LARIMER COUNTY
ENGINEERING DEPARTMENT

BID NUMBER B18-11
PROJECT NUMBER 9363
REPLACEMENT OF BRIDGE NO. LRB5-1135BTC
WILDBRIAR LANE BRIDGE
OVER THE BIG THOMPSON RIVER
LARIMER COUNTY, COLORADO

SPECIAL PROVISIONS

OCTOBER 23, 2018
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NOTICE TO BIDDERS

The proposal guaranty shall be a certified check, cashier's check or bid bond in the amount of 5% of the Contractor's total bid. If the proposal guaranty is a bid bond, the bid bond will be in the format presented in the proposal. No other wording will be accepted.

A Pre-Bid Conference will be held at 10:00 a.m. Friday, November 2, 2018 in the Lake Loveland Conference Room on the 2nd floor at 200 W. Oak Street, Fort Collins, Colorado. Representatives of Larimer County will be present to discuss the project and to answer questions. Bidders are requested (not required) to attend and participate in the conference. Prospective bidders shall contact the following authorized County representative for any contractual interpretations required:

Project Manager – Morgan Fay        970-498-5739

The above referenced individual is the only representative with authority to provide any information, clarification or interpretation regarding the plans, specifications and any other contract documents or requirements.
COMMENCEMENT AND COMPLETION OF WORK

The Contractor shall commence work under this contract on or before the 30th day following the date of award unless such time for beginning the work is changed by the Engineer in the "Notice to Proceed". The Contractor shall complete all work on the project within 60 working days in accordance with the "Notice to Proceed". The anticipated project schedule is included in the bidding document package.

All work in the river channel shall be completed before spring runoff begins.

Salient features to be shown on the Contractor's Progress Schedule are as follows:

1) Construction Traffic Control
2) Clearing and Grubbing
3) Removal of Structure
4) Removal of Tree
5) Structure Excavation
6) Structure Backfill
7) Filter Material
8) Erosion Control
9) Aggregate Base Course
10) Piling
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13) Concrete Class D (Bridge)
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17) Construct Detour Culvert Pipe
18) Willow and Deciduous Tree Planting
19) Prestressed Box Girders
20) Construction Traffic Control
REVISION OF SECTION 101
DEFINITION AND TERMS

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

Section 101 shall include the following:

Subsection 101.01, line 25 shall be deleted and replaced with the following:

CDOT Colorado Department of Transportation or Larimer County, as applicable.

Subsection 101.09.01 shall be added.

101.09.01 CDOT Form 43. Approved job Mix Design performed by an independent laboratory.

Subsection 101.10 shall be deleted and replaced with the following:

101.10 CDOT Resident Engineer. The County Engineer acting directly or through an authorized representative, who is responsible for engineering and administrative supervision of the project.

In subsection 101.17 delete the first paragraph and replace with the following:

101.17 Contract. The written agreement between the County of Larimer through the Engineering Department and the Contractor setting forth the obligations of the parties for the performance of work and the basis of payment.

Subsection 101.23 shall be deleted and replaced with the following:

101.23 Contractor. The individual, firm, or corporation contracting with the County of Larimer through the Engineering Department for performance of prescribed work.

Subsection 101.25 shall be deleted and replaced with the following:

101.25 County. The County of Larimer acting through its authorized representative.

Subsection 101.28 shall be deleted and replaced with the following:

101.28 Department. County Engineering Department. A department within the Larimer County Division of Community Planning, Infrastructure and Resource Services.

Subsection 101.29 shall be deleted and replaced with the following:

101.29 Engineer. The County Engineer acting directly or through an authorized representative, who is responsible for engineering and administrative supervision of the project.
Subsection 101.36 shall be deleted and replaced with the following:

101.36 Holidays. Holidays recognized by Larimer County are:

    New Year’s Day
    Dr. Martin Luther King, Jr.’s Birthday (observed)
    President’s Day
    Memorial Day
    Independence Day
    Labor Day
    Veteran’s Day
    Thanksgiving Day
    Day After Thanksgiving
    Christmas Day

When New Year’s Day, Independence Day, or Christmas Day fall on a Sunday, the following Monday shall be considered a holiday. When one of these days falls on a Saturday, the preceding Friday shall be considered a holiday.

In subsection 101.48 delete CDOT and replace with Larimer County.

Subsection 101.51 shall be deleted and replaced with the following:

101.51 Project Engineer. The County Engineer’s duly authorized representative who may be a Larimer County employee or an employee of a consulting engineer (consultant) under contract to Larimer County as defined below:

   (a) Larimer County Project Engineer. The County Construction Manager or County Engineer’s duly authorized representative who is in direct charge of the work and is responsible for the administration and satisfactory completion of the project under contract.

   (b) Consultant Project Engineer. The consultant employee under the responsible charge of the consultant’s Professional Engineer who is in direct charge of the work and is responsible for the administration and satisfactory completion of the project. The Consultant Project Engineer’s duties are delegated by the Project Engineer in accordance with the scope of work in the consultant’s contract with Larimer County.

Delete subsection 101.58.
Section 102 of the Standard Specifications is hereby revised for this project as follows:

In subsection 102.04 delete the first sentence and replace with the following:

Any change to proposal forms, plans, or specifications prior to the opening of proposals will be posted on the County’s website. It is the contractor’s responsibility to check the website for these changes.

Subsections 102.06 and 102.07 shall be deleted and replaced with the following:

102.06 Preparation of Proposal. The bidder shall submit the proposal (bid) upon the forms furnished by the County. The bidder shall specify a unit price for each pay item for which a quantity is given and shall also show the mathematical products of the respective unit prices and the estimated quantities in the column provided for that purpose, together with the total amount of the bid obtained by adding such mathematical products. All the entries shall be in ink or typewritten.

When the bid contains an alternative pay item, which has been approved by the County, the choice of that item by the bidder shall be indicated in accordance with the specifications for that particular item. No further choices will be permitted.

The contractor's bid must be signed in ink by an individual with legal authority to bind the contractor. Such an individual includes the owner of a sole proprietorship, one or more partner members of a partnership, or more authorized members or officers of each firm representing a joint venture, the president or vice-president of a corporation, or an authorized agent of the contractor. Anyone signing as agent for a contractor must file with the County written evidence of such authority.

(a) Proposal Guaranty. A proposal will not be read and will be rejected unless accompanied by a guaranty of the character and in an amount not less than the amount indicated in the "INSTRUCTIONS TO BIDDERS" statement, found in the Special Provisions portion of the bidding documents. If the proposal Guaranty is a bid bond, the bid bond will be in the format presented in the proposal. No other wording will be accepted.

(b) Delivery of Bids. Each bid shall be submitted separately in a sealed envelope to the County by mail, personal delivery, or messenger service at the location indicated in the invitation for bids. The envelope shall be clearly labeled to identify it as a bid for the subject public project. The sealed bid shall be addressed to:

    Heather MacMillan  
    Purchasing Director  
    200 West Oak Street, Suite 4000  
    Fort Collins, Colorado 80521

All bids shall be filed at the place specified in the invitation for bids and prior to the time specified therein. Bids received after the time for opening of bids will be returned to the contractor unopened.

(c) Withdrawal of Bids Prior to Bid Opening. Prior to bid opening, a contractor may withdraw or revise a bid after it has been deposited with the County. Withdrawal of bids may be made either in writing or in person; however, any bid withdrawn for the purpose of revision must be re-deposited before the time...
set forth for opening of bids in the invitation for bids. A bid may not be withdrawn after the time set for opening of bids.

Before a bid may be withdrawn, proper identification and verification of the authority of the individual requesting to withdraw shall be obtained. The fact of such withdrawal shall be documented, in writing, by the County.

(d) **Receiving Bids.** Sealed bids will be received by Larimer County at the place specified in the invitation for bids until the time and date specified in the invitation for bids.

Bids must be submitted to Larimer County in a manner that ensures that Larimer County receives a complete bid with original signature(s), including submission by U.S. mail, personal delivery, or messenger service. Bids submitted in a manner that results in Larimer County receiving an incomplete bid, a bid without original signature(s), or a bid not in the approved form, including submission by telephone, facsimile machine, telegram or mailgram, will not be accepted or considered but will be rejected.

(e) **Opening of Bids.** Bids shall be opened and read publicly at the time and place specified in the invitation for bids. Such opening shall be performed by an authorized employee of Larimer County in the presence of at least one witness. Contractors, their authorized agents, and other interested parties are invited to be present.

(f) **Rejection of Individual Bids.** Individual bids may be rejected for any of the following reasons:

1. If the bid is on a form other than that prescribed by Larimer County, if the form is altered or any part thereof is detached, or if the form does not contain original signatures.

2. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the bid incomplete, indefinite, or ambiguous.

3. If the contractor fails to acknowledge in the bid that it has received all addenda (if any) current on the date of opening of bids.

4. If the bid does not contain a unit price, for each pay item listed except in the case of authorized alternative pay items, the mathematical products of the respective unit prices and the estimated quantities, and the total amount of the bid obtained by adding such mathematical products.

5. If Larimer County determines that any of the unit bid prices are materially unbalanced to the potential detriment of the County. There are two types of unbalanced bids: (1) mathematically unbalanced and, (2) materially unbalanced. The mathematically unbalanced bid is a bid containing lump sum or unit pay items which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder’s anticipated profit, overhead costs, and other indirect costs, but not necessarily to the detriment of the County. These costs shall all relate to the performance of the items in question. The materially unbalanced bid is a mathematically unbalanced bid which Larimer County determines leaves reasonable doubt that award will result in the lowest ultimate cost to the County, or that award is in the public interest.

6. If the contractor submitting the bid is affiliated with another contractor that has submitted a bid on the same public project.
7. If the contractor submitting the bid has been asked in writing to show why it should not be found in default on a Larimer County contract.

8. If the contractor submitting the bid has had its prequalification by the Colorado Department of Transportation revoked, or if the contractor submitting the bid is currently under debarment or suspension by the Colorado Department of Transportation.

Larimer County reserves the right to reject any or all bids, to waive technicalities, to further negotiate price, scope of work, terms, and conditions with the successful bidder, or to advertise for new bids, if, in the judgment of Larimer County, the best interests of Larimer County will be promoted thereby.
REVISION OF SECTION 103
AWARD AND EXECUTION OF CONTRACT

Section 103 of the Standard Specifications is hereby revised for this project as follows:

Subsection 103.01 shall be deleted and replaced with the following:

103.01 Consideration of Bids. After the bids are opened and read, they will be compared on the basis of the summation of the mathematical products of the estimated quantities shown in the bid schedule and the unit bid prices. The results of such comparisons will promptly be made available to the public.

In the event of a discrepancy between unit bid price and the mathematical products of the unit bid price and the estimated quantities in the bid schedule, the unit bid price shall govern.

In the event of low tie bids, a drawing shall be conducted to determine the low bidder. A witness shall be present to verify the drawing and the result shall be certified on the bid tabulation.

Larimer County reserves the right, in its sole discretion, to reject any subcontractor of the successful bidder, and to further negotiate for a substitute subcontractor.

The County reserves the right to settle proposal discrepancies, as defined in this subsection and in subsection 102.06, that occur in the low bidder's proposal at the time the Contract is awarded. Proposal discrepancies will be settled with the understanding that the low bidder waives any claims against the County because of the bidder's mistakes in the proposal.

Subsection 103.03 shall be deleted and replaced with the following:

103.03 Requirement of Contract Bond. At the time of the execution of the contract, the Contractor shall furnish Performance and Payment Bonds, each in a penal sum equal to the estimated contract price as per "Bid Schedule" hereto attached, with surety or sureties to guarantee the completion of work and also to guarantee that all material and labor upon this work, or incidental to the completion of this work shall be fully paid for. These Bonds shall remain in effect at least until one year after the date of final payment, except as otherwise provided by law. The Contractor shall also furnish such other bonds as are required herein. All bonds shall be executed using Larimer County standard forms and shall be executed by such Sureties as (i) are licensed to conduct business in the State of Colorado, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

If the Surety or any Bond furnished by the Contractor is declared a bankrupt or becomes insolvent or its rights to do business is terminated in the State of Colorado or it ceases to meet the requirements of clauses (i) and (ii) above, the Contractor shall, within five (5) days thereafter, substitute another Bond and Surety, both of which shall be acceptable to the County.

In subsection 103.04 delete the first two sentences and replace with the following:

The contract shall be signed by the successful bidder and returned, together with the Contract Bonds and Insurance Certificates and Endorsements within 15 days after the date of award. If the signed contract, bonds, certificates and endorsements are returned by the successful bidder within 15 days after award and, if the
contract is not executed by the County within 30 days from date of award, the bidder shall have the right to withdraw his bid without penalty.

Subsections 103.05 is hereby added to the Standard Specifications and shall include the following:

103.05 Failure to Execute Contract. Failure of the low responsible bidder to so execute the contract and file acceptable contract bonds and insurance certificates and endorsements within fifteen (15) calendar days or other duration specified by the County after the date of award shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the County. The County may elect to waive forfeiture of the proposal guarantee only if the County determines that the low responsible bidder has made a good faith error, which was an honest, nonjudgmental error, not the result of intentional conduct, gross negligence or willful neglect, and that no damages were sustained by the County as a result of the failure by the low responsible bidder to execute the contract and file acceptable contract bonds and insurance endorsements within the time prescribed. Award may then be made, in accordance with the provisions of Subsection 103.02 to the next lowest responsible bidder, or the work may be re-advertised.
REVISION OF SECTION 104
SCOPE OF WORK

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

In subsection 104.04, paragraph 3, delete the second sentence and replace with the following:

Snow removal will be the responsibility of the Contractor.

In subsection 104.04(b) delete the fourth sentence and replace with the following:

During the suspension period, the maintenance of the roadway will be the responsibility of the Contractor.
REVISION OF SECTION 105
CONTROL OF WORK

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

In subsection 105.02(i) delete Table 105-1 and replace with the following:

<table>
<thead>
<tr>
<th>Section No.</th>
<th>Description</th>
<th>Type</th>
<th>Contractor P.E. Seal Required?</th>
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<tr>
<td>504</td>
<td>MSE Walls (Contractor Alternative)</td>
<td>Shop Drawing</td>
<td>Yes</td>
</tr>
<tr>
<td>504</td>
<td>MSE Walls (Default Design)</td>
<td>Shop Drawing</td>
<td>No</td>
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<tr>
<td>508</td>
<td>Timber Structures</td>
<td>Shop Drawing</td>
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</tr>
<tr>
<td>509</td>
<td>Steel Structures</td>
<td>Shop Drawing</td>
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</tr>
<tr>
<td>512</td>
<td>Bearing Devices Type II</td>
<td>Shop Drawing</td>
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<tr>
<td>512</td>
<td>Bearing Devices Type III</td>
<td>Shop Drawing</td>
<td>Yes</td>
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<tr>
<td>514</td>
<td>Pedestrian and Bikeway Railing</td>
<td>Working Drawing</td>
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</tr>
<tr>
<td>518</td>
<td>Expansion Devices: 0-4”</td>
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<td>Precast Panel Deck Forms</td>
<td>Working Drawing</td>
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<td>601</td>
<td>Permanent Steel Bridge Deck Forms</td>
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<td>601</td>
<td>Falsework</td>
<td>Working Drawing</td>
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<tr>
<td>602</td>
<td>Reinforcing Steel</td>
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<td>Design Calculations</td>
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<td>606</td>
<td>Bridge Railing</td>
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<td>607</td>
<td>Sound Barriers (Alternative)</td>
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<td>Sound Barriers (Default Design)</td>
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<td>613</td>
<td>Light Standards (Low Mast)</td>
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<td>613</td>
<td>Light Standards (High Mast)</td>
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<td>614</td>
<td>Overhead Sign Structures</td>
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<td>614</td>
<td>Traffic Signal Pole (Mast Arm)</td>
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<td>Traffic Signal Pedestal Pole</td>
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<td>Traffic Signal Equipment</td>
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<td>618</td>
<td>Prestressed Concrete (Post-tensioned)</td>
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<td>Pre-fabricated Pedestrian Bridges</td>
<td>Shop Drawing</td>
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</tbody>
</table>

*A PE seal is required where the Contractor has provided the design for the item, or performed engineering to modify the details shown on the plans. The PE seal is not required where complete details are provided on the plans.

In subsection 105.02 delete (b) 4 and replace with the following:

Unless otherwise specified, four sets of shop drawings shall be submitted to the Engineer.

In subsection 105.03 delete the second paragraph and replace with the following:
Conformity to the Contract of all Hot Mix Asphalt, Item 403, will be determined by tests and evaluations of asphalt content, gradation and in-place density, and will be evaluated for acceptance, rejection or price reduction in accordance with this subsection.

Subsection 105.04 shall include the following:

Superpave Performance Graded binders shall meet all requirements of Subsection 702.01.

The Contractor shall submit a Certificate of Compliance from the supplier for all binder delivered for use on the project. The Certificate of Compliance shall be prepared in accordance with subsection 106.12. A new Certificate of Compliance shall be prepared and submitted for each new lot or batch.

In addition to the Certificate of Compliance the contractor shall submit a “Bill of Lading” for each load of binder delivered for use on the project. Each “Bill of Lading” shall contain the lot or batch number identical to that on the Certificate of Compliance.

Binder that cannot be certified as complying with the requirements of Subsection 702.01 shall not be incorporated into the project.

Material which is obviously defective may be isolated and rejected without regard to sampling sequence or location within a lot or batch.

Delete subsection 105.05.

Delete subsection 105.07 and replace with the following:

105.07 Conformity to Roadway Smoothness Criteria. Roadway smoothness shall be tested as described below. Roadway smoothness testing will not be measured and paid for separately, but shall be included in the work.

All longitudinal and transverse pavement surfaces will be measured using a 10 foot straightedge. The Contractor shall furnish an approved 10 foot straightedge and depth gauge and provide an operator to aid the Engineer in testing the finished pavement surface. Areas to be measured shall be as directed by the Engineer. Areas showing high spots of more than 3/16 inch in 10 feet shall be marked and diamond ground until the high spot does not exceed 3/16 inch in 10 feet. Additional diamond grinding shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline within the ground area. All ground areas shall be neat rectangular areas of uniform surface.

Diamond grinding, including all necessary traffic control, shall be completed at the Contractors expense.

On asphalt pavements, the diamond grinding shall not reduce planned pavement thickness by more than 0.3 inch and the entire ground area shall be covered with a fog seal coat when grinding is complete. On concrete pavements, the diamond grinding shall be completed prior to joint sealing and prior to determining pavement thickness in accordance with subsection 412.21. When longitudinal tining is required on concrete pavement, the diamond ground surface shall be grooved to restore the longitudinal texture, whenever the length of the ground area exceeds 45 feet.
If roadway smoothness exceeds the limits allowable for diamond grinding, corrective work on asphalt pavements shall consist of an approved overlay or removal and replacement. Corrective work on asphalt pavements shall conform to the following conditions:

(a) Removal and replacement. The pavement in areas requiring corrective work shall be removed the full width of the lane and the full thickness of the course in accordance with Subsection 202.09 Removal of Asphalt Mat (Planing).

The removal area shall begin and end with a transverse butt joint, which shall be constructed with a transverse saw cut perpendicular to centerline. All replacement shall be made with approved hot mix asphalt mixtures that meet all contract requirements. Replacement material shall be placed in sufficient quantity so the finished surface will conform to grade and smoothness requirements. The corrective area shall be compacted to the specified density.

(b) Overlay. The overlay shall cover the full width of the pavement including shoulders. The area overlaid shall begin and end with a transverse butt joint which shall be constructed with a transverse saw cut and asphalt removal. All material shall be approved hot mix asphalt mixtures that meet all contract requirements. The overlay shall be placed so the finished surface will conform to grade and smoothness requirements. The overlaid area shall be compacted to the specified density. The overlay thickness shall be equivalent to that of the final pass made in accordance with the plans and specifications.

If roadway smoothness exceeds the limits allowable for diamond grinding, corrective work on concrete pavements shall consist removal and replacement. Corrective work on concrete pavements shall conform to the following conditions:

Removal and Replacement. The pavement areas requiring corrective work shall be removed the full width of the lane and full length of the slab between horizontal control joints and shall be jointed in accordance with M-412-1

Regardless of the corrective method used, the final product shall provide a pavement surface equal to adjacent sections not requiring corrective work.

All corrective work, including all necessary traffic control, shall be completed at the Contractors expense.

Subsection 105.16 shall include the following:

All requests for material testing and inspection shall be made during normal business hours. The Contractor shall give the Engineer at least 24 hours notice before the work of an inspector or material testing agency is required. The Engineer reserves the right to reject any requests that are made with less than a 24-hour notice. If the requested inspection or materials testing work cannot be accomplished within 24 hours, the Engineer will inform the Contractor and will estimate a date when the requested work can be accomplished.

The County will pay for all initial field tests and the Contractor shall pay for all retesting work as a result of test failures. Also, the Contractor shall pay for minimum service or standby charges due to his failure to compact earth, pour concrete, or pave on schedule. Should the Contractor request inspection or material testing work within a time requiring County or testing agency personnel to work at overtime pay rates, the Contractor shall bear the entire expense of such overtime operations.
Subsections 105.22, 105.23 shall be deleted and replaced with the following. All references to Project Engineer shall be changed to Construction Manager or Project Manager. The Colorado Department of Transportation will not participate in the resolution process for any claims filed by the Contractor.

105.22 Dispute Resolution. Subsections 105.22 and 105.24 detail the process through which the parties (Larimer County 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. 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 the County and the subcontractor. When an issue arises on the project that cannot be resolved between the parties, either party may consider it a dispute and initiate the dispute resolution process as described in subsection 105.22(b).

If the County 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 the County until all remedies for dispute resolution provided for in subsection 105.22 has been exhausted. If the County contends that the Contractor has failed to follow the provisions of subsection 105.22, the County will notify the Contractor in writing and provide the Contractor with ten days in which to cure the alleged failure. After the County notice, unless the Engineer grants an exception in writing, failure to comply with the requirements set forth in subsections 105.22 and 105.24, 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 the 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. The County and the County’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, 108.08(a), and 108.08(d).

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

1. The date of the dispute
2. The nature of the circumstances which caused the dispute
3. The Contract provisions and any other basis supporting the Contractor’s position
4. The estimated dollar cost, if any, of the dispute with supporting documentation
5. 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, 108.08, 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 disagrees with the written decision of the Construction Manager, the Contractor must either: (1) accept the Construction Manager’s decision as final, (2) file a onetime written appeal to the Construction Manager with the submission of additional information, or (3) file a written appeal to the Director of Public Works based upon all information previously submitted and made a part of the dispute record. The Contractor’s written appeal shall be made within 30 days from the receipt of the Construction Manager’s written decision. The Contractor hereby agrees that if a written appeal is not properly filed within this specified 30 day time period, the dispute shall be considered to be abandoned by the Contractor and settled in the same manner as if the Contractor had agreed with and accepted the Construction Manager’s written decision as final. Failure by the Contractor to properly file a written appeal, according to these specifications, shall bar the Contractor from any further administrative remedy for said dispute under the contract.

d) When the Contractor properly files a written appeal to the Construction Manager, the Construction Manager will review all new submissions made by the Contractor and render a decision to the Contractor.
When a written appeal to the Director of Public Works is properly filed by the Contractor pursuant to subsection, the Construction Manager will provide the complete dispute record, to the Director of Public Works. The dispute will be reviewed by the Director of Public Works who will render a written decision to the Contractor to either affirm, overrule, or modify the Construction Manager’s decision, in whole or in part, in accordance with all contract documents and the following procedure:

1. For the purpose of this subsection, Director of Public Works shall be understood to mean the Director of Public Works or the Road and Bridge Director or both.

2. The Director of Public Works will maintain the dispute record during the review of the dispute. The Contractor’s written appeal to the Director of Public Works will be made a part of the dispute record. Either the Contractor or the Engineering Department may request an oral hearing of the dispute before the Director of Public Works. When an oral hearing is requested by either party, both the Construction Manager and the Contractor’s representative shall be present and the hearing shall be conducted at a time, which is convenient to all parties. The Director of Public Works will not consider any written documents or oral arguments, other than clarification and data supporting previously submitted documentation, which have not previously been made a part of the dispute record.

3. The Director of Public Works will render a written decision to the Contractor within 45 days from the receipt of the Contractor’s written appeal, unless both parties agree to an extension of time. If the Director of Public Works fails to render a written decision to the Contractor within the specified 45 day time period, or within any extended time period as agreed by both parties, the Contractor must either: (1) accept this as a denial of the dispute, or (2) appeal the dispute to the Larimer County Board of County Commissioners, in the same manner as if the Director of Public Works had denied the Contractor’s dispute.

(e) If the Contractor disagrees with the written decision of the Director of Public Works, the Contractor must either (1) accept the Director of Public Works’ decision as final, or (2) file a written appeal to the Larimer County Board of County Commissioners within 30 days from the receipt of the Director of Public Works’ written decision. The Contractor hereby agrees that if a written appeal is not properly filed within this specified 30 day time period, the dispute will be considered to be abandoned by the Contractor and settled in the same manner as if the Contractor had agreed with and accepted the Director of Public Works’ written decision as final. Failure by the Contractor to properly file a written appeal according to these specifications shall bar the Contractor from any further administrative remedy for said dispute under the Contract.

(f) When the Contractor properly files a written appeal to the Larimer County Board of County Commissioners pursuant to subsection 105.22(e), the complete dispute record as maintained by the Director of Public Works will be provided to the Larimer County Board of County Commissioners. The Larimer County Board of County Commissioners will review said dispute and will render a written decision to the Contractor to either affirm, overrule, or modify the Director of Public Works’ decision, in whole or in part, in accordance with the following procedure:

1. The Contractor’s written appeal to the Larimer County Board of County Commissioners will be made a part of the dispute record. Either the Contractor or the Larimer County Board of County Commissioners may request that a review board be convened to review the dispute and provide a recommendation to the Larimer County Board of County Commissioners. A review board will not be convened when the value of the dispute is less than $20,000. When such a request is made by either party, the review board shall be convened pursuant to subsection 105.22(g).
2. When a review board is not requested by either the Contractor of the Larimer County Board of County Commissioners, the Larimer County Board of County Commissioners will render a decision after reviewing the information contained in the dispute record. The Larimer County Board of County Commissioners will not consider any written documents or oral arguments, other than clarification and data supporting previously submitted documentation, which have not previously been made available to the Director of Public Works and properly made a part of the dispute record.

3. When a review board is requested by either the Contractor of the Larimer County Board of County Commissioners, it shall be convened pursuant to subsection 105.22(g). The Larimer County Board of County Commissioners will consider the entire administrative dispute record, including the recommendation of the review board. The Larimer County Board of County Commissioners will not consider any written documents or oral arguments which have not been made available to the review board and made a part of the dispute record. The Larimer County Board of County Commissioners will not be bound by the recommendation of the review board. The decision of the Larimer County Board of County Commissioners will represent the final administrative remedy under the Contract available to the Contractor for said dispute.

(g) When requested by either the Contractor or the Larimer County Board of County Commissioners, pursuant to subsection 105.22(f), a review board shall be convened to review the facts associated with the dispute and to provide a recommendation to the Larimer County Board of County Commissioners in accordance with the following procedure.

1. The review board shall consist of three members. One member shall be selected and directly paid by the Contractor. One member will be selected by the Larimer County Board of County Commissioners and directly paid by the County. The third member shall be selected by mutual agreement of the other two members. Review board members shall not be employed by or affiliated with the disputant Contractor. Larimer County employees shall not serve on the review board. Review board members shall not have assisted either in the evaluation, preparation, or presentation of the dispute case either for the Contractor or the County or have rendered an opinion on the merits of the dispute for either party, and shall not do so during the proceedings of a review board hearing. The costs and reasonable expenses of the third member shall be directly paid by the County. The County will subtract one-half of the cost of the third member from the Contractor's final payment.

2. Once established, the review board shall serve at the convenience of the Larimer County Board of County Commissioners until the final decision is rendered. The entire dispute record will be made available to the review board by the Larimer County Board of County Commissioners. An oral hearing of the dispute will be conducted before the review board. The review board shall consider all written information available in the dispute record and all oral presentations in support of that record by the Contractor and the County. The review board shall not consider any written documents or oral arguments which have not previously been made a part of the dispute record, other than clarification and data supporting previously submitted documentation. After complete review of the facts associated with the dispute, the review board shall provide a written recommendation for resolution of the dispute to the Larimer County Board of County Commissioners. The review board's recommendation shall include: (1) a summary of the issues and factual evidence presented by the Contractor and the County concerning the dispute, (2) recommendations concerning the validity of the dispute, (3) recommendations concerning the value of the dispute as to cost and time impacts if the dispute is determined to be valid, and (4) the contractual and factual bases supporting the recommendations made. The review board shall act only in an advisory capacity to the Larimer County Board of County Commissioners, with no direct authority for resolution of the dispute.
3. Upon receipt of the recommendation of the review board, the Larimer County Board of County Commissioners will render a final decision pursuant to subsection 105.22(f).

4. A practicing attorney may not serve on the review board, participate in the disputant Contractor's oral dispute presentation, question or cross examine witnesses or object to the presentation of any testimony at the review board hearing. Either party may have an attorney present at the review board hearing to provide advice during the proceedings.

In Subsection 105.24, delete paragraphs 3 through 7, (a), (c), the last three paragraphs of (e) and all of (f). All references to the Regional Transportation Director shall be understood to mean Director of Public Works or Road and Bridge Director or both. All references to Chief Engineer shall mean Larimer County Board of County Commissioners.
REVISION OF SECTION 106
CONTROL OF MATERIAL

Section 106 of the Standard Specifications is hereby revised as follows:

Subsection 106.02 (b) shall include the following:

The Contractor shall furnish evidence that Contractor source materials meet the contract specifications and shall pay for such tests as may be required to show compliance. All material shall be sampled and tested in accordance with the appropriate Colorado Department of Transportation or AASHTO procedures. Any materials lab doing work for the Contractor must be approved by the County before any testing is done.

The County is mandated by state statute (Section 35-5-102, CRS) to control the spread of the following noxious weeds:

- Leafy spurge, *Euphorbia esula*
- Canada thistle, *Cirsium arvense*
- Musk thistle, *Carduus nutans*
- Russian knapweed, *Centaurea repens*
- Spotted knapweed, *Centaurea maculosa*
- Diffuse knapweed, *Centaurea diffuse*
- Yellow toadflax, *Linaria vulgaris*
- Dalmation toadflax, *Linaria genistifolia*
- Hoary Cress, *Cardaria draba*
- Hoary Alyssum, *Berteroa incana*
- Perennial Pepperweed, *Lepidium latifolium*

Any source of imported embankment, topsoil, or gravel, except screened material, must be inspected and approved by the County Environmental Specialist, or designee, prior to incorporation into the project. If these materials are infested with these weeds, the Contractor must move to a different location within the area that is not infested or select another source altogether. The Contractor shall notify the County a minimum of two (2) days prior to moving any materials onto the project site in order to schedule this inspection. In the event the Contractor is unable to find a material source that is not infested, he shall be required to coordinate a treatment program with the Larimer County Weed District and the Engineer. The cost of complying with this requirement shall be included in the work.

Subsection 106.08 shall include the following:

With prior approval, portions of the right-of-way and construction easements may be used for storage of materials and equipment, and for field facilities. Any additional space required shall be provided at the Contractor’s expense. Amendment to the Larimer County Comprehensive Zoning Resolution provides that all zoning districts shall permit the temporary storage of vehicles, equipment, materials, and field offices accessory to a construction project, under the following conditions:

(a) The project is for construction of a highway, road, utility, or other public improvement pursuant to a federal, state, county, town, rural water association, or special district contract; or the construction project is located on the same parcel as the temporary storage of construction equipment, materials, or field office.
(b) The storage site is to be used for a maximum of six months. An extension of up to six months may be approved at the discretion of the County, upon written request.

(c) Disposal of solid and hazardous waste such as fuels, solvents, waste oil, construction materials, etc., must be in full compliance with applicable federal and state rules and regulations. On-site disposal of wastes is prohibited.

(d) The equipment, materials, vehicles, and field offices shall not be located or stored within 200 feet of existing dwelling(s), unless the owner(s) of said dwelling(s) have waived this requirements in writing. This condition shall not apply to pipes, fittings, fill material, or road base, which are intended for imminent utilization on the parcel or right-of-way where they are temporarily located.

(e) No manufacturing activity, such as asphalt hot-mix plant, concrete batch plant, or rock crushing facility shall be operated on the site.

(f) The site must be reclaimed as nearly as possible to its original condition within thirty days after this use ceases. The reclamation period may be extended by the Larimer County Planning Director, not to exceed six months.

The Contractor shall notify the Engineer of his selection of a site(s) at the Preconstruction Conference.
Section 107 of the Standard Specifications is hereby revised for this project as follows:

Subsection 107.01 shall include the following:

All mobile machinery, as defined by Section 42-1-102, CRS, and as referred to as Special Mobile Machinery (S.M.M.) by the Colorado Department of Revenue, used on this project must be properly plated and/or tagged as per Section 42-3-106, CRS. The Larimer County Clerk and Recorder's Office monitors compliance of registration and tax laws by owners of S.M.M. under Section 42-3-106, CRS. The Contractor should take notice that the Clerk and Recorder's Office has a field investigator who visits job sites throughout Larimer County to determine if equipment is properly plated and/or tagged.

Additionally, the following language shall be added to Subsection 107.01:

a) The Contractor certifies that the Contractor shall comply with the provisions of C.R.S. 8-17.5-101, et. seq. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

b) The Contractor represents, warrants, and agrees that it (a) has verified that it does not employ any illegal aliens, through participation in either the E-Verify Program or in the State of Colorado Verification Program ("Department Program").

1. If the Contractor elects to participate in the Department Program pursuant to C.R.S. 8-17.5-102, the Contractor must provide the County a copy of Contractor's completed Notice of Participation Form.

2. If the Contractor hires a new employee who performs work under this public contract, the Contractor must provide the County affirmation as required by C.R.S. 8-17.5-102(5)(c)(II).

c) The Contractor shall comply with all reasonable requests made in the course of an investigation by the Colorado Department of Labor and Employment. If the Contractor fails to comply with any requirement of this provision or C.R.S. 8-17.5-101, et. seq., the County may terminate this Contract for breach of contract, and the Contractor shall be liable for actual and consequential damages to the County.

d) The Contractor shall not use the E-Verify Program or the Department Program to undertake pre-employment screening of job applicants while this Contract is being performed.

e) If the Contractor obtains actual knowledge that a subcontractor performing work under this contract knowingly employs or contracts with an illegal alien, the contractor shall:

1. Notify the subcontractor and the County within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

2. Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to sub-paragraph "a" above, the subcontractor does not stop employing or
contracting with the illegal alien, unless the subcontractor provides information to establish that
the subcontractor has not knowingly employed or contracted with an illegal alien.

Subsection 107.02 shall include the following:

Larimer County is exempt from Colorado State Sales and Use Taxes on materials to be permanently
incorporated in the Work. Said taxes shall not be included in the Contract Price. Contractors and
Subcontractors shall apply to the Colorado Department of Revenue, Sales Tax for an exemption certificate and
purchase the materials tax free (39-26-114 C1) (a) (XIX) CRS 1973 as amended, House Bill 1451 effective
June 7, 1979, and shall be liable to State of Colorado for exempt taxes paid due to failure to apply for
exemption certificates and for failure to use said certificates.

Subsection 107.07 shall include the following:

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and
programs in connection with the Work, and shall take all necessary precautions for the safety of, and shall
provide the necessary protection to prevent damage, injury or loss to:

(a) All employees on the Work and other persons who may be affected thereby,

(b) All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the
    site, and

(c) Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements,
    roadways, structures and utilities not designated for removal, relocation or replacement in the course of
    construction.

The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public
body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss;
and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall
notify owners or adjacent property and utilities when prosecution of the Work may affect them. All damage,
injury or loss to any property referred to above caused, directly or indirectly, in whole or in part, by the
Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose
acts any of them may be liable, shall be remedied by the Contractor (except damage or loss attributable to the
fault of Drawings or Specifications or to the acts or omissions of the County Engineer or anyone employed by
either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly,
in whole or in part, to the fault or negligence of the Contractor). The Contractor’s duties and responsibilities for
the safety and protection of the Work shall continue until such time as all the Work is completed and the
Engineer has issued a notice to the County and the Contractor that the Work is acceptable.

In emergencies affecting the safety or protection of persons or the Work, or property at the site or adjacent
thereto, the Contractor, without special instruction or authorization from the Engineer or County, is obligated to
act to prevent threatened damage, injury or loss. The Contractor shall give the Engineer prompt written notice
of any significant changes in the Work or deviations from the Contract Documents caused thereby.

In addition, Contractor shall be responsible for ensuring that all contractors and subcontractors meet all
insurance requirements and shall provide these certificates of insurance to Larimer County if requested.

In subsection 107.15, delete from subsection (a) 1. on and replace with the following:
Prior to commencement of any work, contractor shall forward Certificates of Insurance to Larimer County Risk Management, 200 W. Oak St., #4000, Fort Collins, Colorado 80521. The insurance required shall be procured and maintained in full force and effect for the duration of the Contract and shall be written for not less than the following amounts, or greater if required by law. Certificate Holder should be Larimer County at the above address.

I. Workers' Compensation and Employers' Liability
   A. State of Colorado: Statutory
   B. Applicable Federal: Statutory
   C. Employer's Liability:
      - $100,000 Each Accident
      - $500,000 Disease-Policy Limit
      - $100,000 Disease-Each Employee
   D. Waiver of Subrogation

II. Commercial General Liability on an Occurrence Form including the following coverages: Premises Operations; Products and Completed Operations; Personal and Advertising Injury; Medical Payments; Contractual Liability; Independent Contractors; and Broad Form Property Damage. Coverage provided should be at least as broad as found in Insurance Services Office (ISO) form CG0001. Minimum limits to be as follows:
   A. Bodily Injury & Property Damage General Aggregate Limit
      - $2,000,000
   B. Products & Completed Operations Aggregate Limit
      - $2,000,000
   C. Personal & Advertising Injury Limit
      - $1,000,000
   D. Each Occurrence Limit
      - $1,000,000

Other General Liability Conditions:
   1. Products and Completed Operations to be maintained for one year after final payment. Contractor shall continue to provide evidence of such coverage to the County on an annual basis during the aforementioned period (as appropriate).
   2. Contractor agrees that the insurance afforded the County is primary.
   3. If coverage is to be provided on Claims Made forms, contractor must refer policy to Risk Management Department for approval and additional requirements.

III. Professional Liability/Errors & Omissions
    - $1,000,000

IV. Commercial Automobile Liability coverage to be provided on Business Auto, Garage, or Truckers form. Coverage provided should be at least as broad as found in ISO form CA0001 (BAP), CA0005 (Garage) or CA0012 (Trucker) including coverage for owned, non-owned, & hired autos. Limits to be as follows:
   A. Bodily Injury & Property Damage Combined Single Limit
      - $1,000,000

V. All Insurance policies (except Workers Compensation and Professional Liability) shall include Larimer County and its elected and appointed officials and employees as additional insureds as their interests may appear. The additional insured endorsement should be at least as broad as ISO form CG2010 for General Liability coverage and similar forms for Commercial Auto and Umbrella
Liability. Additional Insured endorsement(s) shall be attached to the certificate of insurance that is provided to the county.

VI. The County reserves the right to reject any insurer it deems not financially acceptable by insurance industry standards. Property and Liability Insurance Companies shall be licenses to do business in Colorado and shall have an AM Best rating of not less than B+ and/or VII.

VII. Notice of Cancellation: Each insurance policy required by the insurance provision of this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the County, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice shall be sent directly to Larimer County Risk Management, 200 W. Oak St., #4000, Ft. Collins, CO 80521. If the insurance company refuses to provide the required notice, the contractor or its insurance broker shall notify the County of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers’ notification to that effect.

VIII. Contractor shall furnish Larimer County certificates of insurance. Contractor will receive all sub-contractors certificates of insurance. Such certificate must meet all requirements listed above.

ANY DEVIATIONS FROM THE STANDARDS GIVEN ABOVE MUST BE APPROVED BY THE LARIMER COUNTY RISK MANAGEMENT DEPARTMENT.

Section 107 of the Standard Specifications is hereby revised as follows:

Add subsection 107.061 immediately following subsection 107.06 as follows:

107.061 Performance of Safety Critical Work. The following work elements are considered safety critical work for this project:

(1) Removal of bridge
(2) Temporary works: falsework, shoring of any height, cofferdams, and temporary bridges
(3) Work requiring the use of cranes or other heavy lifting equipment to set structures. Also when construction materials are being lifted that may fall onto active traffic lanes.
(4) Excavation and embankment adjacent to the roadway, especially if it requires shoring
(5) Work operations such as jack hammering which may create vibration.

The Contractor shall submit, for record purposes only, an initial detailed construction plan that addresses safe construction of each of the safety critical elements. When the specifications already require an erection plan, a bridge removal plan, or a removal of portion of bridge plan, it shall be included as a part of this plan. The detailed construction plan shall be submitted two weeks prior to the safety critical element conference described below. The construction plan shall be stamped “Approved for Construction” and signed by the Contractor. The construction plan will not be approved by the Engineer.

The Construction Plan shall include the following:

(1) Safety Critical Element for which the plan is being prepared and submitted.
(2) Contractor or subcontractor responsible for the plan preparation and the work.
(3) Schedule, procedures, equipment, and sequence of operations, that comply with the working hour limitations
(4) Temporary works required: falsework, bracing, shoring, etc.
(5) Additional actions that will be taken to ensure that the work will be performed safely.
Names and qualifications of workers who will be in responsible charge of the work:
A. Years of experience performing similar work
B. Training taken in performing similar work
C. Certifications earned in performing similar work

Names and qualifications of workers operating cranes or other lifting equipment
A. Years of experience performing similar work
B. Training taken in performing similar work
C. Certifications earned in performing similar work

The construction plan shall address how the Contractor will handle contingencies such as:
A. Unplanned events (storms, traffic accidents, etc.)
B. Structural elements that don't fit or line up
C. Work that cannot be completed in time for the roadway to be reopened to traffic
D. Replacement of workers who don't perform the work safely
E. Equipment failure
F. Other potential difficulties inherent in the type of work being performed

Name and qualifications of Contractor’s person designated to determine and notify the Engineer in writing when it is safe to open a route to traffic after it has been closed for safety critical work.

Erection plan or bridge removal plan when submitted as required elsewhere by the specifications. Plan requirements that overlap with above requirements may be submitted only once.

A safety critical element conference shall be held two weeks prior to beginning construction on each safety critical element. The Engineer, the Contractor, the safety critical element subcontractors, and the Contractor’s Engineer shall attend the conference. Required pre-erection conferences or bridge removal conferences may be included as a part of this conference.

After the safety critical element conference, and prior to beginning work on the safety critical element, the Contractor shall submit a final construction plan to the Engineer for record purposes only. The Contractor’s Engineer shall sign and seal temporary works, such as falsework, shoring etc., related to construction plans for the safety critical element (2) Temporary Works. The final construction plan shall be stamped “Approved for Construction” and signed by the Contractor.

The Contractor shall perform safety critical work only when the Engineer is on the project site. The Contractor’s Engineer shall be on site to inspect and provide written approval of safety critical work for which he provided signed and sealed construction details. Unless otherwise directed or approved, the Contractor’s Engineer need not be on site during the actual performance of safety critical work, but shall be present to conduct inspection for written approval of the safety critical work.

When ordered by the Engineer, the Contractor shall immediately stop safety critical work that is being performed in an unsafe manner or will result in an unsafe situation for the traveling public. Prior to stopping work, the Contractor shall make the situation safe for work stoppage. The Contractor shall submit an acceptable plan to correct the unsafe process before the Engineer will authorize resumption of the work.

When ordered by the Engineer, the Contractor shall remove workers from the project that are performing the safety critical work in a manner that creates an unsafe situation for the public in accordance with subsection 108.05.

Should an unplanned event occur or the safety critical operation deviate from the submitted plan, the Contractor shall immediately cease operations on the safety critical element, except for performing any work necessary to ensure worksite safety, and provide proper protection of the work and the traveling public. If the
Contractor intends to modify the submitted plan, he shall submit a revised plan to the Engineer prior to resuming operations.

All costs associated with the preparation and implementation of each safety critical element construction plan will not be measured and paid for separately, but shall be included in the work.

Nothing in the section shall be construed to relieve the Contractor from ultimate liability for unsafe or negligent acts or to be a waiver of the Colorado Governmental Immunity Act on behalf of the Department.

Add subsection 107.26 immediately following subsection 107.25 as follows:

107.26 Environmental Mitigation.

1. If, during the course of any ground disturbance related to this project, cultural materials are discovered, the Project would be immediately stopped and the SHPO/THPO and the relevant Agency (CDOT Archaeologist or FEMA Archaeologist) notified.

2. The Agencies will implement minimization measures per the July 22, 2014 Programmatic Consultation Agreement Between FEMA and the U.S. Fish and Wildlife Service for FEMA Funded Flood Disaster Recovery and Mitigation Projects. These measures are:

   a. Avoid or minimize the amount of concrete, riprap, bridge footings, and other "hard" engineering features within the stream channel and riparian or adjacent upland habitats. If riprap is used, bury the riprap then plant with native riparian vegetation where technically feasible.

   b. Where technically feasible, use bioengineering techniques to stabilize stream banks when stabilization of natural banks is needed.

   c. Minimize the number and footprint of access routes, staging areas, and work areas.

   d. Locate access routes, staging areas, and work areas within previously disturbed or modified non-habitat areas.

   e. Install limits of work fencing (e.g., orange batTier netting or silt fencing), signage, or other visible markers to delineate access routes and the project area from habitats. Use this fencing to enforce no-entry zones.

   f. Hold a preconstruction briefing for onsite personnel to explain the limits of work and other conservation measures.

   g. Follow regional stormwa ter guidelines and design best management practices (BMPs) to control contamination, erosion, and sedimentation, such as silt fences, silt basins, gravel bags, and other controls needed to stabilize soils in denuded or graded areas, during and after construction.

   h. Locate utilities along existing road corridors, and if possible, within the roadway or road shoulder.

   i. Bury overhead utilities whenever possible.

   ii. Directionally bore utilities and pipes underneath habitats whenever possible.

   i. Develop and implement a habitat restoration plan that addresses site preparation, planting techniques, control of non-native weeds, and use of native seed mixtures. Contact USFWS immediately by telephone at (303) 236-4773 if a Preble's meadow jumping mouse is found alive, dead, injured, or hibernating within the project area. Contact the Service if any other listed species are found within the project area.

   j. To the maximum extent practicable, limit disturbing (e.g., crushing, trampling) or removing (e.g., cutting, clearing) all vegetation, such as willows, trees, shrubs, and grasses within riparian and adjacent upland habitats.
i. Restrict the temporary or permanent removal of vegetation to the footprint of the project area.

ii. Minimize the use of heavy machinery and use smaller equipment when possible.

iii. Soil compaction: Temporarily line access routes with geotextiles or other materials, especially in wet, unstable soils to protect roots and the seed bank.

k. Locate, store, stage, operate, and refuel equipment outside of riparian or adjacent upland habitats.

l. During the Preble's active season (May 1 through November 1), work only during daylight hours to avoid disrupting Preble's nocturnal activities.

m. Promptly remove waste to minimize site disturbance and avoid attracting predators.

n. Use BMPs to limit construction-related disturbance, such as soil compaction, erosion, and sedimentation, and to prevent the spread of invasive weeds;
   i. Soil compaction: Establish one access route for workers, vehicles, and machinery, preferably along a previously disturbed surface or route.
   ii. Soil compaction: Temporarily line access routes with geotextiles or other materials, especially in wet, unstable soils.
   iii. Weed control: Wash and inspect vehicles and equipment before entering or leaving the project area so that they are free of noxious weed seeds and plant parts.
   iv. Weed control: Use only weed free certified materials, including gravel, sand, top soil, seed, and mulch.

o. Upon project completion, revegetate all disturbed areas with native shrubs, trees, and grasses. Use only weed free material and native seed mixtures recommended by USFWS.

p. Identify conservation measures that were implemented to avoid and minimize potential impacts.

3. Measures dictated by Colorado Parks and Wildlife (CPW) in their Senate Bill 40 approval to reduce impacts to game species, fish, birds, and others of state concern; and with other state resource and regulatory agencies must be implemented.

4. A project erosion control plan to minimize soil loss, including the use of Best Management Practices (BMPs), to isolate the construction site and minimize adverse effects of soil loss and sedimentation on soil and water resources will be implemented.

5. Construction noise levels will be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order or implementation of other appropriate measures. Impact to noise levels could be minimized by limiting construction activities that occur during early morning or late evening hours.

6. To mitigate for fugitive dust during construction, periodic watering of active construction areas, particularly in areas close to sensitive receptors (e.g., hospitals, senior citizen homes, and schools) will be implemented.

7. All waste material associated with the project must be disposed of properly and not placed in identified floodway or wetland areas or in habitat for threatened or endangered species. All material resulting from demolition activities, including asbestos and lead paint will be disposed of in a landfill permitted for the specific type of waste.

8. To minimize any potential hazards to occupational health and safety, construction workers and equipment operators are required to wear appropriate personal protective equipment, and to be properly trained for the work being performed, including removal and disposal of asbestos and lead-based paint for demolition projects.
9. To minimize the impact to emergency services the Agencies will coordinate with the emergency service providers to determine the best strategy to alleviate any delays or disruptions of service.

Mitigation measures identified in the technical memoranda prepared specific to this project include:

SAFETY AND OCCUPATIONAL HEALTH

A Materials Management Plan shall be prepared and implemented in order to specify management practices, such as dust suppression, use of personal protective equipment, or personal hygiene protocols, in areas where contaminated fill material, which includes roadway fill throughout the project area, may be encountered during reconstruction.

The contractor will be responsible for determining if the waste is hazardous or not either by knowledge of the waste stream or by conducting a toxicity characteristic leaching procedure (TCLP) analysis of any suspected lead-based paint-containing materials to be disposed of for waste handling and disposal purposes in accordance with U.S. Environmental Protection Agency (EPA) regulations (40 CFR 261.11).

All applicable personnel performing construction type activities at the site must comply with the Occupational Safety and Health Administration (OSHA) worker protection standards (29 CFR 1926 Construction Standards).

FEMA requires the following:

- Removal or repair of materials with painted surfaces may be required and construction workers are required to follow OSHA regulations to avoid release of lead from paint. All solid or hazardous wastes that might be generated by the activities of entities entering the state highway right-of-way must be removed from the right-of-way and disposed of at a permitted facility or designated collection point (e.g., for solid waste, a utility or construction company’s own dumpster).

In addition to the above, CDOT and Larimer County have additional procedures that must be followed:

CDOT:

- CDOT requires that all metal project components (for example, light poles, metal railing, and bridge girders) be recycled. As these materials are recycled, and not disposed at a landfill, it is not necessary to evaluate the content of lead by TCLP analysis, regardless of concentration. The recycling facility must be notified that metal project components contain lead, if applicable. Regardless of lead content, the future contractor must comply with OSHA Regulation 1926.62 for worker safety.
- CDOT requires that painted structures that are not metal proposed for removal and/or demolition at projects (for example, signal poles, bridges, and concrete abutments) be evaluated for lead content. Knowing the presence of lead paint on project components is used to evaluate: 1) worker health and safety considerations; and 2) recycling and/or disposal options.
- CDOT requires that Recognized Environmental Conditions and recommendations be included in the notes sections of the plan set:
  o Follow CDOT’s Standard Special Provision 250.
  o Fill has been used at the site for temporary road repairs. Workers are to be made aware of this material and the fill material needs to be managed appropriately.
Preparation of a Materials Management Plan (MMP), Sampling and Analysis Plan (SAP), Health and Safety Plan (HASP), Spill Prevention Control and Countermeasures (SPCC) Plan.

LARIMER COUNTY:

Larimer County refers to the following Centers for Disease Control and Prevention, Worker Safety After a Flood requirements:

- For most work in flooded areas, workers will need hard hats, goggles, heavy work gloves, and watertight boots with steel toe and insole (not just steel shank).
- During flood cleanup, the risk of wounds may be increased. For this reason, cleanup workers should be sure that they are up-to-date with tetanus vaccination, ideally before starting cleanup activities. Adults need a tetanus booster shot every 10 years.
- First aid, even for minor cuts and burns, is very important during flood cleanup. Immediately clean all wounds and cuts with soap and clean water. Talk to a doctor or other health professional on the scene to find out if you need more treatment.
- Excessive noise from equipment such as chain saws, backhoes, tractors, pavement breakers, blowers, and dryers may cause ringing in the ears and subsequent hearing damage. If you must shout over noise to be heard, you should wear earplugs or other hearing protection devices.

WETLANDS AND WATERS OF THE U.S. (WOUS)

All wetlands occurring within the Project area would be delineated and flagged prior to initiation of construction activities to ensure resource protection. Although avoidance is planned, if any construction equipment would operate within saturated wetlands that would be likely to be affected by soil compaction or rutting based on conditions at the time of construction, equipment mats or low-ground-pressure tracked vehicles to minimize impacts on wetland soils would be employed.

In order to reduce the impacts to nearby WOUS, this Project will employ BMPs and erosion control measures to reduce soil losses, soil inundation, and sedimentation in areas adjacent to the construction area. Sufficient cross-slope drainage structures during new construction also will be provided to maintain natural hydrologic conditions.

The following mitigation measures will be implemented during construction to minimize impacts to wetlands and other habitats:

- All appropriate BMPs to prevent and minimize temporary impacts to vegetation and riparian habitat will be followed during construction.
- Fertilizers and/or hydro-mulching will not be allowed within 50 feet of wetlands.
- Construction staging and materials stockpiling will be located greater than 50 feet from the edge of wetlands or the edge of Big Thompson River, when possible, to avoid disturbance of vegetation and to prevent pollutant discharges into sensitive habitats. Specific locations will be determined during construction planning and, considering the narrowness of the corridor and limited areas available, this buffer may need to be reduced. If this buffer is not achievable, the Contractor will consider the placement of materials closer to the edge of wetlands or the edge of water and identify appropriate additional BMPs that would be required to minimize disturbance of vegetation and prevent pollutant discharges into sensitive habitats. BMPs will be determined on a site-by-site basis and any modifications will require Larimer County environmental staff approval.
- The Contractor will use BMPs and erosion control measures to reduce soil losses, soil inundation, and sedimentation in areas adjacent to the construction area, and provide sufficient cross-slope drainage
structures during new construction to allow natural hydrologic conditions to be maintained on both sides of the right-of-way.

- Prohibit construction equipment from entering the ordinary high water mark (2-year floodplain) except where identified on design plans.
- Replacement of rip-rap along Big Thompson River will be closely monitored to ensure that additional fill is not placed into the 2-year floodplain. Any additional encroachment into the 2-year floodplain would need to be identified in the Section 404 permit.
- Refuel equipment within designated refueling containment area away from floodplain, river, and wetlands.
- Ensure BMPs and containment structures are in place for work conducted within and adjacent to the 2-year floodplain to prevent concrete washout and other potential pollutants from reaching the river and wetlands.
- In compliance with the Colorado Noxious Weed Act and local guidance, BMPs and Larimer County approved preventive measures will be used to prevent the spread of noxious weeds and minimize the potential effects from control treatments during construction of the Project. These measures and practices include, but are not limited to, minimizing soil disturbance to the maximum extent possible, cleaning of construction equipment, and re-seeding of all disturbed soil with a certified, weed-free seed mix.
- An Integrated Noxious Weed Management Plan shall be developed to prevent the spread of noxious weeds into temporary disturbance areas.
- If construction is to commence between April 1 and August 31, a migratory bird nest survey will be conducted prior to construction. If active nests are found, coordination with CPW and USFWS is required to determine an appropriate course of action, which may include, but is not limited to, a delay in construction to avoid the breeding season.
- Construction impacts would be minimized through the use of BMPs and erosion control measures to reduce soil losses, soil inundation, and sedimentation in areas adjacent to the construction zone.
- All measures identified in the Section 404 permit(s) acquired for this project will be followed.

WATER RESOURCES

- To reduce the potential for groundwater impacts designated areas where refueling and fuel storage for construction equipment will be restricted. No refueling or storage of fuels or hazardous materials will be allowed within the floodplain of Big Thompson River or within 200 feet of private wells. Fuel spills or leaks will be contained, and contaminated soils will be removed for disposal in accordance with applicable state and federal laws. Proper housekeeping, maintenance of equipment, and containment of fuels and other potentially hazardous materials would be conducted to minimize the potential for a release of fluids into groundwater or surface waters.

All new construction sites must adhere to the requirements of the applicable National Pollutant Discharge Elimination System (NPDES) storm water permit, which generally include the following:

- Control storm water volume and velocity to minimize erosion.
- Control storm water discharges including both peak flow rates and total storm water volume.

ENVIRONMENTAL MITIGATION

- Minimize the amount of soil exposed during construction activities.
- Minimize the disturbance of steep slopes.
- Minimize sediment discharges from the site using controls that address factors such as the amount, frequency, intensity, and duration of precipitation; the nature of resulting storm water runoff; and soil characteristics, including the range of soil particle sizes expected to be present on the site.
• Provide and maintain natural buffers around surface waters and direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, where feasible.
• Minimize erosion at outlets and downstream channel and stream bank erosion.
• Minimize soil compaction and preserve topsoil where feasible.
BIOLOGICAL RESOURCES

Table 2 presents the mitigation measures for biological resources in the study area.

Table 2. Mitigation Commitments for Biological Resources

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
<th>Impact</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wildlife</strong></td>
<td></td>
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</tr>
<tr>
<td>Use of temporary erosion control blankets for erosion control.</td>
<td>Wildbriar Bridge, where BMPs will control erosion adjacent to Big Thompson River</td>
<td>Potential reptile and amphibian mortality from entanglement in plastic mesh deployed for erosion control.</td>
<td>Erosion control blankets will have flexible natural bio-degradable fibers to allow for safe passage of snakes and amphibians through the erosion control blanket.</td>
</tr>
<tr>
<td>Construction related disturbance between April 1 and August 15.</td>
<td>Wildbriar Bridge</td>
<td>Potential loss of eggs or young of nesting migratory birds.</td>
<td>If construction is to commence between April 1 and August 15 to avoid impacts to nesting birds in accordance with the MBTA, a qualified biologist will conduct a nest survey prior to construction. If active nests are found, coordination with CPW and USFWS is required to determine an appropriate course of action, which may include, but is not limited to, a delay in construction to avoid the breeding season.</td>
</tr>
<tr>
<td><strong>Aquatic Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Runoff (including sedimentation) from construction activities</td>
<td>Wildbriar Bridge</td>
<td>Impacts to aquatic resources as a result of water quality degradation.</td>
<td>• No refueling or storage of fuels or hazardous materials will be allowed within the floodplain of the Big Thompson River or within 200 feet of private wells.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• Fuel spills or leaks will be contained, and contaminated soils will be removed for disposal in accordance with applicable state and federal laws. Proper housekeeping, maintenance of equipment, and containment of fuels and other potentially hazardous materials would be conducted to minimize the potential for a release of fluids into groundwater or surface waters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Prohibit construction equipment from entering the ordinary high water mark (2-year floodplain) except where identified on design plans.</td>
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<td></td>
<td>• All new construction sites must adhere to the requirements of the applicable NPDES storm water permit, which generally include the following:</td>
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<tr>
<td></td>
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<td></td>
<td>• Control storm water volume and velocity to minimize erosion.</td>
</tr>
</tbody>
</table>
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<th>Activity</th>
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<th>Impact</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riparian Vegetation</td>
<td>Wildbriar and bridge</td>
<td>Removal of shrubs and trees</td>
<td>▪ Control storm water discharges including both peak flow rates and total storm water volume.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>▪ Minimize the amount of soil exposed during construction activities.</td>
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<td></td>
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<td></td>
<td>▪ Minimize the disturbance of steep slopes.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>▪ Minimize sediment discharges from the site using controls that address factors such as the amount, frequency, intensity, and duration of precipitation; the nature of resulting storm water runoff; and soil characteristics, including the range of soil particle sizes expected to be present on the site.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>▪ Provide and maintain natural buffers around surface waters and direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, where feasible.</td>
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<td></td>
<td>▪ Minimize erosion at outlets and downstream channel and streambank erosion.</td>
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<td></td>
<td>▪ Minimize soil compaction and preserve topsoil where feasible.</td>
</tr>
<tr>
<td>Bridge Construction</td>
<td>Wildbriar and bridge</td>
<td>Removal of shrubs and trees</td>
<td>▪ Compliance with Senate Bill 40 will include acceptable revegetation.</td>
</tr>
</tbody>
</table>
Section 108 of the Standard Specifications is hereby revised for this project as follows:

In subsection 108.01 delete the first paragraph and replace with the following:

The Contractor shall submit a completed Certificate of Intent to Sublet, Larimer County Engineering Form 276, as part of the bid proposal. In accordance with the special provision to subsection 103.01 of these specifications, the County reserves the right to reject any subcontractor listed on this form and negotiate for a substitute subcontractor. Any change from this list of subcontractors must be approved in writing by the Engineer. The Contractor shall make all project related written subcontracts available to the Engineer for viewing, upon request, and at a location convenient to the Engineer.

In subsection 108.02 delete the last sentence and replace with the following:

The Contractor shall commence work under the Contract on or prior to the 30th day following the date of award or in accordance with the selected start date allowed in the special provisions. The Contractor shall notify the County a minimum of 14 days prior to road closure and/or construction start.

In subsection 108.03, third paragraph add the following:

The Contractor shall present a bar chart schedule to the Engineer at or prior to the preconstruction conference. This bar chart schedule shall show the salient features of the project as listed in Commencement and Completion of Work.

Subsection 108.08 shall include the following:

The Contractor shall not carry on construction operations outside the hours of 7:00 a.m. to 6:00 p.m. unless previously arranged and approved.

In subsection 108.08(a) delete the last sentence of the first paragraph and replace with the following:

Such request shall be made within 7 calendar days of the receipt of the statement and shall detail the reason the statement is believed to be incorrect.
REVISION OF SECTION 109
MEASUREMENT AND PAYMENT

Section 109 of the Standard Specifications is hereby revised for this project as follows:

In subsection 109.06(a) delete the first two sentences and replace with the following:

The Department will make a deduction from the progress payment in the amount considered necessary to protect the interests of the County. The amount to be retained will be 5 percent of the value of the completed work.

In subsection 109.06 delete items (i) and (j).

In subsection 109.07(2) delete the first sentence and replace with the following:

The material is stored on the project, on County owned property, or at an acceptable secured location within Larimer County.

Subsection 109.09 shall include the following:

The County is required, by Law (CRS 38-26-107), to withhold from all payment to the Contractor sufficient fund to insure the payment of all claims for labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by the Contractor or his Subcontractors in or about the performance of the Work. Such funds must be withheld until such claims have been paid or such claims as filed have been withdrawn, such payment or withdrawal to be evidenced by filing with the County a receipt in full or an order for withdrawal in writing and signed by the person filing such claim or his duly authorized agents or assigns. Such funds shall not be withheld longer than ninety (90) days following the date fixed for final settlement, as published in a public newspaper in accordance with the law, unless an action is commenced within that time to enforce such unpaid claim and a notice of lis pendes is filed with the County. At the expiration of such ninety day period, the County shall pay to the Contractor such moneys and funds as are not the subject to suit and lis pendes notices and shall retain thereafter, subject to the final outcome thereof, only sufficient funds to insure the payment of judgments which may result from each suit.
REVISION OF SECTION 201
CLEARING AND GRUBBING

Section 201 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 201.01 shall include the following:

This work includes the removal less than 4 inches in caliper, the trimming of trees, removal of dead or broken branches, and removal of shrubs as designated by the Engineer. This work includes the preservation from injury or defacement of all vegetation and objects designated to remain.

The Engineer will establish environmental limits. All trees, shrubs, plans, grasses, and other vegetative materials shall remain, except as designated by the Engineer.

Prior to beginning any construction in the vicinity of the tree(s), removal, trimming, and pruning of encroaching vegetation (as determined by the Engineer) shall be completed.

Once all directed clearing, trimming, and pruning is completed and accepted, no additional clearing, trimming, or pruning will be allowed unless approved, in writing, by the Engineer.

This work shall be done by a Contractor or subcontractor who is a qualified tree surgeon and a member of the National Arborist Association. The firm’s or individual’s name and qualifications shall be submitted at the preconstruction conference for the Engineer’s approval.

CONSTRUCTION REQUIREMENTS

Subsection 201.02 shall include the following:

Dead or broken branches on trees or shrubs shall be removed as directed by the Engineer. All trimming shall be done by skilled workmen. Contractor shall be licensed in Larimer County. All work shall be done according to the following requirements:

1. Pruning shall be done with proper, sharp, clean tools in such a manner as to preserve the natural character of the tree.
2. All final cuts shall leave no projections on or off the branch and shall not be cut so close as to eliminate the branch collar.
3. To avoid bark stripping, all branches 2 inches in diameter and larger shall be cut using the 3-cut method. These branches shall be lowered to the ground by proper ropes.
4. Tools used on trees known or found to be diseased, shall be disinfected with alcohol before they are used on other trees.
5. Structural weaknesses, decayed trunk or branches, or split crotches shall be reported to the Engineer.
6. When cutting back or topping trees, the Contractor shall use the drop-crotch method and avoid cutting back to small suckers. Smaller limbs and twigs shall be removed in such a manner so as to leave the foliage pattern evenly distributed.
7. When reducing size (cut back or topping) not more than one-third of the total area shall be reduced at a single operation.
8. Climbing spikes shall not be used on trees not scheduled for removal.

In subsection 201.02, third paragraph, delete the third sentence and replace with the following:

In areas to be rounded at the tops of backslopes, stumps shall be removed to at least 2 feet below the surface of the final slope line or final grade.

All brush, branches, limbs, and foliage smaller than 4 inches in diameter shall be chipped into mulch and stockpiled at a designated site. Stumps shall be left no higher that 2 feet above the ground surface and shall not be removed when within the areas to be excavated. When trees being cut off are outside the excavation limits, the stumps shall be cut so that no more than 3 inches remains above the ground surface. All removed or trimmed vegetation shall be removed from the project and shall become the property of the Contractor. Stump grinding is not required in any circumstances.

METHOD OF MEASUREMENT

Subsection 201.03 shall include the following:

All clearing and grubbing directed by the Engineer will be paid for as lump sum under the clearing and grubbing item.

BASIS OF PAYMENT

Subsection 201.04 shall include the following:

Removal less than 4 inches in caliper, the trimming of trees, removal of dead or broken branches, and removal of shrubs will not be measured and paid for separately, but shall be included in the work for Clearing and Grubbing.

Chipping, stockpiling, mulch, and hauling and stockpiling trunks and limbs will not be paid for separately but shall be included in the work.
REVISION OF SECTION 202
REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 202 of the Standard Specifications is hereby revised for this project as follows:

Subsection 202.01 is hereby revised to include the following:

This work includes the removal and disposal of one (1) existing crossing including all pipe, substructures and concrete (the existing culvert crossing was installed immediately after the flooding during emergency repairs).

METHOD OF MEASUREMENT

Subsection 202.11 is hereby revised to include the following:

Removal of the existing infrastructure at Wildbriar to facilitate the construction of the new bridge as shown in the plans shall be measured and paid for one location.

BASIS OF PAYMENT

Subsection 202.12: The accepted quantities measured as provided above will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
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</thead>
<tbody>
<tr>
<td>Removal of Structure</td>
<td>Each</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials required to remove the existing infrastructure to facilitate the construction of the Wildbriar replacement bridge as shown in the plans, including but not limited to all pipes, substructures, riprap, reinforcement and concrete. Removal, saw-cutting to complete any removal, delivery, and stockpiling shall be incidental to the work and included in the cost of the item.
REVISION OF SECTION 202
REMOVAL OF TREE

Section 202 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 202.01 shall include the following:

This work includes the removal of trees over 4 inches in caliper as directed by the Engineer. This work includes the preservation from injury or defacement of all vegetation and objects designated to remain.

The Engineer will establish environmental limits. All trees, shrubs, plants, grasses and other vegetative materials shall remain, except as designated by the Engineer.

Prior to beginning any construction in the vicinity of the tree(s), removal, trimming, and pruning of encroaching vegetation (as determined by the Engineer) shall be completed.

Once all directed removal is completed and accepted, no additional clearing, trimming, cutting, pruning or removal will be allowed unless approved, in writing, by the Engineer.

This work shall be done by a Contractor or subcontractor who is a qualified tree surgeon and a member of the National Arborist Association. The firm’s or individual’s name and qualifications shall be submitted at the preconstruction conference for the Engineer’s approval.

CONSTRUCTION REQUIREMENTS

This work includes the removal of trees as directed by the Engineer and the preservation from injury or defacement of all vegetation and objects designated to remain.

Subsection 202.02 shall include the following:

Branches on trees or shrubs shall be removed as directed by the Engineer. All removal shall be done by skilled workmen. All work shall be done according to the following requirements:

1. Pruning shall be done with proper, sharp, clean tools in such a manner as to preserve the natural character of the tree.

2. All final cuts shall leave no projections on or off the branch and shall not be cut so close as to eliminate the branch collar.

3. To avoid bark stripping, all branches 2 inches in diameter and larger shall be cut using the 3-cut method. These branches shall be lowered to the ground by proper ropes.

4. Tools used on trees known or found to be diseased shall be disinfected with alcohol before they are used on other trees.

5. Structural weaknesses, decayed trunk or branches, or split crotches shall be reported to the Engineer.
6. When cutting back or topping trees, the Contractor shall use the drop-crotch method and avoid cutting back to small suckers. Smaller limbs and twigs shall be removed in such a manner so as to leave the foliage pattern evenly distributed.

7. When reducing size (cut back or topping) not more than one-third of the total area shall be reduced at a single operation.

8. Climbing spikes shall not be used on trees not scheduled for removal.

Stumps shall be left no higher that 2 feet above the ground surface and shall not be removed when within the areas to be excavated. When trees being cut off are outside the excavation limits, the stumps shall be cut so that no more than 3 inches remains above the ground surface. All removed or trimmed vegetation shall be removed from the project and shall become the property of the Contractor. Stump grinding is not required in any circumstances.

Trees shall be removed in their entirety including root balls. Trees in excess of 12 inch caliper shall be stockpiled for reuse in the Landscape Log (See Details and Revision of Section 213). Trees shall be de-limbed.

Access for the removal trees will be monitored. Trees shall be felled at the risk of the Contractor. Strict limits of disturbance will be defined and shall be adhered to.

All brush, branches, limbs and foliage as a result of removal will be removed from the project site by the Contractor.

**BASIS OF PAYMENT**

Subsection 202.12 shall include the following:

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of Tree</td>
<td>Each</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials required to remove the trees. when the diameter at breast height (DBH) is 4 inches or greater. Trees with a smaller DBH shall be removed and paid as a part of Section 201 Clearing and Grubbing.
REVISION OF SECTION 202
REMOVAL OF TRACKING PAD

Section 202 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 202.02 shall include the following:

This work includes the removal and disposal of the existing tracking pad at Narrows Park.

CONSTRUCTION REQUIREMENTS

Subsection 202.02 shall be revised to include the following:

Removal of Tracking Pad shall consist removing the existing tracking pad at Narrows Park. Tracking pad should remain in place during construction and while Narrows Park is used as a staging area. Contractor shall remove tracking pad prior to final stabilization at Narrows Park.

BASIS OF PAYMENT

Subsection 202.12 shall include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
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<tbody>
<tr>
<td>Removal of Vehicle Tracking Pad</td>
<td>Each</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials required to for removals, hauling, and disposal of existing tracking pad.
REVISION OF SECTION 203
EXCAVATION AND EMBANKMENT

Section 203 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 203.03, the first paragraph shall be deleted and replaced with the following:

(a) *Embankment Material.* Embankment material shall consist of approved material acquired from excavations, including Contractor’s source, hauled and placed in embankments.

Contractor’s source material shall have an R-value of at least 25 minimum when tested by the Hveem Stabilometer, have a maximum dry density of not less than 90 p.c.f., and must be stable when tested in accordance with Colorado Procedure L-3102. The Contractor shall furnish evidence that the material meets the requirements of this section and shall pay for such tests as may be required to show compliance. All materials shall be sampled and tested in accordance with appropriate CDOT or AASHTO procedures.

METHOD OF MEASUREMENT

Subsection 203.11, first paragraph, shall be deleted and replaced with the following:

Items paid for by volume will not be remeasured but will be the quantities designated in the Contract. Exceptions will be made when field changes are ordered or when it is determined that there are discrepancies on the plans in an amount of at least plus or minus ten percent of the plan quantity.

Subsection 203.13 (f), shall be deleted and replaced with the following:

(f) *Proof Rolling.* Proof Rolling will not be measured and paid for separately but shall be included in the work.

BASIS OF PAYMENT

Subsection 203.14 shall include the following:

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclassified Excavation (Complete in Place)</td>
<td>Cubic Yard</td>
</tr>
<tr>
<td>Embankment Material (Complete in Place)</td>
<td>Cubic Yard</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials required for Embankment Material (Complete in Place).
REVISION OF SECTION 207
GRANULAR RIPRAP COVER (MINUS 3”)

Section 207 in the Standard Specifications is hereby revised for this project as follows:

Subsection 207.02 shall include the following:

Granular Riprap Cover (Minus 3”) shall consist of native channel bottom or bank material less than 3” in diameter stockpiled during channel excavation and placed in the voids and to a depth of 4” above the top of the 24” riprap to the finish grade shown on the plans. Apply water to all riprap areas to force the migration of the cover material deep into the riprap voids.

Subsection 207.05 shall include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granular Riprap Cover (Minus 3”)</td>
<td>Cubic Yard</td>
</tr>
</tbody>
</table>
REVISION OF SECTION 208
EROSION CONTROL

Section 208 in the Standard Specifications is hereby revised for this project as follows:

In Subsection 208.02(j) delete paragraph 2, and replace with the following:

When approved by the Engineer an “urban” concrete washout structure may be used. Urban concrete washout examples are pre-manufactured containers designed to contain liquid and solid waste from concrete washout, wooden boxes lined with heavy duty plastic or waterproof 55 gallon drums. Only the fabricated concrete washout structures listed on CDOT’s Approved Products List may be used. After use structure must be removed from the project site and disposed of at the Contractor’s expense.

Subsection 208.03 shall include the following:

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

In subsection 208.03 delete paragraph 3 and 4, and replace with the following:

Prior to construction the Contractor shall evaluate the project site for water draining into or through it. If such drainage is identified, BMPs shall be used to prevent off-site water (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 ECS 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.

Subsection 208.03(b) shall include the following:

If necessary, the ECS shall update proposed sequencing of major activities in the SWMP.

Delete subsection 208.03(c), item (4) and replace with the following:

(4) Inspect and record with the Engineer or designated representative the stormwater management system at least every 14 calendar days. Post storm event inspections must be conducted within 24 hours after any precipitation or snow melt event that may cause surface erosion. If no construction activities will occur following a storm event, post-storm event inspections shall be conducted prior to commencing construction activities, but no later than 72 hours following the storm event. The occurrence of any such delayed inspection must be documented in the inspection report. Recorded inspections still must be conducted at least every 14 calendar days; a time span greater than 14 calendar days is a violation of the CDPS-SCP. CDOT Form 1176 shall be used for all inspections.

The project is subject to inspections by CDPHE, COE, EPA and CDOT at any time. If CDPHE reviews the project site and requires additional measures to prevent and control erosion, sediment or pollutants, the Contractor shall cease and desist activities resulting in pollutant discharge and immediately implement these measures.
Subsection 208.04 shall include the following:

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

In subsection 208.04 delete paragraph 3 and replace with the following:

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 pipe. 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(e), shall include the following:

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

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

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.

Completed areas shall be permanently stabilized immediately, but in no case more than 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.

Delete subsection 208.04(e) item (3) and replace with the following:

During the summer and winter when seeding is not allowed, temporary stabilization shall be placed. Temporary stabilization will not be paid for the convenience of the Contractor. 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(f) paragraph 10, delete the first sentence and replace with the following:

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.

In subsection 208.05(l) shall include 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.

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:

(12) The use of the concrete washout site 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.

Delete subsection 208.05(p) and replace with the following:

(p) 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

Add subsection 208.053 immediately following subsection 208.05 which shall include the following:

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, on-site batch plants, 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 ECS shall tabulate additional disturbances not identified in the SWMP or documented in the permit 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.

Add subsection 208.054 immediately following subsection 208.05 which shall include the following:

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.

Subsection 208.07 shall include the following:

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.

In subsection 208.09, delete items (8) and (9) and replace with the following:

(8) Failure to immediately stabilize disturbed areas where work is temporarily halted as required by subsection 208.04(e) and 208.08.

(9) 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(f).

In subsection 208.10(d) shall include the following:

BMPs shall be removed when 70% of preexisting vegetative cover has been established within the disturbed project limits. BMPs subject to removal shall be determined at the final walk through of the project. The Contractor shall remove approved BMPs; cost of BMP removal will be included in the BMP.
REVISION OF SECTION 209
DUST PALLIATIVES

Section 209 of the Standard Special Provisions is hereby revised for this project as follows:

Subsection 209.05 shall include:

Application of dust palliative may be required when work is not in progress, including weekends, holidays, and nighttime.

Delete subsections 209.07 and 209.08.

Dust palliative will not be measured and paid for separately but shall be included in the work.
REVISION OF SECTION 212
SEEDING, FERTILIZER, SOIL CONDITIONER, AND SODDING

Section 212 of the Standard Specifications is hereby revised for this project as follows:

In subsection 212.02 (b) delete the 3rd paragraph.

In subsection 212.02 (b), 4th paragraph, delete the 3rd, and 4th sentence.

In subsection 212.02 (b), delete the 5th paragraph.

In subsection 212.02 (b), delete the 6th paragraph and replace with the following:

<table>
<thead>
<tr>
<th>Compost Parameters</th>
<th>Reported as</th>
<th>Requirements</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>pH Units</td>
<td>6.0 - 8.5</td>
<td>TMECC 04-11-A</td>
</tr>
<tr>
<td>Soluble Salts (Electrical Conductivity)</td>
<td>mmhos/cm</td>
<td>Maximum 10 dS/m</td>
<td>TMECC 04.10-A</td>
</tr>
<tr>
<td>Organic Matter Content</td>
<td>%, Dry Matter Basis</td>
<td>20%-60%</td>
<td>TMECC 05.07-A</td>
</tr>
<tr>
<td>Particle Size (Sieve Sizes)</td>
<td>% dry weight basis for each sieve fraction</td>
<td>Passing 1 inch - 100% 1/2 inch - 95%</td>
<td>TMECC 02.02-B</td>
</tr>
<tr>
<td>Ammonium-N/Nitrate-N-Ratio</td>
<td>Dry Matter Basis</td>
<td>ratio of &lt; 4</td>
<td>Calculation</td>
</tr>
<tr>
<td>Plant Available phosphorus, potassium, zinc, iron, manganese, copper</td>
<td>Dry Matter Basis</td>
<td>level of nutrients must exceed a medium range</td>
<td>AB-DTPA</td>
</tr>
</tbody>
</table>

The contractor shall provide a soil test, performed by an agency pre-approved by the Engineer, completed within 360 days prior to beginning use of material, confirming that the material has been tested in accordance with Test Methods for Examination of Composting and Compost (TMECC).
In Subsection 212.06(b), delete the 5th sentence and replace with the following:

Soil conditioner shall be evenly incorporated into the top eight inches of soil. Soil conditioner shall be applied at a rate of three cubic yards per 1,000 square feet in areas consisting of native seeding.

**METHOD OF MEASUREMENT**

In Subsection 212.07, 1st paragraph, delete the 1st sentence and replace with the following:

The quantities of native seeding will not be measured but shall be the quantities designated in the Contract. Measurements will be made for revisions requested by the Engineer, or for discrepancies of plus or minus five percent of the total quantity designated in the Contract.

**BASIS OF PAYMENT**

Section 212.08 shall include the following:

Payment shall be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeding (Native)</td>
<td>Acre</td>
</tr>
<tr>
<td>Soil Conditioning</td>
<td>Acre</td>
</tr>
<tr>
<td>Mulching</td>
<td>Acre</td>
</tr>
</tbody>
</table>
REVISION OF SECTION 213
LANDSCAPE BOULDER

Section 213 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 213.01 shall be revised to include the following:

This work consists of placing landscape boulders within Narrows Park per the directive of the Engineer or representative from Larimer County Natural Resources.

CONSTRUCTION REQUIREMENTS

Subsection 202.02 shall be revised to include the following:

Landscape Boulder shall consist of placing boulders within Narrows Park as shown in the plans. The Contractor shall coordinate with the County on selection of boulders from existing stockpile at Narrows Park.

BASIS OF PAYMENT

Subsection 202.12 shall include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Boulder (1/2 ton)</td>
<td>Each</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials to place the landscape boulder.
REVISION OF SECTION 214
PLANTING

Section 214 of the Standard Specifications is hereby revised for this project as follows:

Subsection 214.01 shall include the following:

The extent of riparian planting work will be determined primarily by site hydrology at specific locations on the site. Locations designated for the planting of Deciduous Tree (2 inch caliper) and Willow Cuttings are shown on the drawings.

In subsection 214.02, delete the ninth paragraph and replace with the following:

At the landscape pre-construction conference, the contractor shall name the nursery stock supplier for all items. If requested by the Engineer, the Contractor shall tag all nursery stock for inspection by the engineer. The Engineer may reject any nursery stock not meeting the Contract at any of the three following times and locations:

1. At the named supplier’s location. The Engineer will notify the Contractor when nursery stock will be inspected at the supplier’s location.

2. On the project site at the time of delivery, prior to planting.

3. At the time of installation. Final acceptance of all plant material will be made at the time of installation on the project.

Plant material, with the exception of Willow Cuttings, shall be procured from a licensed, qualified and competitive nursery facility specializing in the production of native plant materials, or from cutting areas as designated below.

Delete subsection 214.02(a), and replace with the following:

(a) Deciduous Tree (2 inch caliper). Deciduous Trees shall be ball and burlap, container, or 2-inch minimum diameter. Quantities shall be provided as indicated on the landscape plans and tabulation sheet.

Subsection 214.02 shall include the following:

(e) Willow Cuttings. Willow cuttings will be collected in areas within 1,000 vertical feet of elevation, and of similar hydrology to those existing at the planting site as directed by a qualified ecologist.

Willow cuttings of various sizes (0.25-0.75 inches diameter) shall be installed as per the landscape plans.

Willow collection sites will be a minimum of one-quarter acre in size, with mature willow stands. No more than 20 percent of middle age plant material shall be taken from the site. Written consent from the property owner must be received in areas where harvesting will occur, and will specify if it is beneficial to take more than 20 percent of the plant material.

Willows shall be cut by hand. Transport of willow cuttings on the collection site may be by hand or machinery. No machinery will be used on any property without consent of the owner. Written consent of the owner including explanation of machinery type and limits of machinery travel shall be provided to the
Engineer before machinery is used for willow transport.

Willow collection sites shall be left in good condition following the collection process. All slash will be removed and disposed of as part of the work. The collection team will be aware of all property lines and maintain cutting practices on lands that have provided consent only. Collections made on public lands must be permitted and carried out in accordance with local, state, and federal law. Willow cuttings grown in a nursery will not be allowed.

The Contractor shall provide the Engineer and CDOT Wetlands Biologist two weeks’ notice prior to beginning willow collection for coordination of access and staffing assistance.

Provisions of CDOT Specification 240, Protection of Migratory Birds, shall be observed in the cutting and planting sites.

In subsection 214.02 (b), 1st paragraph, delete the 7th sentence.

In subsection 214.03(a), delete paragraph 3 and replace with the following:

All layout staking for planting shall be done by the Contractor or as called out in the plans and shall be approved by the Engineer before planting holes are prepared.

In subsection 214.03(c) paragraph 4, add the following wording:

The Contractor shall make every effort to minimize the damage to the grading and seeding that has been previously completed on the project. All areas where the grading is disturbed by the Contractor shall be restored to pre-planting conditions as determined by the engineer. The Contractor will be required to pay for reseeding of all areas that the Engineer feels are excessively disturbed during the planting process.

In subsection 214.03(d), delete paragraph 1 and replace with the following:

Soil additives shall be used in accordance with the following procedures. A mix of 82% (by weight) Biosol® Mix 7-2-3 organic fertilizer, 16% Menafee Humate™ and 2% Endo/Ecto Plus (Mycorrhizal Applications, Inc.) shall be thoroughly mixed with the backfill soil at the following application rates:

- 2” caliper trees 1 cup per each foot diameter of root ball (Mix in under and directly around root ball)

This mix is available pre-mixed as Rocky Mountain Bioproducts® Planter’s Kit at Bowman Revex, 14440 Mead Ct., Longmont, CO.

All deciduous will be mulched in accordance with the detail in landscape plans. Diameter of the mulch ring will extend from the trunk or base to the interior edge of the saucer ring.
Wood chip mulch material will be collected within the State of Colorado, in areas of similar elevation and plant species to those being installed at the planting site. Wood chip mulch may contain various species of wood and pine needles.

Delete subsection 214.03 (g), 1st paragraph.

Delete subsection 214.03 (h) and replace with the following:

Willow Cuttings. All stakes are to be delivered directly to the planting site from the cutting site. Plant materials are to be delivered to the planting site in the species, size and quantities identified by the plans and this Project Special Provision. Plant material shall be staged by species in separate and identifiable groups during unloading.

All willow cuttings will be harvested while dormant, stripped of all branches, and cut into 3-foot long and 5-foot long segments with a 45° angle cut on the rooting end. The cuttings will be placed into water within two minutes of cutting and soaked at a water depth of six inches. The cuttings will be kept wet until placed into the ground and will not be allowed out of water for more than ten minutes during planting. They will be planted by inserting them into the ground (angled end first) a minimum of 16 inches or as indicated on the planting or in-channel details. All cuttings will be trimmed after installation to ensure that no more than 12 inches are left above ground. Care will be taken to avoid damage to buds during handling. Bark must not be separated from the cambium layer. Willow cuttings must be installed within 24 hours of harvesting.

1. Deciduous tree (2 inch caliper). Locations designated on planting plans shall be planted with 2 inch deciduous balled and burlapped trees, or container stock. All cottonwood plantings will be performed using Populus angustifolia (narrowleaf) trees. The number of 2 inch caliper trees will be as indicated on the landscape plans.

2. Willow Cuttings. Areas designated on planting plans shall be planted with willow cuttings. All willow plantings will be performed using Salix sp. cuttings. The number of cuttings to be utilized in riparian benches is based on 6 foot on-center spacing. Willow Cuttings shall be grouped and tied into a 5-stem faction before planting occurs. See Willow Planting on Riparian Bench detail in the Landscape Plans. Willow cuttings shall be 36 inches to 72 inches in length. Cutting lengths shall be used in locations as indicated on the Landscape Quantities Tabulation Sheet. Cuttings should be at least 3/4 inch in diameter to ensure sufficient energy for rooting. Cuttings should extend 6-8 inches into the water table or capillary fringe.

All riparian bench willow cuttings must be planted by “puncturing” final grade. Planting holes shall be created with a punch bar, dibbles, or sharpened rebar. Holes shall be deep enough to extend 80 percent of the length of the cutting into the ground (prior to any necessary trimming).

No area larger than six square feet shall be void of vegetation.

In subsection 214.04(a) paragraph 1, delete the words…”and CDOT Landscape Architect”…

Delete subsection 214.04 (b) (2)
CONSTRUCTION REQUIREMENTS

Subsection 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.

No fertilizer shall be placed within 50 feet of an existing wetland.

In subsection 214.04(b) paragraph 6, delete the first sentence. And add the following:

The Contractor shall make every effort to minimize the damage to the grading and seeding that has been previously completed on the project. All areas where the grading is disturbed by the Contractor shall be restored to pre-planting conditions as determined by the engineer. The Contractor will be required to pay for reseeding of all areas that the Engineer feels are excessively disturbed during landscape maintenance.

Biosol® Mix 7-2-3 organic fertilizer shall be surface applied in the fall after spring planting and again in the spring at the end of the landscape establishment period at the following rates:

Trees  1lb per 3-ft.tree height

In subsection 214.04(b) delete the last two paragraphs.

METHOD OF MEASUREMENT

In subsection 214.05 2nd paragraph, replace the term “brush layer cuttings” with “willow cuttings.”

BASIS OF PAYMENT

In subsection 214.06 replace the term “brush layer cuttings” with “willow cuttings.”

Subsection 214.06 shall include the following:

Payment shall be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deciduous Tree (2 Inch Caliper)</td>
<td>Each</td>
</tr>
<tr>
<td>Willow Cuttings</td>
<td>Each</td>
</tr>
</tbody>
</table>

In subsection 214.06 add the following:

Mulch in tree rings as designated on the planting details will not be paid for separately but will be included in the price of the work.
REVISION OF SECTION 240
PROTECTION OF BIRDS

BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR’S BIOLOGIST

Section 240 is hereby added to the Standard Specifications for this project as follows:

DESCRIPTION

240.01 This work consists of protecting migratory birds including raptors during construction work.

MATERIALS AND CONSTRUCTION REQUIREMENTS

240.02 The Contractor shall schedule construction activity, including clearing and grubbing operations and work on structures, to avoid taking (pursue, hunt, take, capture, or kill; attempt to take, capture, kill or possess) birds or their nests protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA).

If construction activity is to occur between: April 1 and August 31; October 15 and July 31; or November 15 and March 15, then the following specifications must be followed and the Contractor shall retain a qualified wildlife biologist. The qualified biologist will determine if work restrictions need to occur, and where nest removal may occur or will be required during construction. The wildlife biologist shall have a minimum of three years’ experience conducting migratory bird surveys and implementing the requirements of the MBTA and BGEPA. The Contractor shall submit documentation of the biologist’s education and experience to the Engineer for acceptance. A biologist with less experience may be used by the Contractor subject to the approval of the Engineer based on review of the biologist’s qualifications.

The wildlife biologist shall record the location of each protected nest, bird species, the protection method used, and the date installed. A copy of these records will be submitted to the Engineer.

(A) Project Related Activities. The Contractor shall conduct project activities in a manner that does not result in a taking birds protected by the MBTA or BGEPA. The Contractor shall not conduct project related activities during the bald eagle nesting season (October 15 and July 31) or winter roosting season (November 15 and March 15), unless the Contractor takes the following actions:

1. Prior to start of project, a qualified biologist will conduct surveys to determine if active nest or winter roost sites occur within ¼ or ½ mile of the project area.
2. If nest or roost sites occur within the buffer distances, the qualified biologist will determine an appropriate survey protocol to ensure that project activities do not disrupt these activities.
3. The CPW has recommended buffer zones and seasonal restrictions for the Bald Eagle:
   a. Nest sites: no surface occupancy within ¼ mile radius of an active nest. Seasonal restriction within ½ mile radius of active nest from October 15 through July 31.
   b. Winter night roosts: no surface occupancy within ¼ mile radius of an active winter night roost. Seasonal restrictions within ½ mile radius of an active winter night roost from November 15 through March 15.

(B) Vegetation Removal. When possible, vegetation shall be cleared prior to the time when active nests are present. Vegetation removal activities shall be timed to avoid the migratory bird breeding season which begins on April 1 and runs to August 31. All areas scheduled for clearing and grubbing between April 1 and August 31 shall first be surveyed by the wildlife biologist within 50 feet of the work limits for active migratory bird nests. Contractor personnel shall enter areas outside CDOT right-of-way only if a written, signed document granting permission to enter the property has been obtained from the property owner. The Contractor shall document all denials of permission to enter property. The Contractor shall avoid all migratory bird nests. The Contractor shall avoid the area within 50 feet of the active nests or the area within the distance recommended by the biologist until all nests within that area have become inactive. Inactive nest removal and other necessary measures shall be incorporated into the work as follows.
1. **Tree and Shrub Removal or Trimming.** Tree and shrub removal or trimming shall occur before April 1 or after August 31 if possible. If tree and shrub removal or trimming will occur between April 1 and August 31, a survey for active nests shall be conducted by the wildlife biologist within the seven days immediately prior to the beginning of work in each area of tree and shrub removal or trimming. The survey shall be conducted for each phase of any tree or shrub removal or trimming.

If an active nest containing eggs or young birds is found, the tree or shrub containing the active nest shall remain undisturbed and protected until the nest becomes inactive. The nest shall be protected by placing fence (plastic) a minimum distance of 50 feet from each nest to be undisturbed. This buffer dimension may be changed if determined appropriate by the wildlife biologist and approved by the Engineer. Work shall not proceed within the fenced buffer area until the young have fledged or the nests have become inactive. If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor’s expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

2. **Grasses and Other Vegetation Management.** Due to the potential for encountering ground nesting birds’ habitat, if work occurs between April 1 and August 31, the area shall be surveyed by a wildlife biologist within the seven days immediately prior to ground disturbing activities.

The undisturbed ground cover to 50 feet beyond the planned disturbance, or to the right-of-way line, whichever is less, shall be maintained at a height of 6 inches or less beginning April 1 and continuing until August 31 or until the end of ground disturbance work, whichever comes first.

If birds establish a nest within the survey area, an appropriate buffer of 50 feet will be established around the nest by the wildlife biologist. This buffer dimension may be changed if determined appropriate by the wildlife biologist and approved by the Engineer. The Contractor shall install fence (plastic) at the perimeter of the buffer. Work shall not proceed within the buffer until the young have fledged or the nests have become inactive.

If the fence is knocked down or destroyed by the Contractor, the Engineer will suspend the work, wholly or in part, until the fence is satisfactorily repaired at the Contractor’s expense. Time lost due to such suspension will not be considered a basis for adjustment of time charges, but will be charged as contract time.

(C) **Work on Structures.** The Contractor shall conduct work on structures in a manner that does not result in a taking of migratory birds protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall not conduct the work on structures during the primary birding season, April 1 through August 31, unless the Contractor takes the following actions:

4. The Contractor shall remove existing nests prior to April 1. If the Contract is not awarded prior to April 1 and CDOT has removed existing nests, then the monitoring of nest building shall become the Contractor’s responsibility upon Notice to Proceed.

5. During the time that the birds are trying to build or occupy their nests, between April 1 and August 31, the Contractor shall monitor the structures at least once every three days for any nesting activity.

6. If the birds have started to build any nests, the nests shall be removed before they are completed. Water shall not be used to remove the nests if nests are located within 50 feet of any surface waters.

7. Installation of netting may be used to prevent nest building. The netting shall be monitored and repaired or replaced as needed. Netting shall consist of a mesh with openings that are ¾ inch by ¾ inch or less.

If an active nest becomes established, i.e., there are eggs or young in the nest, all work that could result in abandonment or destruction of the nest shall be avoided until the young have fledged or the nest is unoccupied as determined by the Contractor’s biologist and approved by the Engineer. The Contractor shall prevent construction activity from displacing birds after they have laid their eggs and before the young have
fledged. If the project continues into the following spring, this cycle shall be repeated. When work on the structure is complete, the Contractor shall remove and properly dispose of netting used on the structure. The taking of a migratory bird shall be reported to the Engineer. The Contractor shall be responsible for all penalties levied by the U. S. Fish and Wildlife Service (USFWS) for the taking of a bird protected by the MBTA or BGEPA.

METHOD OF MEASUREMENT

240.03 Wildlife Biologist will be full compensation for all work and materials required to complete the item, including wildlife biologist, wildlife survey, and documentation (record of nest location and protection method).

Clearing and grubbing will be measured and paid for in accordance with Section 201. Mowing will not be measured and paid for separately, but shall be included in the work. Removal and trimming of trees will be measured and paid for in accordance with Section 202.

Fence needed to protect migratory birds and nests will be measured and paid for in accordance with Section 607.

Netting will be measured by the square yard of material placed to keep birds from nesting on the structure. Square yards will be calculated using the length of netting measured where it is attached to the ground and the average height of the netting where it is attached to the structure.

BASIS OF PAYMENT

240.04 The accepted quantities measured as provided above will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife Biologist</td>
<td>Hour</td>
</tr>
<tr>
<td>Removal of Nests</td>
<td>Hour</td>
</tr>
</tbody>
</table>
REVISION OF SECTION 304
AGGREGATE BASE COURSE

Section 304 of the Standard Specifications is hereby revised for this project as follows:

Subsection 304.02 shall include the following:

Materials for the base course shall be Aggregate Base Course (Class 5) as shown in Subsection 703.03.

The Aggregate Base Course (Class 5) must meet the gradation requirements and have a resistance value of at least 72 when tested by the Hveem Stabilometer method. The Engineer may require the Contractor to submit test results from a certified materials lab to verify the material’s conformance to the requirements of this section. Costs of any such tests shall be borne by the contractor.

Subsection 304.06 shall include the following:

Variation from the aggregate base course plan elevation specified shall not be more than 0.04 foot.
REVISION OF SECTION 502
PILING

Section 502 of the Standard Specifications is hereby revised for this project as follows:

METHOD OF MEASUREMENT

Subsection 502.12 replace the 7th paragraph with the following:

Drilled holes to facilitate pile driving shall be included in the cost of the steel piling.

Subsection 502.13 shall remove the following Pay Item:

Drilled Hole to Facilitate Pile driving, Pay Unit LF.
REVISION OF SECTION 506
RIPRAP DEWATERING

Section 506 of the Standard Specifications is hereby revised to include the following:

Subsection 506.03 shall be revised to include the following:

Riprap Toe Trenches shall be dewatered during excavation, placing of filter material, and during riprap placement.

All dewatering work shall comply with subsection 107.25, Water Quality Control.

Dewatering operations will not be measured and paid for separately but shall be included in the work.
REVISION OF SECTION 506
RIPRAP

MATERIALS

Riprap located on site may be used in the riprap if it meets the requirements of Section 506.02. If the riprap is of good quality, but does not meet the gradation requirements for riprap it may be placed at and around the bridges outside of the revetment. Any riprap located on site with a pink coloration must be buried so that it is not visible.

Geotextiles: Either woven monofilament or non-woven needle-punched geotextiles may be used. If a non-woven fabric is used, it must have a mass density greater than 12 ounces per square yard (400 grams per square meter). Under no circumstances may spun-bond or slit-film fabrics be allowed. Each roll of geotextile shall be labeled with the manufacturer’s name, product identification, roll dimensions, lot number, and date of manufacture. Geotextiles shall not be exposed to sunlight prior to placement.

CONSTRUCTION REQUIREMENTS

Underwater placement of riprap will not be allowed. If required, the contractor must submit justification for underwater placement to be approved by the engineer.

When placing in the dry, the riprap and filter shall be placed on undisturbed native soil, on an excavated and prepared subgrade, or on acceptably placed and compacted fill. Unsatisfactory soils shall be considered those soils having excessive in-place moisture content, soils containing roots, sod, brush, or other organic materials, soils containing turf clods or rocks, or frozen soil. These soils shall be removed, backfilled with approved material and compacted prior to placement of the riprap. Unsatisfactory soils may also be defined as soils such as very fine noncohesive soils with uniform particle size, gap-graded soils, laminated soils, and dispersive clays, per the geotechnical engineer’s recommendations.

The subgrade soil conditions shall meet or exceed the required material properties described in prior to placement of the riprap. Soils not meeting the requirements shall be removed and replaced with acceptable material.

When placing in the dry, the areas to receive the riprap shall be graded to establish a smooth surface and ensure that intimate contact is achieved between the subgrade surface and the filter, and between the filter and the riprap. Stable and compacted subgrade soil shall be prepared to the lines, grades and cross sections shown on the contract drawings. Termination trenches and transitions between slopes, embankment crests, benches, berms and toes shall be compacted, shaped, and uniformly graded. The subgrade should be uniformly compacted to the geotechnical engineer’s site-specific requirements.

Placement of Geotextile: The geotextile shall be placed directly on the prepared area, in intimate contact with the subgrade. When placing a geotextile, it should be rolled or spread out directly on the prepared area and be free of folds or wrinkles. The rolls shall not be dragged, lifted by one end, or dropped. The geotextile should be placed in such a manner that placement of the overlying materials (riprap and/or bedding stone) will not excessively stretch or tear the geotextile.
After geotextile placement, the work area shall not be trafficked or disturbed in a manner that might result in a loss of intimate contact between the riprap stone, the geotextile, and the subgrade. The geotextile shall not be left exposed longer than the manufacturer’s recommendation to minimize potential damage due to ultraviolet radiation; therefore, placement of the overlying materials should be conducted as soon as practicable.

The geotextile shall be placed so that upstream strips overlap downstream strips. Overlaps shall be in the direction of flow wherever possible. The longitudinal and transverse joints shall be overlapped at least 1.5 feet (46 cm) for dry installations. If a sewn seam is to be used for the seaming of the geotextile, the thread to be used shall consist of high strength polypropylene or polyester and shall be resistant to ultraviolet radiation. If necessary to expedite construction and to maintain the recommended overlaps anchoring pins, "U"-staples or weights such as sandbags shall be used.

The filter layer should terminate before the edge of the riprap.

Special-purpose equipment such as clamshells, orange-peel grapples, or hydraulic excavators (often equipped with a "thumb") is preferred for placing riprap. Unless the riprap can be placed to the required thickness in one lift using dump trucks or front-end loaders, tracked or wheeled vehicles are discouraged from use because they can destroy the interlocking integrity of the rocks when driven over previously placed riprap. In all cases, riprap should be placed from the bottom working toward the top of the slope so that rolling and/or segregation does not occur.

Riprap Placement on Geotextiles: Riprap should be placed over the geotextile by methods that do not stretch, tear, puncture, or reposition the fabric. Equipment should be operated to minimize the drop height of the stone without the equipment contacting and damaging the geotextile. Generally, this will be about 1 foot of drop from the bucket to the placement surface (ASTM Standard D 6825). When the preferred equipment cannot be utilized, a bedding layer of coarse granular material on top of the geotextile can serve as a cushion to protect the geotextile. Material comprising the bedding layer must be more permeable than the geotextile to prevent uplift pressures from developing.

Construction operations shall be done in such a manner that erosion and air and water pollution are minimized. The owner, operator, contractor or others will conduct all work and operations in accordance with proper safety guidelines for the type of construction being performed.

The completed job shall be workmanlike and provide a good overall appearance.
REVISION OF SECTION 514
PEDESTRIAN RAILING (TIMBER)

Section 514 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 514.01 shall include the following:

This work consists of the construction of timber curb and pedestrian railing.

MATERIALS

Subsection 514.04 shall include the following:

Curb members shall consist of pressure treated 8x8 timbers.
Rail members shall consist of pressure treated 2x4, 2x6, and 4x4 lumber.
Angles shall be steel Grade A36.
Fasteners shall consist of ½-inch galvanized A36 bolts.

CONSTRUCTION REQUIREMENTS

Subsection 514.06 shall include the following:

All wooden curb timbers (8x8) shall be continuous across a minimum of two steel angles. Contractor shall notch the curb every 8-ft with a 3" by 1'-0" blockout to facilitate drainage.
Rail members (2x4 and 2x6) shall be continuous across a minimum of two 4x4 posts with joints staggered on posts. The connection of the rail system to the girders shall be designed by the contractor and approved the Engineer.

METHOD OF MEASUREMENT

Subsection 514.07 shall include the following:

Pedestrian Railing shall be measured by the lineal foot based on dimensions shown on the plans.

BASIS OF PAYMENT

Subsection 514.08 shall include the following:

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Railing (Timber)</td>
<td>Linear Foot</td>
</tr>
</tbody>
</table>
Payment for Pedestrian Railing (Timber) will be full compensation for all work and materials required to construct the timber curb and pedestrian railing, including notches in curb to facilitate drainage.
REVISION OF SECTIONS 601
STRUCTURAL CONCRETE COATING

Section 601 of the Standard Specifications are hereby revised to include the following:

In Subsection 601.14 (b) 4, paragraph 3 (2) shall be deleted and replaced with the following:

(2) Following sandblasting, a mortar mix, proportioned by volume, consisting of one part portland cement, two to three parts sand (conforming to the requirements of ASTM C 144), and an approved bonding agent shall be used to patch all holes produced by form ties, honeycombing, voids ¼ inch or larger in any dimension, broken corners and edges, and other defects. The mortar mix shall include an approved bonding agent. The quantity, and application procedure of the bonding agent shall be in accordance with the recommendations of the manufacturer of the bonding agent. Areas to be patched shall be moistened with water before the mortar is applied, and the patched area shall be float finished and left flush with the concrete surface without checking or cracking of patches. Patching shall be done when the ambient temperature is at least 40 °F. Holes deeper than 3/4 inch shall be filled in multiple layers.

Subsection 601.14 (b)4, paragraph 5 shall be deleted and replaced with the following:

The coating shall be applied at a rate that will provide a total finished minimum dry film thickness of 10 to 12 mils without texturing agent. The coating shall be mixed by a mechanical mixer and applied by spraying, rolling, or brushing and in all cases shall be applied in two coats. The first coat shall be backrolled immediately after application. Workmanship shall be such that the final coated surface is colored and textured uniformly and presents a pleasing appearance. All areas determined by the Engineer to be insufficiently coated shall be recoated.
REVISION OF SECTIONS 607 
FENCE DEER

Section 607 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

Subsection 607.01 shall include the following:

This work consists of the construction of deer fencing as shown at the locations in the plans.

MATERIALS

Subsection 607.02 shall include the following:

Fence Deer shall be constructed with 12.5 gauge, standard galvanized filled wire mesh with a maximum of 6.5 inch by 6.5 inch openings. Wire mesh shall be 48 inches in height. Fence Deer shall be constructed with a minimum 7 foot long metal t-posts, painted green. Wire mesh shall be attached to the posts with wire ties per the wire mesh manufacture’s recommendations.

CONSTRUCTION REQUIREMENTS

Section 607.03 shall include the following:

Metal t-posts shall be spaced at 8 feet on-center for the length of the fence. Metal t-posts shall be anchored into grade a maximum of 3 feet. 12.5 gauge wire mesh shall be attached at a minimum of 4 locations on each post. The top of the wire mesh and metal t-posts shall match in line and grade for the length of the fence. See Fence Deer Detail in the landscape plans.

METHOD OF MEASUREMENT

Section 607.04 shall include the following:

Fence Deer shall be paid by the linear foot of fence installed and approved by the Engineer.

BASIS OF PAYMENT

Section 607.05 shall include the following:

Payment shall be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fence Deer</td>
<td>Linear Foot</td>
</tr>
</tbody>
</table>

Payment will be full compensation for all work, equipment, and materials required to install the fence. Cost of posts, wire mesh and ties shall be incidental to the work and included in the cost of the item.
REVISION OF SECTIONS 617
DETOUR CULVERT PIPE

Section 617 in the Standard Specifications and Supplemental Specifications is hereby revised for this project as follows:

Subsection 617.03 shall include the following:

The Contractor shall construct, maintain, and remove detour culvert pipe. The pipes may be new or used and shall remain the property of the Contractor.

The minimum size and number of pipe(s) shall not be less than that shown in the plans for the period that the detour will be in use. The Contractor may install pipes of different shapes which have equivalent flow capacity as the minimum culvert sizes shown. The maximum size of pipe that the detour design will accommodate will be based on the required minimum cover for the pipe size proposed. If the Contractor elects to install larger pipe, or an equivalent capacity substitution, an alternative detour culvert pipe design shall be submitted in writing to the Engineer. Construction of the alternative design shall not commence until it has been approved in writing by the Engineer.

Subsection 617.04 shall include the following:

Detour culvert pipe will not be measured.

Subsection 617.05 shall include the following:

The completed and accepted work for detour culvert pipe will be paid for at the contract lump sum price appearing in the bid schedule.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detour Culvert Pipe</td>
<td>Lump Sum</td>
</tr>
</tbody>
</table>

Structure Excavation, Structure Backfill, Roadway surfacing, and Removal of the detour culvert pipe(s) will not be measured and paid for separately but shall be included in the work.

If the Contractor elects to construct an approved alternative detour culvert pipe design, all additional costs shall be borne by the Contractor, and all pay quantities for construction and removal of the detour culvert pipe shall be the quantities shown on the plan.
Section 630 of the Standard Specifications is hereby revised for this project as follows:

In subsection 630.10 delete the second paragraph and replace with the following:

Any major revision to the Traffic Control Plan (TCP) as determined by the Engineer must be authorized in writing by the Engineer.

Subsection 630.14 shall include the following:

When directed by the Engineer, flaggers shall be equipped with radios or field telephones. Backup units shall be available on the project at all times. No work shall be allowed if flaggers are not in radio or field telephone contact after being so directed by the Engineer. The cost of radios or field telephones will not be paid for separately but shall be included in the price for flagging.

In subsection 630.17 delete the first, second, third and fourth paragraphs and replace with the following:

Construction traffic control items will not be measured but will be paid for on a lump sum basis. The Schedule of Construction Traffic Control Devices presents the minimum requirements for traffic control on the project. Additional devices the Contractor may elect to use on the project, which are not ordered by the Engineer, will not be paid for separately but shall be included in the work.

Lump Sum payment for Construction Traffic Control shall be full compensation for the item for the full length of the project, including additional days added to the contract for inclement weather.

The Contractor shall report all traffic control items on Larimer County Daily Traffic Control Log (LCE-073) and shall fax or e-mail these completed forms to the Engineer on a daily basis.

Subsection 630.16 shall include the following:

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Traffic Control</td>
<td>Lump Sum</td>
</tr>
</tbody>
</table>

Subsection 630.16 delete the first paragraph following the Pay Item table.
REVISION OF SECTION 630
PORTABLE MESSAGE SIGN PANEL

Section 630 of the Standard Specifications is hereby revised for this project as follows:

Subsection 630.01 shall include the following:

This work shall consist of furnishing, operating, and maintaining a portable message sign panel, to be on the project site at least 7 days prior to the start of active roadway construction.

Subsection 630.031 is added following subsection 630.03 as follows:

630.031 Portable Message Sign Panel. Portable message sign panel shall be furnished as a device fully self contained on a portable trailer, capable of being licensed for normal highway travel, and shall include leveling and stabilization jacks. The panel shall display a minimum of three—eight character lines. The panel shall be a dot-matrix type with either fluorescent yellow flip-disks legend and/or LED legend on a flat black background. LED signs shall have a pre-default message that activates before a power failure. The sign shall have its own separate power source with independent back-up battery powered source. The sign shall be capable of 360 degrees rotation and be able to be elevated to a height of at least five feet above the ground to the bottom of the sign. The sign should be visible from one-half mile under both day and night conditions. The sign shall be legible from a minimum of 650 feet. The sign shall automatically adjust its light source to meet the legibility requirements during the hours of darkness. The sign enclosure shall be weather tight and provide a clear polycarbonate front cover.

Message signs that are diesel generator powered shall be provided with a 20 gallon minimum capacity fuel tank. Solar powered message signs shall be capable of operating continuously for 10 days without any sun. All instrumentation and controls shall be contained in a lockable enclosure. The sign shall be capable of changing and displaying sign messages and other sign features such as flash rates, moving arrows, etc.

Each sign shall also conform to the following:

(1) Flip-disks legend signs shall have fluorescent ultraviolet black light bulbs.

(2) In addition to the onboard solar/generator power operation with battery back-up, each sign shall be capable of operating on a hard wire, 100-110 VAC, external power source.

(3) All electrical wiring, including connectors and switch controls necessary to allow all sign functions required by the specification shall be provided with each sign.

(4) Each sign shall include an operating and parts manual, wiring diagrams, and trouble-shooting guide.

(5) The portable message sign shall be capable of maintaining all required operations under Colorado mountain-winter weather conditions.

(6) Each sign shall be furnished with an attached license plate and mounting bracket.

(7) Each sign shall be wired with a 7-prong male electric plug for the brake light wiring system. NAPA Part number TC 6215 Trailer Connector or equivalent will be suitable to fulfill the requirements of this specification.

Subsection 630.13 shall include the following:
Maintenance, storage, operation, relocation to different sites during the project, and all repairs of portable message sign panels shall be the responsibility of the Contractor.

Subsection 630.15 shall include the following:

Portable Message Sign Panel will not be measured but be incidental to the work.

Subsection 630.16 shall include the following:

Portable Message Sign Panel will not be measured and paid for separately but shall be included in the item Traffic Control, Lump Sum.
TRAFFIC CONTROL PLAN - GENERAL

The key elements of the Contractor’s method of handling traffic (MHT) are outlined in subsection 630.08.

The components of the TCP, for this project, are included in the following:

1. Subsection 104.04 and Section 630 of the specifications.

Special Traffic Control Plan requirements for this project are as follows:

During the construction of this project, traffic shall use portions of the present traveled roadway.

The Contractor shall not have construction equipment or materials in the lanes open to traffic at any time, unless directed.

Employee vehicle parking will be prohibited where it conflicts with safety, access, or the flow of traffic.

During the work, only one lane may be closed to traffic at any time. Traffic shall not be delayed for more than 10 minutes or as directed by the Engineer.

The Contractor shall not perform any work on the roadway prior to 7 a.m. or after 6 p.m., or as directed by the Engineer.

Prior to starting construction the Contractor shall notify the Engineer of the date the Contractor intends to start construction. The Contractor shall cooperate fully with the Engineer in the handling of traffic.

All costs incidental to the foregoing requirements shall be included in the original contract prices for the project.
SPECIAL NOTICE TO CONTRACTORS

1. SCOPE

1.1 It is the intent of this section of the Special Provisions to provide guidelines to the Contractor or Sub-Contractor, so that they can properly present their materials for inclusion in the construction project.

1.2 The Contractor shall follow the procedures listed below to ensure the proper inspection, sampling, testing and certification of materials and products incorporated into all construction projects.

1.3 The Qualified Manufacturers List (QML) is used for suppliers of Steel Reinforcing Bars & Steel Dowel Bars, Epoxy-Coated Steel Reinforcing Bars & Epoxy-Coated Steel Dowel Bars, and Precast Concrete Structures. These products are required to be selected off the QML. All relevant details for the proper submittal of specified Standard Manufactured Materials and Fabricated Structural Materials are found in CDOT’s Field Materials Manual under CP 11, Quality Management Plans for the Qualified Manufacturers List or the approved Products List.

2. PROVIDE NOTIFICATION OF MATERIALS SOURCES AND SUPPLIERS.

2.1 In accordance with Subsection 106.01 of the Standard Specifications: The Contractor shall submit a formal list of material sources and suppliers to the Engineer at least two weeks prior to delivery; however, it is preferable that the list be presented at the Pre-Construction Meeting. The County will sample and test materials proposed by the Contractor to be utilized for items 203, 206, and 304. If the test results indicate the material is not in conformance with the project specifications, the Contractor is directed to Subsection 106.02 regarding Contractor Source materials and additional testing requirements.

2.2 The list shall include: item to be supplied, quantity, a reference to the level of acceptance required by Larimer County (per Section 7, Designated Products and Assemblies), company name and address supplying the material, and contact person (if the material is to be pre-inspected or if a problem exists with the material delivered). The submitted list shall indicate, immediately after the item being supplied, the applicable acceptance level required:

   (A) Pre-Inspection (PI)
   (B) Certified Test Report (CTR)
   (C) Certificate of Compliance (COC)
   (D) Pre-Approved (per APL)

2.3 All required product or material documentation shall be provided at the point and time of delivery to the construction project. Failure to provide the required documents, such as CTRs and COCs, may result in rejection of the materials. Failure to utilize the QML or APL may result in rejection of materials.

3. INNOVATIVE CONTRACTING (DESIGN / BUILD PROJECTS, CM/CY PROJECTS, ETC.) - MATERIALS DOCUMENTATION RECORD, CDOT FORM #250

3.1 Two weeks before construction of any element of work the Contractor shall furnish the Engineer a schedule of items, approximate quantities to be incorporated into the project, and a reference to the method of acceptance required by Larimer County (per Section 7, Designated Products and Assemblies). This information is to include the item of work with its placement location and dates. The Contractor shall immediately notify the Engineer, in writing, if the items of work or quantities are revised.
3.2 At the completion of the project, the Contractor shall furnish the Engineer with a completed CDOT Form #250 - Materials Documentation Record listing items utilized to construct the project and the approximate quantity of each item.

4. **BUY AMERICA REQUIREMENTS.**

4.1 In accordance with Subsection 106.11 of the Standard Specifications as referenced in 23 CFR Part 635.410:

A. Regulations require the use of domestic steel and iron in Federally funded construction projects. **Buy America** applies to construction components which are "predominantly steel products", defined by the FHWA as products which are manufactured with at least 90% steel or iron content when delivered to the job site for installation. (See "C" below for examples.) FHWA provides waivers for manufactured products and products that are not predominantly steel or iron. (See "D" below for examples.) **Buy America** strictly limits, but does not eliminate, the amount of foreign steel. (See "E" for minimum use & waiver information.

B. All manufacturing processes are defined as "processes required to change the raw ore or scrap metal into the finished, in-place steel or iron product". Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process.

C. Examples of products that are subject to **Buy America** requirements include, but are not limited to, the following:
   - steel or iron products used in pavements, bridges, tunnels or other structures, which include, but are not limited to, the following: fabricated structural steel, reinforcing steel, piling, high strength bolts, anchor bolts, dowel bars, permanently incorporated sheet piling, bridge bearings, cable wire/strand, pre-stressing / post-tensioning wire, motor/machinery brakes and other equipment for moveable structures;
   - guardrail, guardrail posts, end sections, terminals, cable guardrail;
   - steel fencing material, fence posts;
   - steel or iron pipe, conduit, grates, manhole covers, risers;
   - mast arms, poles, standards, trusses, or supporting structural members for signs, luminaires, or traffic control systems; and
   - steel or iron components of precast concrete products, such as reinforcing steel, wire mesh and pre-stressing or post-tensioning strands or cables.

D. Examples of products which are exempt from **Buy America** requirements include, but are not limited to, the following:
   - products made of material other than steel or iron (aluminum, copper, brass, nickel, etc.);
   - cabinets, covers, shelves;
   - clamps, fittings, sleeves;
   - washers, bolts, nuts, screws;
   - tie wire, spacers;
   - chairs;
   - lifting hooks;
   - faucets; and
   - door hinges.
E. Buy America will not prevent a minimal use of foreign steel or iron provided the total project delivery cost of all such steel and iron which includes the cost of delivering the steel and iron to the project, does not exceed one tenth of one percent of the total contract cost or $2,500, whichever is greater. With prior concurrence from FHWA Headquarters, the FHWA Division Administrator may grant a waiver of the Buy America requirements for specific projects. When domestic steel products are available, meeting the contractor’s schedule should not be the basis for requesting a Buy America waiver.

F. The Contractor shall maintain on file at the project the certifications that every process, including the application of a coating, performed on steel or iron products either has or has not been carried out in the United States of America. These certifications shall create a chain of custody, and the lack of these certifications will be justification for rejection of the steel or iron product.

G. Prior to the permanent incorporation into the project of the steel or iron products, the Contractor shall certify in writing to the project engineer that the delivered quantity of each material meets the contract Buy America requirements; that the original Buy America Certification from the Supplier is on file in the Contractor’s project office; and the steel or iron products are in compliance with the plans and specifications for this project.

The Contractor shall maintain a document summarizing the date and quantity of the material utilizing CDOT’s Item Number(s) and Item description(s) delivered to the project, along with the quantity of material installed during the month. The Contractor shall provide documentation of the project delivered cost of all foreign steel or iron permanently incorporated into the project, if any. This summary shall be delivered to the Project Engineer on a monthly basis as established per the revision of Section 106.11 of the Standard Specifications for Road and Bridge Construction. A monthly summary shall be required even if no steel or iron products are incorporated into the project during the month. Examples of these requirements are shown on pages ___thru ___ of this chapter.

NOTE 1: Section 106.11 of the CDOT Construction Manual contains specific information on Buy America Requirements.

5. GLASS BEADS for PAVEMENT MARKING

5.1 The material shall meet the requirements of Standard Specifications Subsection 106.11, Section 627, and Subsection 713.08.

6. QUALITY MANAGEMENT PLANS FOR THE QUALIFIED MANUFACTURERS LIST OR THE APPROVED PRODUCTS LIST

6.1 CP 11 specifies requirements and procedures for a certification system that shall be applicable to all referenced manufacturers, as well as suppliers and contractors within certain industries. Certifying a Manufacturer’s Quality Management Plan is not an automatic acceptance of any particular product, but an acknowledgement that the Manufacturer has taken steps to ensure that their quality controls meet the applicable Industry standards. Manufacturers whose Quality Management Plans are acceptable will be placed on the Qualified Manufacturers List (QML). Only Manufacturers listed on the QML will be eligible to provide the referenced products to a County project.
6.2 The following Standard Manufactured Materials as referenced in CP 11 require an annual submission of a Quality Management Plan along with a sample for evaluation.

- Part I, Standard Manufactured Materials
  - Sub-Part 1. Asphalt Binder
  - Sub-Part 2. Asphalt Emulsion
  - Sub-Part 3. Hydraulic Cement
  - Sub-Part 4. Fly Ash
  - Sub-Part 5. Hydrated Lime

These products are located on the APL.

6.3 The following Fabricated Structural Materials as referenced in CP 11 require an annual submission of a Quality Management Plan.

- Part II, Fabricated Structural Materials
  - Sub-Part 1. Steel Reinforcing Bars & Steel Dowel Bars
  - Sub-Part 2. Epoxy-Coated Steel Reinforcing Bars & Epoxy-Coated Steel Dowel Bars
  - Sub-Part 3. Precast Conc. Structures

The QML is located within CDOT’s Approved Products List (APL) web site, at www.codot.gov/business/APL. A notice to manufacturers is located within the same web site that references specific evaluation protocols including AASHTO’s National transportation Product Evaluation Program (NTPEP).

6.4 The respective QML web site pages are updated regularly. All pages will have at least one revision referencing acceptability for the new calendar year.

7. DESIGNATED PRODUCTS AND ASSEMBLIES

7.1 The majority of materials submitted for inclusion on Larimer County projects will fall within one of four methods of product acceptance for their sampling and testing. Larimer County always retains the right through its Quality Assurance (QA) Program to obtain samples for additional testing and require supplemental documentation.

7.2 If the material or product is not referenced within the four methods of product acceptance then the materials or products must be fabricated or supplied in accordance with the requirements of the applicable Colorado Department of Transportation specifications, plans, and standards. An example of processed materials not found in the following four methods are Aggregate Base Course (ABC), Hot Mix Asphalt (HMA), and Concrete (PCCP). An example of a manufactured product treated uniquely is the Dynamic Message Signs (DMS) which are competitively bid on projects or through state awards.

7.3.a. PRE-INSPECTION (PI):

Pre-Inspection is when representatives from the Larimer County visit a manufacturer’s facility to perform an initial review of the company’s quality control plan and employee certifications, as well as subsequent inspection visitations during the manufacturing of the product. Inspection arrangements shall be made by contacting Larimer County a minimum of 10 days prior to the beginning of fabrication. Failure to give notification may result in delays to the project and/or rejection of materials or products.

NOTE 2: Bearing Devices and Expansion Devices are inspected randomly at the discretion of the Larimer County.
Products needing Pre-Inspection:
- Bearing Devices (Type III) - Bridge A
- Expansion Device, Modular - Bridge A (0-6", through, 0-24")
- Prestressed Concrete Units - Bridge A
- Structural Steel - Bridge A

CDOT Form #193 may need to be provided with the above referenced products.

7.3.b. CERTIFIED TEST REPORT (CTR):

The Certified Test Report method of acceptance is when a manufacturer is required to submit the actual test results performed on the material being provided. A CTR shall contain the actual results of tests for chemical analysis, heat treatment, and/or mechanical properties per the drawing and/or specification. The contract will designate products and assemblies that can be incorporated in the work, if accompanied by Certified Test Reports. The word preceding the “Test Report” may vary between different industries, as Certified, Mill, Metallurgical, Laboratory; however, they are all considered equivalent.

In accordance with Subsection 106.13 of the Standard Specifications and the requirements of this document, each CTR shall include:
1) Department’s project number,
2) Manufacturer’s name,
3) Address of manufacturing facility,
4) Laboratory name & address,
5) Name of product or assembly,
6) Complete description of the material,
7) Model, catalog, stock no. (if applicable),
8) Lot, heat, or batch number identifying the material delivered,
9) Date(s) of the laboratory testing,
10) All test results that are required so as to verify that the material furnished conforms to all applicable Department specifications. Test results shall be from tests conducted on samples taken from the same lot, heat, or batch.
11) The following certification, signed by a person having legal authority to act for the Contractor:

The Certified Test Report shall be a legible copy or an original document and shall include the Contractor’s original signature. The signature (including corporate title) on the Certified Test Report, under penalty of perjury, shall be 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 this project has been sampled and passed all specified tests in conformity to the plans and specifications for this project. One legible copy or original document of the fully signed Certified Test Report shall be furnished to the Engineer prior to installation of the material. Failure to comply may result in delays to the project and/or rejection of the materials.

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certified Test Report. Products or assemblies furnished on the basis of Certified Test Reports may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to Subsection 105.03.
An example of what is required on a CTR can be found in the current CDOT Special Notice to Contractors.

**Products requiring Certified Test Report** (below is an incomplete list):

- Bearing Devices (Type III) - Bridge A
- Bridge Deck Forms, Permanent Steel A
- Cribbing, Steel
- Geogrid (or COC, per project specs)
- Mechanical Fasteners (Field) A
- Glass Beads (for pavement marking)
- Overhead Sign Structures A
- Pedestrian & Bikeway Railing
- Quicklime
- Soil Conditioner
- Structural Plate Structures
- Top Soil
- Traffic Signal Structures A
- Water, Non-Potable
- Welded Wire Reinforcement

**7.3.c. CERTIFICATE OF COMPLIANCE (COC):**

The Certificate of Compliance method of acceptance is when a manufacturer is required to submit a document certifying that the material being provided meets all required Department specifications. A COC shall reference the required specifications for the chemical analysis, heat treatment, and/or mechanical properties per the drawing and/or specification, but not the actual test results. The contract will designate products and assemblies that can be incorporated in the work, if accompanied by Certificates of Compliance.

In accordance with Subsection 106.12 of the Standard Specifications and the requirements of this document, the certificate shall include:

1) Department’s project number,
2) Manufacturer’s name,
3) Address of manufacturing facility,
4) Laboratory name & address,
5) Name of product or assembly,
6) Complete description of the material,
7) Model, catalog, stock no.(if applicable),
8) Lot, heat, or batch number identifying the material delivered,
9) Date(s) of the laboratory testing,
10) Listing of all applicable specifications required by the Department for this particular product or assembly. Certificates shall reference the actual tests conducted on samples taken from the same lot, heat, or batch, and shall include a statement that the product or assembly to be incorporated into the project was fabricated in accordance with and meets the applicable specifications.
11) The following certification, signed by a person having legal authority to act for the Contractor: [See example at the end of Section 7.3.c.]

The original Certificate of Compliance shall include the Contractor’s original signature. The original signature (including corporate title) on the Certificate of Compliance, under penalty of perjury, shall be
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 passed all specified tests in conformity to the plans and specifications for this project. One legible copy 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.

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certificate of Compliance. Products or assemblies furnished on the basis of Certificates of Compliance may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to Subsection 105.03.

An example of what is required on a COC can be found in the current CDOT Special Notice to Contractors.

**NOTE 3:** If the Plans do not specifically reference a Certified Test Report (Mill Test Report) and the product category is not listed on the Approved Products List within the Pre-Approved level of acceptance, then a COC will be required.

**Products requiring Certificate of Compliance** (below is an incomplete list):
- AEP (Asphalt Emulsion Prime)
- Aggregate Bag (for the bag, CTR for agg.)
- Bearing Devices (Type I, II A B)
- Bridge Rail, Steel A
- Catch Basin Insert
- Cattle Guard Boxes, Pre-Cast
- Concrete Box Culverts, Precast
- Dampproofing, Asphalt
- Delineator Posts, Steel
- Ditch Control (Erosion Log & Silt Dike)
- Dust Palliative, Asphaltic or Magnesium Chloride
- Erosion Bales D
- Expansion Joint Material, Preform. Filler
- Fence (Wires & Posts)
- Fertilizer
- Flumes (all types) Gabions and Slope Mattress
- Gaskets
- Geogrid (for Erosion Control)
- Glass Beads (for PMM)
- Guard Rail - End Anchors
- Guard Rail Metal A
- Guard Rail Posts - Metal A
- Guard Rail - Precast
- Guard Rail Posts - Timber Blocks and Posts A
- Hay D
- Headgates
- Hydraulic Soil Stabilizers
- Inlets, Grates and Frames (Prefab)
- Interior Insulation
- Irrigation Systems
Lighting, all items
Light Standards, High Mast
Light Standards, Metal
Luminaires (Inclusive)
Manholes, Rings and Covers (Prefab)
MSE Wall - Elements A,C
Mulch (Hydraulic or Dry Applied)
Mulch Tackifier
Pedestrian Bridge A
Perimeter Control (Silt Fence)
Piling
Pipes – all material compositions
Rest Area Materials (construction of)
Retaining Wall Blocks
Seeding (Native), Seed C
Sign Panels
Sprinkler System(s)
Steel Chairs
Steel Sign Posts
Steel Sheet Piling A
Storm Drain Inlet Protection
Straw
Structural Glazed Tile and Ceramic Tile
Structural Plate Structures A
Structural Steel Galvanized A
Treated Timber
Vegetation (Sod & Plants)
Water, Potable
Water Control Devices

NOTE 4:
A - Mill Test Report shall be included.
B - Certified Test Report(s) on components must accompany the material or product.
C - Certified Test Report shall be included.
D - Contractor may obtain a current list of Weed Free Forage Crop Producers by contacting the Colorado Department of Agriculture at (303) 239-4149.

Example of stamp or affixed sticker to be placed on Certified Test Reports (CTRs), per Subsection 7.2 B (11).

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 # and description) that will be installed in conformance with the plans and specifications on Project Number_________________ .

________________________________ __________________
Contractor Rep. Signature Date

Example of stamp or affixed sticker to be placed on Certificates of Compliance (COCs), per Subsection 7.2 C (11).
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 # and description) that will be installed in conformance with the plans and specifications on Project Number_________________.

________________________________ __________________
Contractor Rep. Signature Date
7.3.d. PRE-APPROVED (APL):

The Pre-Approved method of acceptance is when a manufacturer is required to submit all relevant documentation on their product in advance of any specific project. A primary requirement to be considered for the Approved Products List (APL) is that the material retains a very high level of uniformity and consistency in its production quality (i.e. not project specific).

The submittal of Product literature /Tech Data Sheet (TDS), Certificates of Compliance, Certified Test Reports, Materials Safety Data Sheets (MSDS), etc., as well as product samples for specific categories combine all previous methods of acceptance into one. A Manufacturer whose product is not currently on the APL should read and follow the instructions within the Notice to Manufacturers on the APL web site at www.codot.gov/business/APL.

Product evaluation can take a minimum of four months to in excess of a year for some product categories. If CDOT specifications need to be altered or created for a product’s acceptance then it could take even longer.

In accordance with CDOT's Procedural Directive 1401.1, a manufacturer's product is evaluated within CDOT to determine its acceptability on CDOT construction projects, as defined by CDOT specifications, plans and standards. For additional information on the APL or the web site contact the Product Evaluation Coordinator within the Staff Materials & Geotechnical Branch at 303-398-6566.

Locate products on the web site through APL Search, and then use the referenced Category, the Manufacturer’s name, or the Product name. A category search requires that the drop-down menus be used.

APL User Guidance

1. If three or more products are listed for any applicable category then one of these products shall be selected. If the category is unpopulated a COC will be required for the product actually used. If the category is under-populated a COC will be required for the product actually used if not from the APL.

2. Products that are evaluated on a batch or lot basis and subsequently posted on the APL web site will not be posted indefinitely. They expire two years after their CTR date or they will be removed sooner if informed that the batch or lot is depleted. Specifically this refers to (1) single component, hot-applied, elastomeric membranes for bridge decks, (2) hot poured, joint/crack sealant, and (3) asphalt plug joints.

3. Asphalt Binder and Asphalt Emulsions: Approved asphalt binders and emulsions are valid for the calendar year in which they were tested and approved, per CP 11. The year is incorporated into the product name. On February 1st of each calendar year product older than two complete years will be automatically removed.

4. Environmental Erosion Control, Soil Retention Covering and Herbicide Treatment: All questions regarding this categories materials, both the current specifications and the products, should be directed to the Engineer.

5. Traffic Control Pavement Marking Material Sub-Category: All questions regarding pavement marking materials, both the current specifications and the products, should be directed to the Engineer.

http://www.dot.state.co.us/DesignSupport/Materials%20Bulletins/Materials%20Bulletins.htm

This Materials Bulletin clarifies the terminology and application of geosynthetics as specified in the standard specifications and the standard special provision (SSP), Revision of Sections 208, 420, 605, and 712 – Geosynthetics and Geotextiles. For New York State web site navigation refer to (NYDOT APL Instructions) at http://internal/infoexchg/organizations.cfm.

7. Concrete Mix Designs: On the APL website there is a folder listing concrete mix designs that have been pre-approved. When a concrete mix is placed on the APL, it meets the most current CDOT Standard Specifications; however, it may not meet a CDOT project’s Special Provisions. CP 62 is the procedure for approving all concrete mixes for use on a Larimer County project.

8. Warm Mix Asphalt (WMA) Mixes: On the APL website there is a folder listing approved WMA technologies and a folder listing approved contractors for specific WMA technologies that have been pre-approved for use on CDOT Projects. Use of a WMA mix on a Project shall be approved by the Project Engineer.

9. Contractors are required to submit a Certificate of Compliance to the project engineer documenting the selection of the CDOT APL and/or QML products that they wish to include for project incorporation. (See CDOT Special Notice to Contractors for example).

10. APL Quality Assurance Program: Upon selecting the sub-category or base category the Product ID (PID), Product Name, Manufacturer, and Comments will be displayed.

(a) By clicking on the PID / Form #595 the Pre-Approved Product Evaluation Request & Summary will be displayed. This will provide the customer with both a mini product data sheet and the information necessary for additional product analysis for specific utilization.

(b) From a Quality Assurance (QA) perspective, it is highly recommended that the Comments – Add field be selected so that a database can be generated for products that work best in specific situations. In those rare occasions, bad or flawed products can be removed from the APL. Only comments from the Contractor, applicable sub-contractor, and the project personnel representing the Department will be accepted.

(c) If a product fails to perform to within minimum quality expectations contact the CDOT Product Evaluation Coordinator immediately via e-mail as listed in the APL web site.

**DISCLAIMER:** The Colorado Department of Transportation (CDOT) is not obligated to any manufacturer to use any of their products listed in the Approved Products List (APL). The APL simply documents that the listed products have been reviewed, tested, and evaluated against CDOT standards, and were found to be acceptable to be used in CDOT projects. Acceptance is based on product quality; however, price or availability may be the determining factor by a contractor or sub-contractor on the Larimer County project.

The product shall be removed from the APL if Product Performance comments indicate that field performance is unacceptable to CDOT quality standards or if the product varies from the data as originally submitted. Additional disclaimer information can be found within the APL web site.

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<th>October 23, 2018</th>
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<td>Sound Wall: Absorptive</td>
<td>607.02.02.00</td>
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<tr>
<td><strong>Environmental</strong></td>
<td>Reflective</td>
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<tr>
<td><strong>Erosion Control</strong></td>
<td>Ditch Control</td>
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<td><strong>Erosion Control</strong></td>
<td>Silt Berrm</td>
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<tr>
<td><strong>Erosion Control</strong></td>
<td>Storm Drain Inlet Protection</td>
<td>208.02.08.01</td>
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<td><strong>Erosion Control</strong></td>
<td>Dewatering Filter Bag</td>
<td>208.02.18.00</td>
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<td><strong>Erosion Control</strong></td>
<td>Pre-Fabricated</td>
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<tr>
<td><strong>Erosion Control</strong></td>
<td>Flexible Pipe</td>
<td>208.02.06.00</td>
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<td><strong>Erosion Control</strong></td>
<td>Manufactured Channel Liner</td>
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<tr>
<td><strong>Soil Retention Covering</strong></td>
<td>SRB [Biodegradable Class 1]</td>
<td>216.02.02.00</td>
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<td><strong>Soil Retention Covering</strong></td>
<td>SRB [Photodegradable Class 1]</td>
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</tr>
<tr>
<td><strong>Soil Retention Covering</strong></td>
<td>SRB [Biodegradable Class 2]</td>
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<td><strong>Soil Retention Covering</strong></td>
<td>SRB [Photodegradable Class 2]</td>
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<td>216.02.03.00</td>
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<td><strong>Soil Retention Covering</strong></td>
<td>TRM [Class 2]</td>
<td>216.02.03.00</td>
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<tr>
<td><strong>Soil Retention Covering</strong></td>
<td>TRM [Class 3]</td>
<td>216.02.03.00</td>
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<td><strong>Paint / Coating</strong></td>
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<td><strong>Paint / Coating</strong></td>
<td>Concrete Corrosion Inhibitor: N/A</td>
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<td><strong>Paint / Coating</strong></td>
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<td><strong>Paint / Coating</strong></td>
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<tr>
<td><strong>Pedestrian Safety</strong></td>
<td>ADA Truncated Dome: Embedded</td>
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88
<table>
<thead>
<tr>
<th>Joint System</th>
<th>Retrofit</th>
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</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>705.01.03.00</td>
<td></td>
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</table>

| Right-of-Way Structure: Mailbox Support System: | 210.13.01.00 |
| Utility Enclosure:                           |            |
| Fence, Non-Standard Coating:                | 710.03.01.00 |
| Pole Base Hardware:                          | 713.05.01.00 |

| Roadway Safety:                          | 606.02.06.00 |
| Cable Barrier:                           |            |
| Guardrail W-Beam:                        | 606.02.04.00 |
| Crash Cushion:                           | 606.02.03.00 |
| Crash Cushion:                           | 606.02.02.00 |
| Railing                                 | 606.02.02.00 |
| Crash Cushion:                           | 614.07.02.00 |
| Roadway Safety:                          |            |
| Sealant [Joint & Crack]: Asphalitic Plug Joint: | 518.03.01.00 |
| Hot Poured, Joint/Crack:                 | 702.06.01.00 |
| Sealant [Joint & Crack]: Silicone, Joint: | 705.01.01.00 |
| Pre-Formed Joint Filler:                 | 705.01.02.00 |
| Loop Detector Slot:                     | 705.01.01.00 |
| Soil / Geotechnical:                     |            |
| Stabilization:                           | Chemical, Liquid |
| Void Elimination:                        | Polyurethane Foam, High Density |

<p>| Traffic Control:                         | 630.03.01.00 |
| Portable Changeable Message: Trailer Mount |            |
| Vehicle Mount                            | 630.03.01.00 |
| Arrow Board:                             | 630.03.01.00 |
| Type A                                   | 630.03.01.00 |
| Type B                                   | 630.03.01.00 |
| Type C                                   | 630.03.01.00 |
| Type D                                   | 630.03.01.00 |
| Speed Notification:                      | 630.03.01.00 |
| Radar/Message Trailer                    | 630.03.01.00 |
| Speed Display Trailer                    | 630.03.01.00 |
| Speed Display Device                     | 630.03.01.00 |
| Traffic Control Enhancement: AFAD        | 630.04.01.00 |
| Flashing Beacon                          | 630.06.01.00 |
| Warning Light                            | 630.08.02.00 |
| Raised Island, Temporary                 | 630.08.02.00 |
| Rumble Strip, Temporary                  | 630.08.02.00 |
| Glare Screen                             | 630.08.01.00 |
| Channelizing Device:                     | 630.05.01.00 |
| Cone                                     | 630.05.01.00 |
| Tubular Marker                           | 630.05.02.00 |</p>
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<tr>
<th>Item Description</th>
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<tr>
<td>Vertical Panel</td>
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<tr>
<td>Drum</td>
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<td>Barricade, Type 1</td>
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<tr>
<td>Barricade, Type 2</td>
<td>630.06.02.00</td>
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<tr>
<td>Barricade, Type 3</td>
<td>630.06.02.00</td>
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<tr>
<td>Direction Indicator Barricade</td>
<td>630.02.02.00</td>
</tr>
<tr>
<td>Longitudinal Channelizing Device</td>
<td>630.06.04.00</td>
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<tr>
<td>Opposing Traffic Lane Divider</td>
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<tr>
<td><strong>Delineator:</strong></td>
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<tr>
<td>Flexible Post</td>
<td>612.02.02.00</td>
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<tr>
<td>Flexible, Multiple Hit Post</td>
<td>612.02.02.00</td>
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<tr>
<td>Guardrail Mount</td>
<td>612.02.02.00</td>
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<td><strong>Reflective Element:</strong></td>
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</tr>
<tr>
<td>Barrier (Solid Wall) Marker</td>
<td>612.02.04.00</td>
</tr>
<tr>
<td>Guardrail &amp; Post Marker</td>
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<td>Delineator Post Marker</td>
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<tr>
<td><strong>Reflective Element:</strong></td>
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<tr>
<td>Linear Reflector Strip</td>
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<tr>
<td><strong>Post Anchoring:</strong></td>
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<td>Mechanical System</td>
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<td>Polyurethane Foam, Backfill</td>
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<tr>
<td><strong>Crash Cushion, Temporary:</strong></td>
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<tr>
<td>Impact Attenuator, Temporary</td>
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<tr>
<td>Truck Mounted Attenuator (TMA)</td>
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<td>Trailer Mounted Attenuator</td>
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<td><strong>Sign Stand:</strong></td>
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<td><strong>Pavement Marking Material:</strong></td>
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<tr>
<td>Preform Plastic Tape, Type I, Perm.</td>
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<tr>
<td>Preform Plastic Tape, Type III, Perm.</td>
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<td>Thermoplastic, Hot Applied</td>
<td>713.12.01.00</td>
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<td>Thermoplastic, Preformed</td>
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<td>Epoxy Paint, Yellow</td>
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<td><strong>Pavement Marking Material:</strong></td>
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<td>Methyl Methacrylate</td>
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<td><strong>Sign Sheeting:</strong></td>
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<td>ASTM D 4956, Type IV</td>
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<td>ASTM D 4956, Type V</td>
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<td>ASTM D 4956, Type VI</td>
<td>713.04.01.00</td>
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<tr>
<td>ASTM D 4956, Type VI</td>
<td>713.04.01.00</td>
</tr>
<tr>
<td>[Roll-up &amp; Cone Collar]</td>
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<tr>
<td>ASTM D 4956, Type VIII</td>
<td>713.04.01.00</td>
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<td>ASTM D 4956, Type VIII, Fluorescent</td>
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<td>ASTM D 4956, Type IX</td>
<td>713.04.01.00</td>
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<tr>
<td>ASTM D 4956, Type IX, Fluorescent</td>
<td>713.04.01.00</td>
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<tr>
<td>ASTM D 4956, Type XI</td>
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<td>ASTM D 4956, Type X, Fluorescent</td>
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<td>Concrete Sealer</td>
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<td>Single Component, Hot Applied</td>
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<tr>
<td>Non-Asphalting</td>
<td>705.08.01.00</td>
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</table>
UTILITIES

Known utilities within the limits of this project are:

<table>
<thead>
<tr>
<th>Utility Company</th>
<th>Service</th>
<th>Contact</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Century Link</td>
<td>Communications</td>
<td>Terry Speer</td>
<td>970-392-4841</td>
</tr>
<tr>
<td>City of Loveland Power Department</td>
<td>Power</td>
<td>Jon Shepard</td>
<td>970-962-3551</td>
</tr>
</tbody>
</table>

The work described in these plans and specifications may require coordination between the Contractor and the utility company(s) in accordance with subsection 105.06 in conducting their respective operations as necessary.

The work listed below shall be performed by the Contractor in accordance with the plans and specifications, and as directed by the Engineer. The contractor shall keep the utility company(s) advised of any work being done to their facility, so that the utility company(s) can coordinate their inspections for final acceptance of the work with the Engineer.

The work listed below will be performed by the utility owners or their agents:

Temporary relocation of the overhead communications and power lines during construction of the Wildbriar Bridge.

It is the Contractor's responsibility to make arrangements with the utility company(s) to locate all underground utilities prior to construction. The Contractor shall have the responsibility of protecting utilities during construction.

The Contractor shall comply with Article 1.5 of Title 9, CRS (“Excavation Requirements”) when excavation or grading is planned in the area of underground utility facilities. The Contractor shall notify all affected utilities at least two (2) business days prior to commencing such operations. Contact the Utility Notification Center of Colorado (UNCC) at 1-800-922-1987 to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective company. Utility service laterals shall also be located prior to beginning excavating or grading.

The location of utility facilities as shown on the plan and profile sheets, and herein described, were obtained from the best available information.

The Contractor shall have the responsibility of protecting live utilities during his construction operations and shall hold the County harmless for any and all damages to live utilities arising from his construction operations.

All costs incidental to the foregoing requirements will not be paid for separately but shall be included in the work.
FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the Engineer’s estimate for force account items included in the Contract. The estimated amounts marked with an asterisk will be added to the total bid to determine the amount of the performance and payment bonds. Force Account work shall be performed as directed by the Engineer.

BASIS OF PAYMENT

Payment will be made in accordance with subsection 109.04. Payment will constitute full compensation for all work necessary to complete the item.

Force Account work valued at $5,000.00 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

<table>
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<tr>
<th>Force Account Item</th>
<th>Estimated Quantity</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>F/A Minor Contract Revision</td>
<td>F/A</td>
<td>$ 70,000</td>
</tr>
<tr>
<td>F/A Narrows Park</td>
<td>F/A</td>
<td>$ 15,000</td>
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</table>
REVISION OF SECTION 105
CONSTRUCTION DRAWINGS

Section 105 of the Standard Specifications is hereby revised for this project as follows:
Delete subsection 105.02(f).
Sections 107 and 208 of the Standard Specifications are hereby revised for this project as follows:

In subsection 107.25(b) 6 delete the second paragraph and replace it with the following:
The Contractor shall record the location of potential pollutants on the plans. Descriptions of the potential pollutants shall be submitted for approval.

Delete subsection 107.25 (c) and replace with the following:
A Colorado Discharge Permit System Stormwater Construction Permit (CDPS-SCP) is not required for this project.

The Engineer will coordinate with CDOT Maintenance and the Region Water Pollution Control Manager prior to initiating partial or final acceptance of the stormwater construction work, including soil conditioning and seeding for permanent stabilization. Unsatisfactory and incomplete erosion control work will be identified in this walkthrough, and will be summarized by the Engineer in a punch list.

In subsection 208.01 delete the third paragraph and replace with 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, as approved.

In subsection 208.03, delete the first and second paragraphs.
Delete subsection 208.03 (b) and replace with the following:
(b) Erosion and Sediment Control Activities. The erosion and sediment control activities shall be included in the weekly meeting update. The project schedule shall specifically indicate the sequence of clearing and grubbing, earthwork operations, and construction of temporary and permanent erosion control features and stabilization. The project schedule shall include erosion and sediment control work for haul roads, borrow pits, storage and asphalt or concrete batch sites, and all areas within the project limits. If during construction the Contractor proposes changes which would affect the Contract's BMPs, the Contractor shall propose revised BMPs to the Engineer for approval in writing.

In subsection 208.03, delete (c), (d) and (e) and replace with the following:
(c) SWMP Administrator. The Contractor shall assign to the project an individual to serve in the capacity of SWMP Administrator. These duties may be assumed by the Superintendent. The SWMP Administrator shall have working knowledge and experience in construction and have satisfactorily completed the Transportation Erosion Control Supervisor Certification (TECS) training provided by the Department. Proof that this requirement has been met shall be submitted to the Engineer prior to start of work. The SWMP Administrator shall:

(1) Ensure the Method Statement for Containing Pollutant Byproducts is implemented.
(2) Review the construction site for compliance with CDOT specifications and the SWMP.
(3) Follow all stormwater requirements and inspections for other applicable State and local agencies unless a waiver or other agreement has been made.
(4) Immediately report to the Contractor and Engineer the following instances of noncompliance:
(i) Noncompliance which may endanger health or the environment.
(ii) Spills or discharge of hazardous substance or oil which may cause pollution of waters of the State.
(iii) Discharge of stormwater which may cause an exceedance of a water quality standard.
(iv) Discharge of pollutants that have occurred on site.

(d) Documentation Available on the Project. The SWMP Administrator shall provide the following Contract documents and references. They shall be made available for reference in one location on the project during construction. The documents shall be kept in a single notebook:

(1) SWMP Plan Sheets – Notes, tabulation, sequence of major activities, area of disturbance, existing soil data, existing vegetation percent cover, potential pollutant sources, receiving water, non-stormwater discharges, and environmental impacts.

(2) SWMP Site Maps (if included in the original Contract) - Construction site boundaries ground surface disturbance, limits of cut and fill, flow arrows, structural BMPs, non-structural BMPs, springs, streams, wetlands, and surface water. Also included on the map are the protection of trees, shrubs, and cultural resources.

(3) BMP Details not in Standard Plans M-208-1, M-216-1 and M-615-1.

(4) Spill Response Plan – Reports of reportable spills submitted to CDPHE.

(5) List and Evaluation of Potential Pollutants – List of potential pollutants as described in subsection 107.25 and approved Method Statement for Containing Pollutant Byproducts.

(6) All Project Environmental Permits-All Project environmental permits and associated applications and certifications, including, Senate Bill 40, USACE 404, dewatering and all other permits applicable to the project, including any separate CDPS-SCP obtained by the Contractor for staging area on private property, asphalt or concrete plant, etc.

(7) Form 105 and all other correspondence related to water quality which are issued by the Engineer for Contractor’s lack of compliance.

The Contractor shall incorporate the documents and reports and have Items 1-7 available for the first working day of the project. None of these documents are required to be updated during the course of the project.

(e) Weekly Meetings. The Contractor shall conduct weekly meetings with the Engineer to discuss the following:

(1) Requirements of the SWMP.
(2) Problems that may have arisen in implementing the site specific SWMP or maintaining BMPs.
(3) Unresolved issues from inspections and concerns from last inspection
(4) BMPs that are to be installed, removed, modified, or maintained.
(5) Planned activities that will affect stormwater in order to proactively phase BMPs.
(6) Recalcitrant inspection findings.

Delete the third paragraph in subsection 208.04 and replace with the following:
New inlets and culverts shall be protected during their construction. Appropriate protection of each culvert and inlet shall be installed immediately after installation of the culvert or inlet. When riprap is called for at the outlet of a culvert, it shall be installed within 24 hours of completion of each pipe. The Contractor shall remove sediment, millings, debris, and other pollutants from within the newly constructed drainage system prior to use, at the Contractor’s expense. All removed sediment shall be disposed of in accordance with all applicable regulations.

Delete the first paragraph in subsection 208.04 (f) and replace with the following:

(f) Maintenance. 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 until final acceptance of the project. BMPs shall be continuously maintained in accordance with good engineering, hydrologic 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. When possible, the Contractor shall use equipment with an operator rather than labor alone to remove the sediment.

In subsection 208.06, first paragraph, delete the first sentence.

In subsection 208.07, second paragraph, delete the second sentence.

In subsection 208.08, delete the first paragraph and replace with the following:

208.08 Limits of Disturbance. The Contractor shall limit construction activities to those areas within the limits of disturbance 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, on-site batch plants, haul roads or work access, and all other action which would disturb existing conditions. Off road staging areas must be pre-approved by the Engineer, unless otherwise designated in the Contract. Construction activities beyond the limits of disturbance due to Contractor negligence shall be restored to the original condition by the Contractor at the Contractor’s expense.

In subsection 208.09, delete the first and second paragraph and replace with the following:

208.09 Failure to Perform Erosion Control. Failure to implement the Stormwater Management Plan is a violation of the Colorado Water Quality Control Act. Penalties may be assessed to the Contractor by the appropriate agencies. Penalties will be assessed by the Department as liquidated damages for failure to meet the contract documents. All fines assessed to the Department for the Contractor’s failure to implement the SWMP will be deducted from monies due the Contractor.

The Contractor will be subject to liquidated damages for incidents of failure to perform erosion control as required by the Contract. Liquidated damages will be applied for failure to comply with these specifications, including the following:

1. Failure of the Contractor to implement necessary actions required by the Engineer as required by subsection 208.03(b) and (c)
2. Failure to construct or implement erosion control or spill containment measures required by the Contract, or failure to construct or implement them in accordance with the Contractor’s schedule.
3. Failure to stabilize disturbed areas as required by subsections 208.04(e) and 208.08.
4. Failure to replace or perform maintenance on an erosion control feature after notice from the Engineer to replace or perform maintenance as required by subsection 208.04(f).
5. Failure to remove and dispose of sediment from BMPs as required.
(6) Failure to install and properly utilize a concrete washout structure for containing washout from concrete placement operations.

(7) Failure to perform permanent stabilization as required by subsection 208.04 (e).

(8) Failure to prevent discharges not composed entirely of stormwater from leaving the construction site.

(9) Failure to provide the survey of Permanent Water Quality BMPs when required on the project in accordance with subsection 208.10.

In subsection 208.09, delete the 10th paragraph, and replace with the following:

If the Contractor’s corrective action plan and schedule are not submitted and approved within 96 hours of the initial notice, the Engineer will issue a Stop Work Order and have an on-site meeting with the Superintendent, SWMP Administrator, and the Superintendent’s supervisor. This meeting will also be attended by the Resident Engineer, the Region Water Pollution Control Manager, and the Region Program Engineer. This meeting will identify and document needed corrective actions and a schedule for completion. If after the meeting, the unacceptable work is not remedied within the schedule as agreed to in the meeting, the Engineer will take action to effect compliance with the Contract and these specifications by utilizing CDOT Maintenance personnel or other non-Contractor forces and deduct the cost from any monies due or to become due to the Contractor pursuant to subsection 105.17. Delays due to these Stop Work Orders shall be considered non-excusable. The Stop Work Order shall be in place until the project is in compliance.

In subsection 208.10, delete (c) and replace with the following:

(c) Locations of Temporary BMPs. The Engineer will identify locations where modification, cleaning or removal of temporary BMPs are required, and will provide these in writing to the Contractor.

In subsection 208.11, delete the first paragraph.

In subsection 208.12, delete the third, fourth and fifth paragraphs and replace with the following:

SWMP Administrator duties on projects having less than one acre of total disturbed area will not be measured and paid for separately but shall be included in the work. The Erosion Control Management Pay Item will not apply to this project.
REVISION OF SECTION 108
LIQUIDATED DAMAGES

Section 108 of the Standard Specifications is hereby revised for this project as follows:

In subsection 108.09 delete the schedule of liquidated damages and replace with the following:

<table>
<thead>
<tr>
<th>Original Contract Amount ($)</th>
<th>Liquidated Damages per Calendar Day ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From More Than</td>
<td>To And Including</td>
</tr>
<tr>
<td>0</td>
<td>500,000</td>
</tr>
<tr>
<td>500,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>1,000,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>2,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>5,000,000</td>
<td>15,000,000</td>
</tr>
<tr>
<td>15,000,000</td>
<td>-----</td>
</tr>
</tbody>
</table>
Section 109 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 109.06(e) and replace with the following:

(e) **Prompt Payment.** The Contractor shall pay subcontractors and suppliers for all work which has been satisfactorily completed within seven calendar days after receiving payment for that work from the Local Public Agency (LPA). For the purpose of this section only, work shall be considered satisfactorily complete when the LPA has made payment for the work. The Contractor shall include in all subcontracts a provision that this requirement for prompt payment to subcontractors and suppliers must be included in all subcontracts at every tier. The Contractor shall ensure that all subcontractors and suppliers at every tier are promptly paid. If the Contractor or its subcontractors fail to comply with this provision, the Engineer will not authorize further progress payment for work performed directly by the Contractor or the noncompliant subcontractor until the required payments have been made. The Engineer will continue to authorize progress payments for work performed by compliant subcontractors.

Delete subsection 109.06(f)5 and replace with the following:

5. In determining whether satisfactory completion has been achieved, the Contractor may require the subcontractor to provide documentation such as certifications and releases, showing that all laborers, lower-tiered subcontractors, suppliers of material and equipment, and others involved in the subcontractor’s work have been paid in full. The Contractor may also require any documentation from the subcontractor that is required by the subcontract or by the Contract between the Contractor and the LPA or by law such as affidavits of wages paid, material acceptance certifications and releases from applicable governmental agencies to the extent that they relate to the subcontractor’s work.

Delete subsection 109.06(f)8 and replace with the following:

8. If additional quantities of a particular item of work are required at a later date after final measurement has been made, the Contractor shall perform this work in accordance with Contract requirements and at unit bid prices.

For this subsection only, satisfactory completion of all work described on CDOT Form No. 205 is when all tasks called for in the subcontract as amended by changes directed by the Engineer have been accomplished and documented as required by the LPA.

The requirements stated above do not apply to retainage withheld by the LPA from monies earned by the Contractor. The LPA will continue to process the release of that retainage based upon the completion date of the project as defined in the Commencement and Completion of Work special provision.

Delete subsection 109.06(f)9 and replace with the following:

9. If during the prosecution of the project a portion of the work is partially accepted in accordance with subsection 105.21(a), the Contractor shall release all subcontractors’ retainage on the portion of the partially accepted work performed by subcontractors. Prior to the LPA releasing the Contractor’s retainage on work that has been partially accepted in accordance with subsection 105.21(a), the Contractor shall submit to the Engineer a certified statement for each subcontractor that has participated in the partially accepted work. The statement shall certify that the subcontractor has been paid in full for its portion of the partially accepted work including release of the subcontractor’s retainage. The statement shall include the signature of a legally responsible official for the Contractor, and the signature of a legally responsible official for the subcontractor.

Delete subsection 109.06(g) and replace with the following:

(g) **Good Cause Exception.** If the Contractor has “good cause” to delay or withhold a subcontractor’s progress payment, the Contractor shall notify the LPA and the subcontractor in writing within seven calendar days after receiving payment from the LPA. The notification shall specify the amount being withheld and provide adequate justification for withholding the payment. The notice shall also clearly state what conditions the
subcontractor must meet to receive payment. “Good cause” shall include but not be limited to the failure of the subcontractor to make timely submission of required paperwork.

Delete subsection 109.06(h) and replace with the following:

(h) **Monthly Reporting.** On a monthly basis, the Contractor shall submit the Form 1418, Monthly Payment Report, to the Engineer along with the project schedule updates, in accordance with subsections 108.03(g). Failure to submit a complete and accurate Form 1418 shall be grounds for CDOT to withhold subsequent payments or retainage from the Contractor.
REVISION OF SECTION 206
REMOVABILITY MODULUS

Section 206 of the Standard Specifications is hereby revised for this project as follows:
In subsection 206.02 (a) 2., delete the third paragraph and replace with the following

Removability Modulus, RM, is calculated as follows:

\[
RM = \frac{W^{1.5} \times 104 \times C^{0.5}}{10^6}
\]

where:  \( W \) = unit weight (pcf)
\( C \) = 28-day compressive strength (psi)
Sections 206 and 703 of the Standard Specifications are hereby revised for this project as follows:

Subsection 206.02 (a) 1 shall include the following:

The Contractor may also substitute Structure Backfill (Class 3) as backfill for culverts and sewer pipes.

In subsection 206.02(a) 2, first paragraph, delete the last sentence and replace with the following:

Flash fill is a rapid setting Flow-Fill that may be used when approved by the Engineer and will be tested, accepted, and paid for as Flow-Fill.

Subsection 206.02(a) 2 shall include the following as the last paragraph:

The Contractor shall submit a Process Control (PC) Plan with the mix design to the Engineer. The PC plan shall address the batching, mixing, testing and placement of the structure backfill (Flow-Fill).

In subsection 206.03 delete the 17th paragraph and replace with the following:

When Flash Fill is used, it shall be batched with a volumetric mixing truck. Volumetric mixing trucks used to produce Flow-Fill and Flash Fill shall have a computer batching system, capable of producing the approved mix design and printing tickets. For Flash Fill, the batch weights of cement and/or fly ash per cubic yard shall be within 2 percent of the mix design batch weights and the batch weight of water per cubic yard shall be within 2 percent of the mix design batch weight.

Prior to the placement of structure backfill (Flow-Fill), the Contractor shall sample the structure backfill (Flow-Fill) in accordance with ASTM D5971. The Contractor shall test the structure backfill (Flow-Fill) unit weight in accordance with ASTM D6023. For Flash Fill, the measured unit weight shall be within 5.0 percent or 5.0 pounds per cubic foot, whichever is larger, of the approved mix design unit weight. The Contractor shall test the structure backfill (Flow-Fill) for slump in accordance with ASTM C143 or flow consistency according to ASTM D6103.

Subsection 703.08 shall include the following:

(c) Class 3 structure backfill shall be a sandy gravel and meet the following gradation:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Mass Percent Passing Square Mesh Sieves</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5mm (3/8&quot;)</td>
<td>90 to 100</td>
</tr>
<tr>
<td>4.75mm (#4)</td>
<td>45 to 80</td>
</tr>
<tr>
<td>0.075mm (#200)</td>
<td>5 to 12</td>
</tr>
</tbody>
</table>
Section 208 of the Standard Specifications is hereby revised for this project as follows:

In subsection 208.03(c) delete the first paragraph and replace it with the following:

Erosion Control Management (ECM). Erosion Control Management for this project shall consist of Erosion Control Inspection and the SWMP Administration. All ECM staff shall have working knowledge and experience in construction, and shall have successfully completed the Transportation Erosion Control Supervisory Certificate Training (TECS) as provided by the Department. The Superintendent will not be permitted to serve in an ECM role. The Erosion Control Inspector (ECI) and the SWMP Administrator may be the same person in projects involving less than 40 acres of disturbed area.

In subsection 208.03(c)1 delete the first paragraph and replace it with the following:

SWMP Administration. The SWMP shall be maintained by a SWMP Administrator. In the case of a project requiring only one TECS, the SWMP Administrator may also be the ECI for the project. The name of the SWMP Administrator shall be recorded on the SWMP Section 3. B. The SWMP Administrator shall have full responsibility to maintain and update the SWMP and identify to the Superintendent critical action items needed to conform to the CDPS-SCP as follows:

In subsection 208.03(c)2 delete the first paragraph and replace it with the following:

One ECI is required for every 40 acres of total disturbed area which is currently receiving temporary and interim stabilization measures as defined in subsection 208.04 (e). An ECI shall not be responsible for more than 40 acres in the project. Accepted permanent stabilization methods as defined in subsection 208.04 (e) will not be included in the 40 acres.

In subsection 208.03(d)1 delete item (1) and replace it with the following:

(1) SWMP Site Maps and Plan Title Sheet - Construction site boundaries, ground surface disturbance, limits of cut and fill, flow arrows, structural BMPs, non-structural BMPs, Springs, Streams, Wetlands and surface water. Also included on the sheets is the protection of trees, shrubs and cultural resources.

In subsection 208.05(n), in the list of requirements for pre-fabricated concrete washout structures, delete item (2) and replace it with the following:

(2) Structure shall be located 50 horizontal feet away from State waters, and shall be confined so that no potential pollutants will enter State waters and other sensitive areas are as defined in the Contract. Locations shall be as approved by the Engineer. The site shall signed as “Concrete Washout”.

In subsection 208.11 delete the first paragraph and replace it with the following:

Erosion Control Management will be measured as the actual number of days of ECM work performed, regardless of the number of personnel required for SWMP Administration and Erosion Control Inspection, including erosion control inspections, documentation, meeting participation, SWMP Administration, and the preparation of the SWMP notebook. If the combined hours of SWMP Administration and Erosion Control Inspection is four hours or less in a day, the work will be measured as ½ day. If the combined hours of SWMP Administration and Erosion Control Inspection is more than four hours in a day, the work will be measured as one day. Total combined hours of ECM work exceeding eight hours in a day will still be paid as one day.
Section 213 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 213.02 (f)(1) and replace with the following:

1) Spray-on Mulch Blanket (Type 1) shall be a hydraulically applied matrix containing organic fibers, water soluble cross-linked tackifier, and reinforcing biodegradable fibers. The reinforcing fibers shall completely break down and not release any metals or toxins (compostable). Mulch Blanket (Type 1) shall conform to the following:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Requirement</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Fibers</td>
<td>71% Min.</td>
<td>ASTM D2974</td>
</tr>
<tr>
<td>Cross linked Tackifiers</td>
<td>10% ± 2% Min.</td>
<td></td>
</tr>
<tr>
<td>Reinforcing Fibers</td>
<td>2.5% Min.</td>
<td></td>
</tr>
<tr>
<td>Biodegradability</td>
<td>100%</td>
<td>ASTM D5338</td>
</tr>
<tr>
<td>Ground Cover at Application Rate</td>
<td>90% Min.</td>
<td>ASTM D6567</td>
</tr>
<tr>
<td>Functional Longevity</td>
<td>12 Months Min.</td>
<td></td>
</tr>
<tr>
<td>Cure Time</td>
<td>&lt; 8 hours</td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application Rate</td>
<td>3000 lbs./acre</td>
<td></td>
</tr>
</tbody>
</table>

The organic fiber shall not contain lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, or chlorine bleach. The organic fibers and reinforcing fibers cannot be produced from sawdust, cardboard, paper, or paper by-products.
REVISION OF SECTION 250
ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT

Section 250 of the Standard Specifications is hereby revised for this project as follows:

In subsection 250.03 delete the second paragraph and replace with the following:

This project may be in the vicinity of property associated with petroleum products, heavy metal based paint, landfill, buried foundations, abandoned utility lines, industrial area or other sites which can yield hazardous substances or produce dangerous gases. These hazardous substances or gases can migrate within or into the construction area and could create hazardous conditions. The Contractor shall use appropriate methods to reduce and control known landfill, industrial gases, and visible emissions from asbestos encounters and hazardous substances which exist or migrate into the construction area. The Contractor shall follow CDOT’s Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure, dated October 18, 2016 for proper handling of asbestos-contaminated soil, and follow all applicable Solid and Hazardous Waste Regulations for proper handling of soils encountered that contain any other substance mentioned above.

In subsection 250.03(a) delete the second paragraph and replace with the following:

When regulated asbestos contaminated soil (RACS) is present or is suspected to be present on or near a project, the HSO shall have knowledge of RACS regulations. The HSO shall meet the minimum training and medical surveillance requirements established by the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) for a supervisory Site Safety Official per 29 CFR 1962.65. The Contractor shall furnish documentation to the Engineer, at the preconstruction conference, that the above requirements have been met. Certification as an Asbestos Building Inspector in accordance with subsection 250.03 (b) is recommended.

In subsection 250.03(b) delete the first and second paragraphs and replace with the following:

The Contractor shall designate a monitoring technician to be responsible for monitoring of hazardous substances during work on the project. The MT shall have a minimum of two years of actual field experience in assessment and remediation of hazardous substances that may be encountered during highway construction projects. When asbestos is present or is suspected to be present on or near a project, the MT shall have additional 40 hours experience in RACS project management and certification as an Asbestos Building Inspector in accordance with the Colorado Air Quality Control Commission Regulation No. 8 Part B. The MT shall be experienced in the operation of monitoring devices, identifying substances based upon experience and observation, and field sampling (for testing) of all media that may be found on the site. Completion of the 40 hour hazardous waste and 8 hour supervisory training required by OSHA and U.S. EPA rules and regulations which complies with the accreditation criteria under the provisions of the proposed 29 CFR 1910.121 is required prior to beginning work. The Contractor shall furnish documentation at the Preconstruction Conference that demonstrates these requirements have been met.

The MT shall be equipped with the following:

(1) Communication equipment as required in subsection 250.03(d) 2.A. and a vehicle.

(2) Monitoring and detection equipment for flammable gas, oxygen sufficiency, toxic gas, radiological screening and other hazards. This includes, as required, a combustible gas indicator, flame ionization or photo ionization detector, oxygen meter, radiation monitor with Geiger Mueller detector and other foreseeable equipment.

(3) Depth gauging equipment, sampling equipment and sampling containers.
(4) Personal protective equipment (levels C and D) when required.

Delete subsection 250.07 and replace with the following:

250.07 Regulated Asbestos Contaminated Soils (RACS) Management. Environmental documents or plans listed in the special provisions should include known or suspected locations that could involve encounters with RACS during excavation and other soil disturbing construction activities. Unexpected discoveries of RACS may occur during excavation and soil disturbing construction activities. RACS shall be properly managed or remediated, in accordance with subsection 250.07(a).

All asbestos related activities shall be performed by CDPHE certified asbestos professionals, contractors, or consultants. Certifications are issued by the CDPHE, Indoor Air Quality Unit. A Colorado Certified Asbestos Building Inspector shall manage the assessment and disposal of RACS and other ACM. The Indoor Air Quality Unit within CDPHE is the only unit that certifies such professionals. The Contactor shall furnish a copy of the certification to the Engineer.

(a) Regulatory Compliance. RACS management is governed by 6 CCR 1007-2, Section 5.5, which includes and references regulatory compliance with Colorado Air Quality Control Commission Regulation No. 8 Part B-Asbestos. Colorado Regulation No. 8 governs all asbestos activities, demolition, permitting, and certification of Certified Asbestos Professionals in the State of Colorado. The Contractor shall conform to all current regulations, policy directives, or both, issued by the CDPHE, and the Department.

(b) Asbestos Management and Visual Inspections. Asbestos management shall be performed by a CDPHE certified asbestos building inspector. All inspections of the area of asbestos contaminated soil removal shall be performed by a CDPHE certified Asbestos Building Inspector to determine what, if any, controls must be instituted to allow future activity in the excavation area.

(c) Permitting and Notification. The CDPHE requires notification of any soil disturbing activity where asbestos is known, suspected, or discovered. A 24-hour notification to CDPHE is required after any soil disturbing activity of an unplanned asbestos discovery. A 10 working day notification to CDPHE is required prior to any soil disturbing activity in an area with known or potential RACS. Removal of asbestos-containing material on a facility component, that is located on or in soil that will be disturbed, with asbestos quantities above the following trigger levels shall be permitted and abated in accordance with the requirements of Colorado Air Quality Control Commission Regulation No. 8 (5 CCR 1001-10, Part B):

1. 260 linear feet on pipes,
2. 160 square feet on other surfaces, or
3. The volume of a 55-gallon drum.

All permit applications shall be submitted to the Colorado Department of Public Health and Environment a minimum of 10 days prior to start of work for approval. The permit application and notification shall be submitted simultaneously. A CDPHE certified General Abatement Contractor shall obtain all required State and local permits and shall be responsible for all associated fees. Permit application, notification, and waiver request forms shall be submitted to:

Colorado Department of Public Health and Environment Permit Coordinator/APCD - SS - B1 4300 Cherry Creek Drive South Denver, CO 80246-1530 Phone: (303) 692-3100 Fax: (303) 782-0278

Application and waiver forms are available on the CDPHE website: asbestos@state.co.us

(d) CDOT's Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure, dated October 18, 2016. Asbestos contaminated soil shall be managed in accordance with 6 CCR 1007-2, Part 1, Section 5.5, Management of RACS... Regulations apply only upon unexpected discovery of asbestos materials during excavation and soil disturbing activities on construction projects, or when asbestos
107

encounters are expected during construction. The Contractor shall comply with procedures detailed in the CDPHE’s Management of Regulated Asbestos Contaminated Soil Regulation and CDOT’s CDPHE approved Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure, dated October 18, 2016, including the following minimum requirements:

(1) Immediate actions and implementation of interim controls to prevent visible emissions, exposure, and asbestos contamination in surrounding areas.

(2) Soil Characterization.

(3) Training required for all personnel involved in excavation and other soil disturbing activities, once asbestos is encountered during construction or on projects where asbestos encounters are expected. Asbestos Awareness Training shall be given by a qualified and certified Asbestos Building Inspector with a minimum of six months experience inspecting asbestos contaminated soil.

(4) Assessment for the presence and extent, within the proposed area of disturbance, of asbestos discoveries, whether expected or unexpected, by a CDPHE Certified Asbestos Building Inspector.

(5) Investigation and sampling required for risk assessment and management. Investigation, if required, shall be conducted by a CDPHE Certified Asbestos Building Inspector.

(6) Risk assessment and determinations for further management or abatement.
   
   (i) Risk assessment and determinations must be made by a CDPHE Certified Asbestos Building Inspector, and coordinated with the Engineer.

   (ii) Soil remediation is not necessarily required, depending on the circumstances.

(7) Submit CDPHE 24-hour Notification form for unexpected RACS discovery included in Attachment 1 of the CDOT Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure.

(8) Submit CDPHE 10-day Notification form for planned RACS management included in Attachment 1 of the CDOT Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure.

(e) Risk Assessment and Determinations for Further Management Or Remediation. Risk assessment and determinations for further management or remediation must be closely coordinated with the Project Engineer and Project Manager of the Statewide Management Plan.
Section 502 of the Standard Specifications is hereby revised as follows:

Delete subsection 502.08 and replace with the following:

**502.08 Extensions and Splices.** There will not be a limit placed on the number of splices allowed for steel piles; however, payment will be limited to two splices per pile. Commercial splices may be used if approved by the Engineer.

Full length piles shall be used unless otherwise approved.

All welded splices shall be made by using a prequalified joint design in accordance with AWS D1.1. The CJP design shall include beam copes (weld access holes) through the web of the pile at the junctures with the flanges. Copes shall be made in accordance with AWS D1.1, Section 5.17. If backing is used it shall be in accordance with AWS D1.1, removal of the backing after welding is not required.

Personnel performing quality assurance (QA) and process control (PC) welding inspection shall be qualified as a certified welding inspector (CWI) in accordance with AWS D1.1, Chapter 6. All welded pile splices shall be made in accordance with a written Welding Procedure Specification (WPS), as submitted by the Contractor. The WPS shall be reviewed, and approved by the Contractor's CWI, prior to welding any piling splices on the project. The WPS shall list all essential variables of the process in accordance with AWS D1.1. The WPS shall be available for review during welding operations.

All welded splices shall be made with low hydrogen electrodes. The Contractor shall adhere to the low hydrogen practice for electrodes in accordance with AWS D1.1.

All cuts at splices shall be made normal to the longitudinal axis of the pile. The cut-off portion may be driven to start the next pile or it may be welded to previously driven piles to provide the necessary extension length.

All welders shall be currently qualified in accordance with AWS D1.1. Welder qualifications shall be approved by the Contractor's CWI prior to the start of welding.

The Contractor shall provide an AWS Certified Welding Inspector (CWI) on the project site for PC. The CWI shall inspect all production stages of the welded splice, including assembly of the splice joint, during welding, and after welding to ensure that workmanship and materials meet the requirements of the contract documents. Prior to CDOT acceptance, the CWI shall submit documentation that all material and workmanship is in accordance with the Contract. The CWI shall keep a record of all findings, which shall be available to the Engineer at any time.

The first two CJP welded splices shall be ultrasonically tested (UT) for acceptance in accordance with Table 6.3 of AWS D1.1. If both of the UT tested CJP splices are determined to be acceptable, no further UT testing of CJP splices will be required. If either of the first two UT tested CJP splices are not acceptable, UT testing of CJP splices shall continue until two consecutive tests are acceptable.

Personnel performing UT testing of CJP splices shall be qualified in accordance with the current edition of the American Society for Nondestructive Testing Practice No. SNT-TC-1A. Individuals who perform nondestructive testing shall be qualified for NDT Level II.

In subsection 502.12, delete the fifth paragraph and replace with the following:
Partial Joint Penetration (PJP) welded splices for piles, when specified in the plans, will be measured as the additional length of pile, each splice considered as 3 linear feet.

CJP welded splices, when specified in the plans, will be the actual number completed and accepted.

Subsection 502.13 shall include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Joint Penetration (CJP) Splice</td>
<td>Each</td>
</tr>
</tbody>
</table>

All costs for providing Certified Welding Inspector (CWI) services for Partial Joint Penetration (PJP) welded splices will not be measured and paid for separately, but shall be included in the additional measured length of pile in accordance with subsection 502.12.

Payment for completing the CJP splices shall include the CJP splice, Ultrasonic Testing, Certified Welding Inspector (CWI) services and all required documentation.
Section 703 of the Standard Specifications is hereby revised for this project as follows:

In subsection 703.03, delete Table 703-2 and replace with the following:

**Table 703-2**

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Mass Percent Passing Square Mesh Sieves</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LL not greater than 35</td>
</tr>
<tr>
<td></td>
<td>Class 1</td>
</tr>
<tr>
<td>150mm (6&quot;)</td>
<td>100</td>
</tr>
<tr>
<td>100mm (4&quot;)</td>
<td>100</td>
</tr>
<tr>
<td>75mm (3&quot;)</td>
<td>95-100</td>
</tr>
<tr>
<td>60mm (2 ½&quot;)</td>
<td>100</td>
</tr>
<tr>
<td>50mm (2&quot;)</td>
<td>95-100</td>
</tr>
<tr>
<td>37.5mm (1.5&quot;)</td>
<td>90-100</td>
</tr>
<tr>
<td>25mm (1&quot;)</td>
<td></td>
</tr>
<tr>
<td>19mm (3/4&quot;)</td>
<td></td>
</tr>
<tr>
<td>4.75mm (#4)</td>
<td>30-65</td>
</tr>
<tr>
<td>2.36mm (#8)</td>
<td></td>
</tr>
<tr>
<td>75 mm (#200)</td>
<td>3-15</td>
</tr>
</tbody>
</table>

NOTE: Class 3 material shall consist of bank or pit run material.
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General

II. Nondiscrimination

III. Nonsegregated Facilities

IV. Davis-Bacon and Related Act Provisions

V. Contract Work Hours and Safety Standards Act Provisions

VI. Subletting or Assigning the Contract

VII. Safety: Accident Prevention

VIII. False Statements Concerning Highway Projects

IX. Implementation of Clean Air Act and Federal Water Pollution Control Act

X. Compliance with Governmentwide Suspension and Debarment Requirements

XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

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, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) 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 provisions of the Americans with 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 contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program 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.

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 minorities and women.

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 minorities and women 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 minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women 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, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such 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 its 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 their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are
applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

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. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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 employees who are minorities and women 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 good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 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 good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith 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 contracting agency 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 referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill any vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualified minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. 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 contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. 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. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT’s U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. 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 the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours 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; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting 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 FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor
will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt.

Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of or in connection with the aid construction project shall be paid at a rate at least equal to the minimum wage rate prescribed by the wage determination. The contractor must ensure that the employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where a wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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. The wage determination (including any additional classification and wage rates contained in the wage determination). The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every 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 Administrator or the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The 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.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

   (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
   (ii) The classification is utilized in the area by the construction industry; and
   (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), 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 Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The 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.

(3) In the event the contractor, the laborers or mechanics to be employed in the 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. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as 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.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor 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, so 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 contracting agency 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.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents 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. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. 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). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each 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 Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
(3) 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 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, 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 FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action 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.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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 U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or 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 Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen 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 worker 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 on 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 is performing construction on a project in a location other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

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 journeymen 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 determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

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 U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman 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 wage rate on the wage determination which provides for less than full fringe benefits for apprentices. 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.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor 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. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
d. 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 program. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 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 U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).


V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor and any subcontractor responsible therefor shall be liable for the 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 or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cease to be withheld, from any moneys 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, 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 (2) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.
VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

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 contracting agency. 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 635.116).

   a. The term “perform work with its own organization” refers to workers employed or leased 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 or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

      (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
      (2) the prime contractor remains responsible for the quality of the work of the leased employees;
      (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
      (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

   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 or propose 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 VI 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 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 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 contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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 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. 3704).

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. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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, Form FHWA-1022 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.

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 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification — First Tier Participants:
   a. By signing and submitting this proposal, the prospective first tier 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 first tier 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 first tier 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 contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
   d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier 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," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
   f. The prospective first 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 entering into this transaction.
   g. The prospective first tier 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 Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.
   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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.
i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective 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.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

   (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

   (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment 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;

   (3) 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 (a)(2) of this certification; and

   (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective 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 Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

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,” “participant,” “person,” “principal,” and “voluntarily excluded,” as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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 exceeding the $25,000 threshold.

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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.

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 Participants:

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 participating in covered transactions 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.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is 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 its bid or proposal that the participant 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.
ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

   a. To the extent that qualified persons regularly residing in the area are not available.

   b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

   c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor’s permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
A. AFFIRMATIVE ACTION REQUIREMENTS

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)


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**

<table>
<thead>
<tr>
<th>Economic Area</th>
<th>Standard Metropolitan Statistical Area (SMSA)</th>
<th>Counties Involved</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>157 (Denver)</td>
<td>2080 Denver-Boulder</td>
<td>Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, Jefferson..........................</td>
<td>13.8%</td>
</tr>
<tr>
<td></td>
<td>2670 Fort Collins</td>
<td>Larimer</td>
<td>6.9%</td>
</tr>
<tr>
<td></td>
<td>3060 Greeley</td>
<td>Weld</td>
<td>13.1%</td>
</tr>
<tr>
<td></td>
<td>Non SMSA Counties</td>
<td>Cheyenne, Clear Creek, Elbert, Grand, Kit Carson, Logan, Morgan, Park, Phillips, Sedgwick, Summit, Washington &amp; Yuma........</td>
<td>12.8%</td>
</tr>
<tr>
<td>158 (Colo. Spgs. - Pueblo)</td>
<td>1720 Colorado Springs</td>
<td>El Paso, Teller</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td>6560 Pueblo</td>
<td>Pueblo</td>
<td>27.5%</td>
</tr>
<tr>
<td></td>
<td>Non SMSA Counties</td>
<td>Alamosa, Baca, Bent, Chaffee, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Lake, Las Animas, Lincoln, Mineral, Otero, Prowers, Rio Grande, Saguache........</td>
<td>19.0%</td>
</tr>
<tr>
<td>159 (Grand Junction)</td>
<td>Non SMSA</td>
<td>Archuleta, Delta, Dolores, Eagle, Garfield, Gunnison, Hinsdale, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel</td>
<td>10.2%</td>
</tr>
<tr>
<td>156 (Cheyenne - Casper WY)</td>
<td>Non SMSA</td>
<td>Jackson County, Colorado</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

**GOALS AND TIMETABLES FOR FEMALE UTILIZATION**

Until Further Notice......................................................................................................6.9% -- Statewide
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 form 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.
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;
   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.
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 he 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.
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.
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).
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, color, religion, sex, 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, 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.
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 Contract 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 thorough 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.
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.