keep such records as are necessary to determine compliance with the Contractor's equal employment opportunity obligations. The records kept by the Contractor will be designed to indicate:
 - (1) The number of minority and nonminority group members and women employed in each work classification on the project.
 - (2) The Progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force).
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and
 - (4) The progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection

by authorized representatives of the State highway agency and the Federal Highway Administration.

- c. The Contractors will submit an annual report to the State highway agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR 1391.

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June 18, 2009

ARRA MONTHLY EMPLOYMENT REPORT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this special provision on projects that are funded by the American Recovery and Reinvestment Act.

ARRA MONTHLY EMPLOYMENT REPORT

This project is funded with America Recovery and Reinvestment Act funding received from the Federal government. CDOT is required to report the number of jobs created on this project due to the ARRA. CDOT is also required to report the actual monthly total of Disadvantaged Business Enterprise (DBE) payments on ARRA projects.

To report the number of jobs created and DBE payments the Contractor shall submit the Monthly Employment Report – American Recovery and Reinvestment Act (ARRA). In order for CDOT to fulfill its reporting requirements under Section 1201 and 1512 of ARRA, CDOT must collect and analyze certain employment information. The data as identified below shall be reported on the model form. The Contractor shall ensure that each subcontractor also submits the required employment and DBE payment information to the Contractor in a timely fashion for the Contractor to fulfill this reporting obligation. The completed Monthly Employment Report shall be submitted by email to the following e-mail address:

Programs.ProjectAnalysis@dot.state.co.us

All Monthly Employment Reports shall be submitted by the 25th of the month (estimate cut-off date as specified by the Revision of subsection 109.06). Failure to submit the completed forms shall be grounds for a determination by the Engineer that no further progress payments are to be made until the Contractor has submitted all outstanding forms.

The Monthly Employment Report and the instructions may be found on the CDOT Forms website at <http://www.dot.state.co.us/FormsMgmt/#otherforms>.

The Monthly Employment Report shall be completed and submitted each month from the Notice to Proceed through project acceptance or September 2012 whichever occurs sooner. Each report shall include all information for the period from the date of the previous estimate to the date of the current estimate.

Submittal of the Monthly Employment Report shall not relieve the Contractor and subcontractors from the requirement to submit the annual Form FHWA 1391 for the last full week in July. This monthly report shall be made in addition to the annual report. All additional overhead associated with the reporting shall be included in the work.

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March 20, 2009

ARRA PEAK EMPLOYMENT
JOB CREATION
REPORTING REQUIREMENTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this special provision on projects that are funded by the American Recovery and Reinvestment Act.

March 20, 2009

ARRA PEAK EMPLOYMENT
JOB CREATION
REPORTING REQUIREMENTS

This project is funded with America Recovery and Reinvestment Act (ARRA) funding received from the Federal government. CDOT is required to report the number of jobs created on this project due to the ARRA.

To report the number of jobs created the Contractor shall submit one additional report for this project on a modified Form FHWA 1391. The report shall be for the week of peak employment on the project as determined by the Contractor and agreed to by the Engineer. It is anticipated that this will be the week of peak construction activity. The Contractor shall ensure that each subcontractor also submits a modified Form FHWA 1391 for the same week the Contractor does. The completed modified FHWA 1391 forms shall be submitted by email to the following e-mail address: Programs.ProjectAnalysis@dot.state.co.us

All modified FHWA Forms 1391 shall be submitted within 10 working days after the peak employment week. Failure to submit the completed forms shall be grounds for a determination by the Engineer that no further progress payments are to be made until the Contractor has submitted all outstanding forms.

The modified Form FHWA 1391 and the monthly reporting requirements may be found on the CDOT Forms website at <http://www.dot.state.co.us/FormsMgmt/#otherforms> .

Reporting of the peak project workforce shall not relieve the Contractor and subcontractors from the requirement to submit the annual Form FWHA 1391 for the last full week in July. This weekly report shall be made in addition to the annual report. All additional overhead associated with the reporting will be included in the work.

January 17, 2008

ON THE JOB TRAINING

71.

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions regarding its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies that use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on all projects.

This training special provision supplements subparagraph 6 of paragraph B and supersedes subparagraph 7b of paragraph C of the Special Provision entitled "Affirmative Action Requirements, Equal Employment Opportunity" and is an implementation of 23 U.S.C. 140 (a).

As part of the Contractor's Equal Employment Opportunity Affirmative Action Program, training shall be provided on projects as follows:

(a) General Requirements

1. The Contractor shall provide on the job training aimed at developing full journey workers in the type of skilled craft involved.
2. Training and upgrading of minorities and women toward journey worker status are a primary objective of this specification. Accordingly, the Contractor shall make every reasonable effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor shall be responsible for demonstrating the steps that were taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this specification. This training commitment shall not be used to discriminate against any applicant for training whether a member of a protected class or not.
3. An employee shall not be employed or utilized as a trainee in any skilled craft in which the employee has successfully completed a training course leading to journey worker status or in which the employee has been employed as a journey worker on a permanent and regular basis. The intent of the OJT Program is to train unskilled workers into a skilled job; the intent is not to use a previously trained and skilled worker to meet the project training requirements. The Contractor shall satisfy this requirement by including appropriate questions (i.e. Have you ever completed a formal training class in the craft that you are working in? worked as a journeyman in the highway construction industry?) in the employee application or by other suitable means. Regardless of the method used, the Contractor's records shall document the findings in each case.

In order to enhance promotion from within the Contractor's unskilled workforce, the Contractor may utilize an unskilled worker as a journey worker in a skilled craft, provided that the worker is paid the required contract journey worker rate. In that event, the trainee will have an opportunity to advance to journey worker status in and/or outside of the OJT program.

4. The minimum length and type of training for each skilled craft shall be as established in the training program selected by the Contractor and approved by the Department and the Colorado Division of the Federal Highway Administration (FHWA), or the U. S Department of Labor (DOL), Bureau of Apprenticeship and Training (BAT). The Department and the FHWA will approve a program if it is reasonably calculated to meet the Equal Employment obligations of the Contractor and to qualify the average trainee for journey worker status in the skilled craft concerned by the end of the training period. Apprenticeship and training programs will be accepted if registered with the U.S. Dept. of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau. To obtain FHWA approval, the

Contractor's training program will be reviewed by the CDOT Center for Equal Opportunity and approved by the Colorado Division of the FHWA. The Contractor shall allow up to 30 days for FHWA review. The proposed training program shall be submitted by the Contractor to:

CDOT Center for Equal Opportunity
4201 East Arkansas Avenue
Denver, CO 80222

The following documentation shall be submitted:

- A. Evidence of an approved training program.
 - B. A copy of the current applicable approved training program, including a copy of the applicable ratios of trainees/apprentices to journey worker for a project.
5. Approved training programs shall provide the trainee with a minimum of 2000 hours of training which includes a minimum of 40 hours of classroom training. Credit for prior classroom or other training may be allowed if such training is relevant to the trainees' current training program requirements.
 6. Training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. There will be no reimbursement for offsite training.
 7. The Contractor shall pay the training program wage rates and the correct fringe benefits to each registered trainee employed on the contract work and currently enrolled in an approved program. The wage rate and fringe benefit rates will correspond with the applicable minimum wage decision for the project. The minimum trainee wage shall be no less than the wage for the Guardrail Laborer classification as indicated in the appropriate Davis Bacon wage decision. However, if the trainee is in a BAT approved training program, the wage rate should be as described in the current apprenticeship program.
 8. All apprentices or trainees that are used to meet the OJT goal and/or for whom the Contractor shall request reimbursement must first be approved by the CDOT Regional Civil Rights Manager before commencing work on the project. The Contractor shall meet the requirements of the FHWA 1273 for all apprentices and trainees. Approval for the apprentice or trainee to begin work on a CDOT project will be based on information from the items listed below, and any additional criteria identified by CDOT in other parts of this specification.
 - A. Evidence of the registration of the trainee or apprentice into the approved training program as submitted by the Contractor or sponsor to the CDOT Center for Equal Opportunity.
 - B. The completed Form 838 for each trainee or apprentice as submitted to the Engineer.
 - C. The Form 838 will be reviewed and approved by the CDOT Regional Civil Rights Manager before reimbursement will be made.
 9. Within the first 100 hours of training time completed, the Contractor shall provide each trainee with a review of the approved training program, pay scale, pension and retirement benefits, health and disability benefits, promotional opportunities, and company policies and complaint procedure. The Contractor shall also furnish the trainee a copy of the approved training program.
 10. At least ten working days prior to the first progress payment to be made after work has begun, the Contractor shall submit to the Engineer documentation showing DOL or FHWA approval of the Contractor's training program, a plan that identifies total training hours for each trainee, and the construction phase for training each of the proposed trainees, including the duration, for this specific project. On a monthly basis, the Contractor shall provide to the Engineer a completed On the Job Training Progress

Report (Form 832) for each approved trainee or apprentice on the project. The Form 832 will be reviewed and approved by the Engineer before reimbursement will be made on a monthly basis. The Contractor will be reimbursed for each approved apprentice or trainee required by the Department and documented on Form 832, but not more than the OJT Force Account budget unless approved by the Engineer through a Change Order. Upon completion of training, transfer to another project, termination of the trainee or notification of final acceptance of the project, the Contractor shall submit to the Engineer a "final" completed Form 832 for each approved apprentice or trainee.

Progress payments may be withheld until this plan is submitted and approved and may be withheld if the approved plan is not followed.

11. All forms referred to are available from the CDOT Center for Equal Opportunity, through the CDOT Regional Civil Rights Manager, or on CDOT's website at <http://www.dot.state.co.us/Bidding/BidForms.htm>.
12. The Engineer will provide reimbursement to the Contractor. Payment is based on the number of hours of on the job training the Contractor provides to the trainee under this Contract and the applicable reimbursement rate. Submission of the Form 832 will document the training hours provided during the month, and will be considered a request for payment. Where applicable, the Contractor shall note and explain discrepancies between the hours documented on Form 832 and the corresponding certified payrolls. To receive payment, the Forms 838 and 832 shall be completed in full and the Contractor shall be in compliance with all requirements of this specification and the provisions of FHWA 1273.
13. Failure to provide the required training impedes the Department's federal mandate to bring women and minorities into the construction industry. Although precise damages to the program are difficult to calculate, they are, at a minimum, equivalent to the loss to the individuals who were the intended beneficiaries of the program. Therefore, where the Contractor fails to provide the required number of training hours and has failed to establish why the Contractor was unable to do so, the Contractor will be assessed an amount equal to the following damages to be deducted from the final progress payment:

A sum representing the number of training hours specified in the Contract, minus the number of training hours worked as certified on Form 832, multiplied by the journey worker hourly wages plus fringe benefits [(A hours – B hours worked) x (C dollar per hour + D fringe benefits)] = Damages Assessed. The journey worker scale is that for the skilled craft identified on the contract's wage decision document.

The Engineer will provide the Contractor with a written notice at Final Acceptance of the project informing the Contractor of the noncompliance with this specification which will include a calculation of the damages to be assessed.

(b) Standard Training Program

If the Contractor is not participating in the Department's Colorado Training Program, the training shall be provided according to the following in addition to the general requirements outlined above in part (a):

1. The number of training hours for the _____ trainees to be employed on the project shall be as shown in the Contract. The trainees or apprentices employed under the Contract shall be registered with the Department using Form 838.
2. Subcontractor trainees who are enrolled in an approved Program may be used by the Contractor to satisfy the requirements of this specification.
3. At least ten working days prior to the first progress payment to be made after work has begun, the Contractor shall submit to the Engineer documentation showing DOL or FHWA approval of the Contractor's training program, a plan that identifies total training hours for each trainee, and the construction phase for training each of the proposed trainees, including the duration, for this specific project.

Progress payments may be withheld until this plan is submitted and approved and may be withheld if the approved plan is not followed.

4. A trainee shall begin work on the project as soon as possible and shall be utilized in accordance with the applicable training program and as long as meaningful training opportunities exist. It is not required that all trainees be utilized on the project for the entire length of the Contract.
5. The Contractor will be reimbursed 80 cents per hour for each approved apprentice or trainee required by the Department.
6. In order to receive reimbursement, the Contractor shall provide on Form 832 the number of training hours specified in the OJT goal assigned to the project. Reimbursement will be made only for hours worked by an apprentice or trainee who has been approved by the Department to meet the OJT training requirement.
7. The OJT goal for the project will be included in the Project Special Provisions and will be determined by the Regional Civil Rights Manager after considering:
 - A. Availability of minorities, women, and disadvantaged for training;
 - B. The potential for effective training;
 - C. Duration of the Contract;
 - D. Dollar value of the Contract;
 - E. Total normal work force that the average bidder could be expected to use;
 - F. Geographic location;
 - G. Type of work; and
 - H. The need for additional journey workers in the area;
8. The guidelines for contract dollar value, minimum total training hours, and maximum reimbursement are as follows:

Category	Contract dollar value	Minimum total training hours to be provided on the project	Maximum reimbursement allowed

A	Up to 1 million	0	0
B	>1 - 2 million	320	\$600
C	>2 - 4 million	640	\$800
D	>4 - 6 million	1280	\$1400
E	>6 - 8 million	1600	\$1700
F	>8 - 12 million	1920	\$2000
G	>12 - 16 million	2240	\$2,400
H	>16 - 20 million	2560	\$2,600
I	For each increment of \$5 million, over \$20 million	1280	\$1400

9. The Contractor shall have fulfilled its responsibilities under this specification if the CDOT Regional Civil Rights Manager has determined that it has provided acceptable number of training hours specified in the Contract in accordance with this specification.

(c) Colorado Training Program.

If the Contractor has a current approved Colorado Training Program plan, the training shall be provided according to the following in addition to the general requirements outlined in part (a) above when applicable.

1. The Contractor shall comply with the requirements of the Department's procedures as defined in this specification.
2. If the Contractor has an approved Colorado Training Program, then it shall be exempted from the contract OJT goal, but not from the requirement to provide training in accordance with the Contractor's approved training plan. Contractors shall have an approved Colorado Training Program Plan for the calendar year to be able to use this option. Contractors who do not have an approved Colorado Training Program Plan shall comply with the requirements of part (b) of this specification.
3. Each trainee enrolled in the Colorado Training Program will receive a minimum of 1200 hours per year of on the job training. Up to 200 hours of offsite classroom training can be included in the 1200 hours minimum. The trainee's hours per year may be on CDOT or non-CDOT projects.
4. At least ten working days prior to the first progress payment to be made after work has begun, the Contractor shall submit to the Engineer documentation showing DOL or CDOT approval of the Contractor's training program and proof of good standing in the Colorado Training Program.
5. The Contractor will be reimbursed \$4.80 per hour for each approved apprentice or trainee required by the Department and documented on Form 832, but not more than

the OJT Force Account budget unless approved by the Engineer by Change Order. Of the \$4.80 per hour reimbursed to the Contractor, any amount over \$0.80 per hour shall be forwarded by the Contractor to the trade or labor organization(s) or other CDOT-approved sponsor through which the Contractor obtains its trainees or apprentices (sponsor) and shall be spent for training and recruitment. The Department will not reimburse for classroom training or training provided on non-CDOT projects.

The Contractor shall make every effort to enroll minority and female trainees and apprentices from within the Contractor's workforce and from the community by recruiting through public and private sources likely to yield minority and women trainees to the extent which these recruits are available in the geographic area.

6. The Contractor will be considered in compliance with the requirements of the Colorado Training Program when the Contractor demonstrates to the Department that it has met the requirements described in this specification and the Contractor's approved Colorado Training Program Training Plan.
7. Contractors who are in compliance with the Colorado Training Program will receive hours credit for their trainees whether they work on a CDOT or a non-CDOT project. Contractors will be reimbursed by CDOT only for hours worked on CDOT projects.
8. The Contractor shall comply with the affirmative action requirements in their approved Colorado Training Program Plan.
9. The minimum required number of trainees to be employed by the Contractor shall be as shown in the Contractor's approved Colorado Training Program Plan.

To be entitled to participate in the Colorado Training Program, the Contractor agrees to a minimum trainee commitment based on the Contractor's average annual dollar amount of contracts with CDOT over the last three calendar years. One trainee is required for every four million dollars of contract work with the Department. Please refer to the following table for the number of trainees required.

Three Year Average	Number of Trainees
\$0.00 - \$3,999,999	0
\$4,000,000 - \$7,999,999	1
\$8,000,000 - \$11,999,999	2
\$12,000,000 - \$15,999,999	3
\$16,000,000 - \$19,999,999	4
\$20,000,000 - \$23,999,999	5
\$24,000,000 - \$27,999,999	6
\$28,000,000 - \$31,999,999	7
\$32,000,000 - \$35,999,999	8
\$36,000,000 - \$39,999,999	9
\$40,000,000 - \$43,999,999	10
Etc.	

A Contractor or their program sponsor may obtain its three year average by contacting the OJT Manager at the CDOT Center for Equal Opportunity, 303-757-9234.

10. The Contractor shall have fulfilled its responsibilities described in this special provision if it has remained in compliance with the Colorado Training Program during the life of the Contract.

March 20, 2009

REQUIRED CONTRACT PROVISIONS
ARRA CONSTRUCTION CONTRACTS

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on projects funded with federal ARRA funds.

Attached is Form FHWA 1273 titled *Required Contract Provisions Federal-Aid Construction Contracts*. As described in Section I. General, the provisions of Form FHWA 1273 apply to all work performed under the Contract and are to be included in all subcontracts with the following modifications:

The exemptions in Part IV – Payment of Predetermined Minimum Wage do not apply to projects funded with funds appropriated by the *American Recovery and Reinvestment Act* (ARRA). Predetermined minimum wages must be paid to workers on all ARRA projects, including those on roadways classified as local roads or rural minor collectors in conformance with Part IV. Nor is there an exemption for enhancement projects.

The weekly payrolls submitted by contractors and subcontractors in accordance with Part V., paragraph 2c shall not include full social security numbers and home addresses. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g. the last four digits of the employee's social security number). Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them to the SHA upon request.

March 20, 2009

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REQUIRED CONTRACT PROVISIONS
ARRA CONSTRUCTION CONTRACTS

FHWA-1273 Electronic version -- March 10, 1994

REQUIRED CONTRACT PROVISIONS
72. FEDERAL-AID CONSTRUCTION CONTRACTS

REQUIRED CONTRACT PROVISIONS
ARRA CONSTRUCTION CONTRACTS

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for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4, and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may

affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor

has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor,

as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the

amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination

for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be

withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the

course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof of the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 21, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered

transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from

participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

April 7, 2006

PARTNERING PROGRAM

NOTICE

The designer should add a Planned Force Account, Item 700-70011, F/A Partnering, to the plans and project special provisions to account for costs associated with the partnering process.

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by the Standards and Specifications Unit of the Project Development Branch. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

Instructions for use on CDOT construction projects:

Use this standard special provision on all projects.

April 7, 2006
PARTNERING PROGRAM

The Colorado Department of Transportation actively encourages partnering and invites the Contractor and his subcontractors and suppliers to participate in a voluntary partnering agreement for this project.

The following information summarizes the partnering process. More information is available through the Resident Engineer listed in the project special provisions.

This partnership will be structured to draw on the strengths of each organization to identify and achieve mutual goals. The objectives are effective and efficient Contract performance with reciprocal cooperation, and completion within budget, on schedule, and in accordance with the Contract.

This partnership will be bilateral in make-up and all costs associated with this partnership will be agreed to by both parties and will be shared equally. The Contractor shall assume full responsibility for all costs associated with partnering during the implementation of the partnering process. CDOT will reimburse the Contractor for the agreed amount.

The CDOT Program Engineer or the Resident Engineer will contact the Contractor within ten days after the award of this project to ask if the Contractor wants to implement this partnership initiative. If the Contractor agrees, the Contractor's on-site project manager shall meet with CDOT's Resident Engineer to plan a partnering development and team building workshop. At this planning session, arrangements shall be made to determine the facilitator and the workshop, attendees, agenda, duration, and location.

The workshop shall be held prior to the commencement of any major work item and preferably before the preconstruction

conference. The following persons shall attend the workshop: CDOT's Resident Engineer, Project Engineer, and key project personnel; the Contractor's on-site project manager and key project supervision personnel; and the subcontractors' key project supervision personnel. The following personnel shall also be invited to attend as needed: project design engineer, key local government personnel, suppliers, design consultants, CDOT maintenance foreman, CDOT environmental manager, key railroad personnel, and key utility personnel. The Contractor and CDOT shall also have Regional or District managers and Corporate or State level managers on the partnering team.

Follow-up workshops may be held periodically throughout the duration of the Contract as agreed by the Contractor and the Engineer at the initial workshop. A closeout workshop shall be held to evaluate the effectiveness of the partnership.

The establishment of a partnership charter, which identifies the workshop participants' mutual goals on the project, will not change the legal relationship of the parties to the Contract or relieve either party from any terms of the Contract.

