El Paso County
Deer Creek Road Improvements
EPC Project No.: 17-067-90
PPRTA No.: 202112

May 22, 2026

EL PASO COUNTY
PROJECT SPECIAL PROVISIONS

DEER CREEK ROADWAY IMPROVEMENTS

The 2023 Standard Specifications for Road and Bridge Construction controls construction of this project. The following special provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications and plans.

PROJECT SPECIAL PROVISIONS

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PROJECT SPECIAL PROVISIONS

STANDARD SPECIAL PROVISIONS

Description	Date	Pages
Revision of Section 105 – Control of Work	(October 1, 2023)	1
Revision of Section 109 – Asphalt Cement Cost Adjustment (Asphalt Cement Paid Separately)	(October 1, 2023)	3
Revision of Section 207 – Topsoil	(October 1, 2023)	9
Revision of Section 601 – Concrete Acceptance	(April 9, 2024)	4
Revision of Section 613 – Lighting Pull Box	(April 2, 2024)	5

NOTICE TO BIDDERS

The below referenced individuals are the only representatives of the Department with authority to provide any information, clarification, or interpretation regarding the plans, specifications, and any other contract documents or requirements.

El Paso County Engineer:	Joshua Palmer (719) 520-6806
El Paso County Project Engineer:	John Lantz (719) 208-5913

COMMENCEMENT AND COMPLETION OF WORK (WORKING DAY)

The Contractor shall commence work under the Contract on or before the 15th day following Contract execution or the 30th day following the date of award, whichever comes later, unless such time for beginning the work is changed by the Chief Engineer in the "Notice to Proceed." The Contractor shall complete all work 250 Working Days in accordance with the "Notice to Proceed."

If materials stockpiling begins before the beginning date, contract time will not be charged for the stockpiling effort. Stockpiling of materials before the beginning date is subject to the Engineer's approval. If such approval is given, stockpiled material will be paid for in accordance with Sections 109 and 626.

Asphalt paving shall not be performed between October 15 and April 15 unless otherwise approved by the Engineer. As temperatures allow, paving outside this window can be accomplished if requested by the Contractor in writing and approved by the Engineer in writing.

REVISION OF SECTION 101
DEFINITIONS AND TERMS

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

Subsection 101.01 shall include the following:

EPC	El Paso County

Subsection 101.02 is revised as follows:
Contract Modification Order: In addition to the definition given in the "CDOT Standard Specifications", the term "Contract Modification Order" shall also include and be synonymous with the term "Change Order".

Project Engineer: This term shall mean the El Paso County Engineer, El Paso County Department of Public Works or designated representative.

Subsection 101.02 shall include the following:

Chief Engineer: shall mean the El Paso County Engineer or designated representative.

County or EPC: shall mean El Paso County, Colorado.

Department: shall mean El Paso County, Colorado, Department of Public Works, Engineering Division.

Department of Transportation: shall mean El Paso County, Department of Public Works, Engineering Division.

CDOT Resident Engineer: shall mean the County Engineer, El Paso County, Colorado or designated representative.

Division: shall mean the El Paso County Department of Public Works, Engineering Division.

Engineer: shall mean the County Engineer, El Paso County, Colorado, or designated representative.

Owner: The term "OWNER" shall refer to the El Paso County Department of Public Works, acting through and on behalf of the El Paso County Board of County Commissioners.

Regional Transportation Director: shall mean the El Paso County Department of Public Works, Engineering Division.

Staff Construction Engineer: shall mean the County Engineer, El Paso County, Colorado, or designated representative.

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REVISION OF SECTION 101
DEFINITIONS AND TERMS

State, State of Colorado, or State Department of Transportation or CDOT: shall mean El Paso County, Colorado (where applicable).

REVISION OF SECTION 102
BIDDING REQUIREMENTS AND CONDITIONS

Section 102 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 102.01 Prequalification of Bidders.

Subsection 102.05 shall include the following:

3D modeling data is available in Land XML and dwg formats. Available 3D modeling data will consist of survey files and design model files.

The County does not warrant the 3D modeling data, and this information is not considered to be part of the Contract. If bidders use the 3D modeling data in preparing a proposal or planning and prosecuting the Work, it is used at their own risk, and bidders are responsible for all conclusions, deductions, and inferences drawn from the 3D modeling data.

REVISION OF SECTION 103
AWARD AND EXECUTION OF CONTRACT

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

Add Subsection 103.05 Contract Duration

The contract will remain open until all Work has been completed and accepted by the County, all permit requirements have been met and all permits have been closed, including but not limited to, the El Paso County Work in the ROW Permit, Erosion & Stormwater Quality Control Permit (ESQCP) and Colorado Discharge Permit System Construction Stormwater Discharge Permit (CDPS-SDP). If agreed upon by the Contractor and the Engineer, the project may be deemed substantially complete, and retainage may be released prior to closing permits, but the Contractor will remain responsible for meeting all permit requirements, including but not limited to, inspections, maintenance, and additional Work as approved by the Engineer, until the permits have been closed. All permits shall remain open until closure is agreed upon by the Contractor and the Engineer.

REVISION OF SECTIONS 104 AND 105
PAVEMENT SURFACE COURSE MAINTENANCE

Sections 104 and 105 of the Standard Specifications are hereby revised for this project as follows:

In subsection 104.04(a), the second paragraph shall be deleted and replaced with the following:

Maintenance requirements will not be paid for separately but shall be included in the Work.

Subsection 105.19 shall include the following:

The Contractor shall be responsible for timely response to complete all surface course maintenance for portions of the roadway that are included in the contract Work within the project limits, including 50 feet of the approach to project and any detour routes, as required to complete the Work. The Contractor will provide snow removal for portions of the roadway that are included in the contract Work within the project limits as required to complete the Work. These services shall be available upon notice, and provided for at all times, including holidays and seasonal no Work periods. The Contractor shall provide these services beginning when time count starts for the project through final acceptance. The Contractor shall submit a Pavement Surface Course Maintenance Plan (PSCMP) to the Engineer for acceptance prior to opening the onsite detours to traffic. The PSCMP shall include, but will not be limited to, the following:

(1) Source of materials to be used for pavement surface course repairs (PSCR).
(2) Type of materials to be used for PSCR.
(3) Equipment available to use for PSCR.
(4) Labor, including names and phone numbers, to perform PSCR.
(5) Response Time. The Contractor and the traffic control supervisor (TCS) shall respond to the project site within two hours of notification.
(6) Traffic Control. The Contractor shall perform traffic control as required until completion of the PSCR.
(7) Pavement Marking. Full compliance pavement markings shall be in place on all PSCRs prior to opening to traffic.

The Contractor shall complete pavement surface course maintenance in accordance with the PSCMP. To implement the PSCMP, the Contractor shall develop and submit a method for handling repairs (MHR) for each different PSCR that shows the Contractor's proposed construction methods consistent with the PSCMP. Each proposed MHR will be approved in writing by the Engineer before the PSCR will be allowed to begin.

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REVISION OF SECTIONS 104 AND 105
PAVEMENT SURFACE COURSE MAINTENANCE

PSCRs shall be completed in a timely manner in accordance with the approved PSCMP. Unless otherwise approved, PSCRs shall be completed within 24 hours of notification.

Pavement surface course maintenance and snow removal as described above will not be paid for separately but will be included in the Work.

REVISION OF SECTION 105
AS-CONSTRUCTED DRAWINGS

Subsection 105.02(b) shall include the following:

The Contractor shall coordinate with the Project Inspector to supply the Engineer upon completion, an as-constructed set of drawings showing the locations of items that were changed during construction and any other pertinent information that altered from the construction bid set plans. The changes will be "red-lined" and agreed upon by the Contractor and the Engineer. Costs associated with the as-constructed plans shall be included in the Work.

REVISION OF SECTION 107
STORMWATER CONSTRUCTION PERMIT

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

Subsection 107.25(c) replace the first sentence with the following:

The Colorado Discharge Permit System Stormwater Construction Permit (CDPS-SCP) shall be obtained by the Contractor.

REVISION OF SECTION 107
RIGHT-OF-WAY RESTRICTIONS

Section 107 of the Standard Special Provisions is hereby revised for this project as follows: Subsection 107.19 shall include the following: The County has signed Memorandums of Agreement for all properties; final possession process is ongoing. While the County does not anticipate impacts to the project, any property delay with impacts to the Notice to Proceed and schedule will be relayed during the bid process.

Project Exceptions		
Ownership	**Owner Name**	**Anticipated Possession Date**
RW-1	Stemberg Investments LLC	21 JUL 2026
TE-1	Stemberg Investments LLC	21 JUL 2026
PE-2	Base Camp Road LLC	21 JUL 2026
TE-2	Base Camp Road LLC	21 JUL 2026
PE-3	Lynn M Rogers	21 JUL 2026
PE-3A	Lynn M Rogers	21 Jul 2026
TE-3	Lynn M Rogers	21 JUL 2026
TE-4	DKR Property LLC	21 JUL 2026
PE-7	1845DCP LLC	21 JUL 2026
PE-7A	1845DCP LLC	21 JUL 2026
TE-7	1845DCP LLC	21 JUL 2026
TE-7A	1845DCP LLC	21 JUL 2026
RW-8	Woodmoor Water & Sanitation District No. 1	21 JUL 2026
TE-8	Woodmoor Water & Sanitation District No. 1	21 JUL 2026
RW-9	Lewis-Palmer School District 38	21 JUL 2026
PE-9	Lewis-Palmer School District 38	21 JUL 2026
PE-9A	Lewis-Palmer School District 38	21 JUL 2026
TE-9	Lewis-Palmer School District 38	21 JUL 2026
TE-9A	Lewis-Palmer School District 38	21 JUL 2026

TE-9B	Lewis-Palmer School District 38	21 JUL 2026
TE-10	Spurlark II LLC	21 JUL 2026
TE-10A	Spurlark LLC	21 JUL 2026
TE-11	PT Crystal Vally LLC	21 JUL 2026
PE-12	DKR Property LLC	21 JUL 2026
TE-12	DKR Property LLC	21 JUL 2026
RW-13	Ascent Church	21 JUL 2026
PE-13	Ascent Church	21 JUL 2026
PE-13A	Ascent Church	21 JUL 2026
TE-13	Ascent Church	21 JUL 2026
TE-13A	Ascent Church	21 JUL 2026
TE-14	Lake Woodmoor Holdings LLC	21 JUL 2026
PE-15	Nathan Johnson & Jessica Johnson	21 JUL 2026
TE-15	Nathan Johnson & Jessica Johnson	21 JUL 2026

When bidding, the Contractor is advised that the Contractor shall not enter the Parcels identified above prior to receiving a final clearance.

The County has signed Memorandums of Agreement for all properties; final possession process is ongoing. While the County does not anticipate impacts to the project, any property delay with impacts to the Notice to Proceed and schedule will be relayed during the bid process.

REVISION OF SECTION 107
LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

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

Subsection 107.02 shall include the following:

Unless otherwise specified, the Contractor shall procure all permits and licenses; pay all charges, fees, and taxes, including permits procured for this project by others; and give all notices necessary and incidental to the due and lawful prosecution of the Work. The costs of these permits will not be paid for separately but shall be included in the Work. Contractor provided permits shall include, but are not limited to:

- Construction Dewatering Permit (CDPHE) (as applicable)
- Construction Activity Permit (El Paso County Health Department)
- Erosion & Stormwater Quality Control Permit (ESQCP) (El Paso County). Prior to issuing the ESQCP, the Contractor will need to submit the following:
  - Drainage Report (provided by Engineer of Record)
  - ESQCP Application
  - Signed PBMP Applicability Form (provided by Engineer of Record)
  - Signed GEC Plans (Provided by Engineer of Record)
  - Signed GEC Checklist (Provided by Engineer of Record)
  - Signed SWMP Checklist (Provided by Engineer of Record)
  - Spill Prevention and Response Plan (part of SWMP)
- COR400000 Stormwater Discharge Permit (CDPS-SDP) (CDPHE)
- Work in the ROW Permit (El Paso County)

The County has obtained the following permits:

- Floodplain Development Permit (Regional Building Department) (obtained by EPC)
- 404 Permit (USACE)

The Contractor shall comply with all permit provisions and requirements. The costs of these permits will not be paid for separately but shall be included in the Work.

Subsection 107.06 (d) Competent Persons shall include the following:

(20) Traffic Control
(21) Erosion Control

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REVISION OF SECTION 107
LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Subsection 107.07 shall include the following:

All construction activities shall be completed Monday through Friday during daytime hours between 7:00 am and 5:00 pm. Weekend or nighttime construction Work will be considered provided that the Contractor submits a request a minimum of four (4) Working days prior to the weekend activities and two (2) weeks prior to nighttime activities. The submittal shall include a noise mitigation plan identifying the measures to be implemented by the Contractor to mitigate construction noise. Noise mitigation measures will not be measured and paid for separately but shall be included in the Work.

Subsection 107.12 shall include the following:

The Contractor shall protect all existing vegetation (including trees, shrubs, ground covers, grasses, wetlands & riparian) in the project area, except for that vegetation, which must be removed to accommodate construction of the project and perform environmental mitigation, as shown on the plans.

The Contractor shall perform all the Work in such a manner that the least environmental damage will result. All questionable areas or items shall be brought to the attention of the Engineer for approval prior to removal or any damaging activity.

Subsection 107.25 (b) 6, shall include the following:

Excavation for construction of the box culvert may require dewatering. The Contractor shall secure applicable permits and shall submit to the Engineer their proposed dewatering plan and methods in accordance with regulatory and permit requirements. It is not anticipated that any contaminated groundwater will be encountered at this site, however dewatering operations shall be monitored to ensure any evidence of contamination does not exist.

Dewatering operations, including infiltration ponds (if required) shall be included in the cost of the Work. Costs associated with analytical Work and disposal of contaminated groundwater, if encountered, will be paid for as Force Account under Minor Contract Revisions.

Delete subsection 107.25 (b) 13 and replace with the following:

Pollutant byproducts of construction, such as concrete, asphalt, solids, sludges, pollutants removed in the course of treatment of wastewater, excavation or excess fill material, and material from sediment traps shall be handled, stockpiled, and disposed of in a manner that prevents entry into State waters, including wetlands. Removal of concrete waste and

washout water from mixer trucks, concrete finishing tools, concrete saw, and all concrete material removed during construction operations or cleaning shall be performed in a manner that prevents waste material from entering State waters and shall not leave the site as surface runoff. A minimum of ten days prior to the start of the construction activity, the Contractor shall submit in writing a Method Statement for Containing Pollutant Byproducts to the Engineer for approval.

Delete subsection 107.25 (c) and replace with the following:

(c) *Stormwater Construction Permits.* A Colorado Discharge Permit System Construction Stormwater Discharge Permit (CDPS-SDP) will be obtained from CDPHE by the General Contractor. The Contractor shall coordinate with El Paso County (EPC) to become the Operator permittee of the permit upon award of the Contract.

An Erosion & Stormwater Quality Control Permit (ESQCP) will be obtained from El Paso County by the General Contractor. A Stormwater Management Plan (SWMP) and, SWMP Checklist (provided by the Contractor) and Grading and Erosion Control (GEC) Plan, GEC Checklist, PBMP Applicability Form, and Drainage Report/Letter (if applicable) (provided by the Engineer of Record and included in the IFB package) are required to be submitted to EPC for review at least ten (10) calendar days prior to requested issuing of the ESQCP. EPC will not certify the project as Owner for the CDPS-SDP until the ESQCP is issued by the County.

No Work shall begin until the CDPS-SDP permit with Owner and Operator has been approved by CDPHE. A copy of the permit shall be placed in the project SWMP.

The Contractor is legally required to obtain all other permits associated with specific activities within or outside of the right of way, such as borrow pits, concrete or asphalt plant sites, waste disposal sites, or other facilities. Staging areas within a quarter mile, but not within EPC right of way shall be considered a common plan of development and permits for these facilities require permitting in the Contractor's name as Owner and Operator. These permits include local agency, federal, or other stormwater permits. The Contractor shall consult with the Engineer and contact the CDPHE or other appropriate federal, state, or local agency to determine the need for any permit.

To initiate final acceptance of the stormwater construction Work (including seeding and planting required for erosion control), the Contractor shall request in writing, a Stormwater Completion Walkthrough. The Engineer will set up the walkthrough. It will include the Engineer or designated representative, EPC Stormwater Inspector, Superintendent or

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REVISION OF SECTION 107
LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

designated representative, Stormwater Management Plan (SWMP) Administrator, and an EPC Maintenance representative. Unsatisfactory and incomplete stormwater and sediment/erosion control Work will be identified in this walkthrough and will be summarized by the Engineer in a punch list.

The completed action items associated with the corrective Work will be shown as completed on the punch list. Upon completion of all items shown, the Contractor shall notify the Engineer. Upon written agreement that the punch list is completed from the Engineer, the Contractor shall submit a written request to EPC to terminate the ESQCP. Upon termination of the ESQCP, the Contractor shall request to terminate the CDPHE CDPS-SDP.

Until termination of the ESQCP has been approved by EPC and termination of the CDPS-SDP has been approved by the CDPHE, the Contractor shall continue to adhere to all permit requirements. Requirements shall include erosion control inspections, control measure installation, control measure maintenance, control measure repair including seeded areas, and temporary control measure removal. All documentation shall be submitted to the Engineer and placed in the SWMP.

All costs associated with the Contractor applying for, holding, and terminating the ESQCP and CDPS-SDP will not be measured and paid for separately but shall be included in the Work in accordance with subsection 107.02.

Subsection 107.251 shall be added for this project as follows:

107.251 Noxious Weed Mediation. The Contractor shall ensure that all equipment moved onto the Project is free of soil, seeds, vegetative matter, or other debris that could contain or hold noxious weed seed. The Engineer may inspect all equipment prior to it being placed into service and may reject equipment that does not meet this specification.

REVISION OF SECTION 108
PROSECUTION AND PROGRESS

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

Subsection 108.02 shall be replaced with the following:

The Contractor shall not commence Work prior to the issuance of a Notice to Proceed. Construction of the project is anticipated to begin in the Summer of 2026. The “Notice to Proceed” will be issued to allow the awarded Contractor to order materials in advance of construction as required. The “Notice to Proceed” will specify the date on which contract time commences.

Subsection 108.03 shall include the following:

A CPM schedule will be required. Schedules submitted for this bid shall use the assumed start date.

Salient features to be shown on the Contractor's progress schedule are:

- Construction Surveying
- Mobilization
- Temporary Erosion Control
- Clearing and Grubbing
- Construct stormwater elements
- Base Course Construction
- Asphalt (HMA) Pavement
- Topsoil, Seeding and Mulching / Soil Retention blankets.

The Contractor shall submit an electronic copy and .pdf copy of the critical path schedule and method statement to the Engineer each month, 10 days prior to the estimate cutoff date. Payment of the estimate will be released after review and acceptance of the updated schedule and method statement. Minimum review time will be 10 days. The electronic copy shall be submitted on Microsoft Project, 2018 version or newer. A large-scale schedule shall be posted in the construction trailer at the beginning of the project and updated periodically, as directed by the Engineer.

REVISION OF SECTION 202
REMOVAL OF TREE AND REOVAL OF ASPHALT MAT

Section 202 of the CDOT Standard Specifications is hereby revised for this project to include the following:

Subsection 202.02 General. Shall include the following:

Trees designated for removal shall include removing all branches, stems, trunks, stumps and roots to at least 2 feet below the surface of the final slope line. Debris shall become the property of the Contractor.

Subsection 202.11 shall include the following:

Removal of tree will be measured as each tree removed as designated in the plans. All other vegetation that must be removed, including trees not specifically identified, shall be included in the cost of item 201 Clearing and Grubbing.

The removal of asphalt mat will be measured in square yards of pavement removed, regardless of depth and location. The cutting of asphalt mat to a neat line where removal of asphalt mat will abut a new pavement will not be paid for separately but shall be included in the Work. The Contractor shall perform necessary investigations required to determine the thickness and location of existing asphalt pavements designated for removal.

Subsection 202.12 shall include the following:

Pay Item	Pay Unit
Removal of Tree	Each
Removal of Asphalt Mat	Square Yard

Payment for removal of tree shall be full compensation for all labor, equipment and materials required to complete the Work. Allowances for additional trees beyond the quantity in the plans shall not be made. All other trees to be removed shall be included in the cost of item 201 Clearing and Grubbing.

REVISION OF SECTION 202
REMOVAL OF PIPE

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

Subsection 202.11 shall include the following:

Removal of Pipe will be measured by the linear foot and shall include pipe of any material and at any depth with a diameter of 2 inches or larger as shown in plans.

Subsection 202.12 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Removal of Pipe	Linear Foot

REVISION OF SECTION 202
REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

Subsection 202.12 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Removal of Headwall	Each
Removal of Riprap	Square Yard
Removal of Fire Hydrant	Each
Removal of End Section	Each
Removal of Wall (Landscape)	Linear Foot
Removal of Wall (Boulder)	Lump Sum
Removal of Curb and Gutter	Linear Foot
Removal of Concrete Pavement	Square Yard
Removal of Ground Sign	Each
Removal of Sign Panel	Each
Removal of Fence	Linear Foot

REVISION OF SECTION 203
POTHOLING

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

Subsection 203.05, item (f), shall include the following:

Pothole hours shall be approved by the Engineer prior to commencing the work.

REVISION OF SECTION 206
EXCAVATION AND BACKFILL FOR PIPES

Section 206 of the Standard Specifications is hereby revised for this project as follows:

Delete subsection 206.06(b) and replace with the following:

(b) For pipes, structure excavation, structure backfill and earthwork required in accordance with Standard Plans M-206-1 with for all pipes, pipe extensions, end sections, and inlets will not be measured but shall be included in the work.

Subsection 206.07 shall include the following:

Structure Excavation, Structure Backfill (Class 1) and (Class 2) and earthwork required in accordance with Standard Plans M-206-1 for all pipes, pipe extensions, end sections, and inlets will not be measured and paid for separately but shall be included in the work.

REVISION OF SECTION 209
WATERING AND DUST PALLIATIVES

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

In subsection 209.05, Delete the last six paragraphs and replace with the following:

Magnesium chloride shall not be used as a dust palliative.

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 and replace with the following:

Dust palliative will not be measured and paid for separately but shall be included in the Work.

REVISION OF SECTION 210
RESET SIGN PANEL (SPECIAL)

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

Subsection 210.111, Sign Panel shall hereby be added as follows:

Reset Sign Panel (Special) shall consist of removal of the existing private sign structure including posts and foundations, providing a new foundation or footing, adjustments of posts as required, and providing all electrical equipment and materials necessary to restore the installation to service at the new location. There are two private signs to be reset.

The first private sign is located along westbound Deer Creek Road just east of Base Camp Road and is shown in a photograph on this page. The sign is affixed to a boulder. The boulder and sign shall remain intact. Location of the reset sign shall be coordinated with the property owner. Coordination with the property owner for this work shall not be paid separately but will be included in the work.

The second private sign is located along westbound Deer Creek Road just west of Microscope Way and is shown in a photograph on this page. Location of the reset sign shall be coordinated with the property owner. Coordination with the property owner for this work shall not be paid separately but will be included in the work.

Subsection 210.13, Basis of Payment, shall include the following:

Pay Item	Pay Unit
Reset Sign Panel (Special)	Each

Reset Sign Panel (Special) shall be full compensation for all work and materials necessary to remove the existing sign, posts, and foundation including backfill and disposal, removal and protection of the signs and reinstallation in a new location, foundation, and repair or replacement of any components damaged by the work.

REVISION OF SECTION 210
VALVE BOX AND MANHOLE ADJUSTMENTS

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

Subsection 210.10 shall include the following:

The Contractor shall notify each utility company (Owner) prior to any construction that will involve the adjustment of its valve boxes or manholes.

Each Owner will mark all their valve boxes and manholes that will be involved in the specified construction area.

Prior to commencing construction, the Contractor shall coordinate and conduct, with the Engineer and each Owner, an inspection of all impacted manholes and valve boxes. The purpose of this inspection will be to account for all valve boxes and manholes involved in the construction and determine their accessibility and condition. The Contractor shall provide traffic control for this inspection and for the final inspection. The Contractor shall coordinate construction with the Owner to allow sufficient time for the Owner to make all necessary repairs to valve boxes and manholes before construction begins near the valve boxes and manholes. All parties shall agree on the condition of each valve box and manhole prior to construction.

The Contractor shall replace all valve box sections damaged or misplaced during construction with new valve box sections complying with the specifications and requirements of the Owner. The Contractor shall set each valve box to be adjusted so that it is ¼ inch to ½ inch below the final grade of the paved surface, or to the satisfaction of the Owner, and so that it is plumb over the operating nut of the valve.

The Contractor shall adjust all manholes that require adjustment with materials conforming to the specifications and requirements of the Owner. Some adjustments may require the addition, removal, or replacement of a manhole or cone section. If manhole adjustment requires a manhole cone or barrel section to be added, removed, or replaced, this work will not be considered "Adjust Manhole", but shall be performed in accordance with the Revision of Section 210 for “Modify Manhole".

The Contractor shall prevent tools, concrete, dirt, or debris of any kind from falling into the channel of the existing manhole. The Contractor shall clean or remove debris from the downstream storm and sanitary sewer that enters as a result of the Contractor’s work at the Contractor’s expense.

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REVISION OF SECTION 210
VALVE BOX AND MANHOLE ADJUSTMENTS

Prior to the final inspection, the Contractor shall thoroughly clean all valve boxes designated for cleaning.

The Contractor shall coordinate and conduct, with the Engineer and each Owner, a final inspection upon completion of construction. This inspection shall assure that all valve boxes

and manholes are in compliance with these requirements. The Engineer will obtain the Owner's written approval before accepting the work.

Subsection 210.12 shall include the following:

The quantity to be measured for "Adjust Manhole" shall be the actual number of manholes adjusted and restored to service, completed, and accepted. Interim adjustments (e.g., for pavement planing operations) will not be measured and paid separately from final adjustments.

The quantity to be measured for "Adjust Valve Box" shall be the actual number of valve boxes adjusted and restored to service, completed, and accepted. Interim adjustments (e.g., for pavement planing operations) will not be measured and paid separately from final adjustments.

Subsection 210.13 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Adjust Manhole	Each
Adjust Valve Box	Each

Adjustments that include adding, removing, or replacing a manhole cone or barrel section will be paid for under the Section 210 pay item, Modify Manhole.

REVISION OF SECTION 210
MODIFY MANHOLE

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

Subsection 210.01 shall include the following:

Modify manholes consists of raising existing manholes to the new grade lines established with construction of project improvements.

Subsection 210.02 shall include the following:

Modification of manholes shall be done in accordance with the details included in the plans and in conformance with the Standard Plans.

Subsection 210.12 shall include the following:

The quantity to be measured for “Modify Manhole” shall be the actual number of manholes modified and restored to service, completed, and accepted.

Subsection 210.13 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Modify Manhole	Each

“Modify Manhole” shall include all work required to remove portions of existing manholes to the top of the barrel, construct new barrel section, build new eccentric cones, grade rings or brick courses to the required height, add additional steps as required, and reset the manhole ring and cover to the finished grade. If the rings and covers are destroyed or in the opinion of the Engineer cannot be reused, new manhole rings and covers shall be provided and will not be paid for separately but shall be included in the cost of the work.

Structure excavation and structure backfill required for "Modify Manhole" will not be measured and paid for separately but shall be included in the work. Reinforcing steel, structural concrete, pre-cast barrel sections, eccentric cones, grade rings, brick courses, manhole rings and covers, as well as all other materials required to complete the item shall be included in the work.

REVISION OF SECTION 212
SEEDING

Section 212 of the Standard Specification is hereby revised as follows:

Subsection 212.02(a) of the Standard Specifications shall include:

Unless otherwise shown in the plans, all disturbed areas, including temporarily disturbed habitat areas, will be revegetated using the weed-free seed mix shown below. The wheat and oat seeds will be a sterile variety to prevent long-term establishment. Seed beds will be disked or raked prior to seeding, and tackifiers, straw, or wood mulch will be applied as needed to boost moisture holding capacity and minimize the risk of seed loss from wind.

Common Name	**Scientific Name**	**Pounds PLS/ac**
Sideoats Grama	*Bouteloua curtipendula* var. Vaughn	3.0
Blue Grama	*Bouteloua gracilis* var. Hachita	2.0
Little Bluestem	*Schizachyrium scoparium* var. Pastura	3.0
Western Wheatgrass	*Pascopyrum smithii* var. Arriba	6.0
Green Needlegrass	*Stipa viridula va. Lordom*	3.0
Junegrass	*Koeleria macrantha*	0.2
Switchgrass	*Panicum virgatum* 'Dacotah'	4.0
Purple Prairie Clover	*Ratibida Columnaris*	0.5
Prairie Coneflower	*Ratibida Columnifera*	0.3
Gaillardia	*Gaillardia Artistata*	1.0
Oats	*Avena Sativa*	3.0
Total Pounds of Pure Live Seed (PLS) LBS per Acre		**26.0**

Subsection 212.08 shall include:

Payment will be made under:

Pay Item	**Pay Unit**
Seeding (Native) Drill	Acre

REVISION OF SECTION 212
SEEDING (SPECIAL)

Section 212 is hereby revised for this project as follows:

DESCRIPTION

212.09 This work shall consist of furnishing and spreading fertilizers; soil preparation; furnishing and drilling or sowing seed; mulching the seeded Receiving Pervious Areas (RPAs) used as water quality treatment in accordance with these specifications, Mile High Flood District's Fact Sheet T-0, accepted horticultural practice, and in reasonably close conformity with the locations and details shown on the plans or as designated.

MATERIALS

212.10 Seed, Soil Conditioners, Fertilizer, and Mulching

(a) Seed. All seed materials for RPAs shall comply with the specifications set forth in section 212.02 (*a*) and 212.10 (*a*).

The mixture shall consist of species and rates as determined by a Registered Landscape Engineer provided by and paid for by the Contractor. Seed mix shall be submitted to County for approval prior to installation. Planting rates are expressed in terms of pure live seed (PLS). Select durable, dense, and drought tolerant grasses. Turf grasses such as Kentucky bluegrass are often selected due to these qualities. Dense native turf grasses may also be selected where a more natural look is desirable. Areas seeded and so maintained shall be protected against damage by vehicle and pedestrian traffic by the use of barriers and appropriate warning signs.

The Contractor shall be responsible for maintaining and irrigating all RPA seeded areas until a minimum of 80% vegetative cover is achieved. Irrigation application rates and schedules should be developed and adjusted throughout the establishment and growing season to meet the needs of the selected plant species.

(b) Soil Conditioners and Fertilizers. Contractor shall perform soil sampling and testing to verify NRCS Hydrologic Soil Group (HSG), and determine sand gradation and percent sand, silt, and clay for texture, and include agronomic tests for organic content, pH, salinity, and nutrients. Soil conditions must be characterized in order to select the most suitable soils for the RPA and determine appropriate amendments. Plot the percent sand, silt, and clay of each sample on a USDA soil triangle and use this to confirm soil texture and HSG. Table RR-2 and Figure RR-3 indicate HSG based on percent sand, silt and clay according to the NRCS National Engineering Handbook (USDA, 2009). Based on the results of onsite soil sampling

and testing, refer to Table RR-3 to select the most suitable soil from the site for use in the RPA.

Table RR-2. Percent Sand, Silt, and Clay for HSG A through D.

HSG Group	% Sand	% Clay	% Silt
A	> 90%	< 10%	0 % < A < 10%
B	50 % < B < 90%	10 % < B < 20%	10 % < B < 50%
C	< 50%	20 % < C < 40%	0 % < C < 100%
D	< 50%	> 40%	0 % < D < 60%

Table RR-3. Topsoil Suitability Criteria for RPA.

Soil Parameter	Suitable	Less Suitable	Marginal	Unsuitable
Electrical Conductivity (EC)	0-4	4-8	8-12	>12
Sodium Adsorption Ratio (SAR)	0-4	4-8	8-13	>13
Exchangeable Sodium % (ESP)	<15		15-20	>20
Saturation Percentage	25-50		20-25 and 50-80	<20 and >80
Calcium Carbonate Percentage	<10%		10-20%	>20%
pH	6.0-8.0	5.0-5.5 and 8.0-8.5	5.0-5.5 and 8.5-9.0	<5.0
Texture	sandy loam, loam	sandy clay loam, silt loam, well-aggregated silty clay loam and clay loam	sandy clay, loamy sand, silty clay,silt, clay (<60%), disggreagated silty clay loam and clay loam	sand, clay (>60%)
Coarse Fragments (gravels, cobbles, boulders)	<25%		25-35%	>35
Nitrate Nitrogen (as accelerant for weed growth)	<10 ppm	10-15 ppm	>15 ppm	
Organic Matter	>2%	1%-2%	<1%	

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REVISION OF SECTION 212
SEEDING (SPECIAL)

If on-site topsoil is suitable as determined by Table RR-3, strip, stockpile, and reuse it. If topsoil doesn't meet the criteria in Table RR-3, it will require amendments. Based on the onsite topsoil sampling and testing, use the most suitable topsoil from the site in the RPA.

Where topsoil was found to be less suitable refer to the recommendations of a Registered Landscape Engineer. If an imported source is considered, all the same sampling, testing, and remedial actions described herein for on-site soils should be undertaken for the proposed source of imported topsoil. Topsoil shall have a clay content less than 60%.

(c) Fertilizers. Fertilizers for RPAs shall comply with the standard specifications set forth in section 212.02 (*b*).

(d) Mulch. Mulch shall be in conformance of standard specifications set for in section 213.

CONSTRUCTION REQUIREMENTS

212.11 Seeding Seasons. Seeding requirements shall conform to standard specifications in section 212.03.

212.12 Seeding (Special). All seeded areas shall be irrigated.

(a) Soil Preparation. Slopes shall be free of clods, sticks, stones, debris, concrete, and asphalt more than 4 inches in any dimension and brought to the desired line and grade. In areas where topsoil is less than 12-inches, subgrade soils should be sampled and tested for salinity. Regardless of topsoil thickness, subgrade should be tilled to a depth of at least 18 inches below the finished ground surface.

(b) Fertilizing and Soil Conditioning. Before seeding, fertilizer, soil conditioner, or both shall be applied. The fertilizer and soil conditioner type and rate of application shall be determined by the Contractor and a Registered Landscape Engineer and approved by The County. Fertilizer shall be worked into the top 4 inches of soil at the rate specified. Biological nutrient, culture or humic acid-based material shall be applied in a uniform application onto the soil surface. Organic amendments shall be applied uniformly over the soil surface and incorporated into the top 6 inches of soil. No measurable quantity of organic amendment shall be present on the surface after incorporation.

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REVISION OF SECTION 212
SEEDING (SPECIAL)

(c) Seeding. Seeding shall be accomplished within 24 hours of tilling or scarifying to make special seed bed preparation unnecessary. The seeding mix and application rate shall be determined by the Contractor and a Registered Landscape Engineer and approved by The County. All slopes flatter than 2:1 shall be seeded by mechanical power drawn drills followed by packer wheels or drag chains. Mechanical power drawn drills shall have depth bands set to maintain a planting depth of at least 1/4 inch and shall be set to space the rows not more than 7 inches apart. Seed that is extremely small shall be sowed from a separate hopper adjusted to the proper rate of application.

If strips greater than 7 inches between the rows have been left unplanted or other areas skipped, the Engineer will require additional seeding at the Contractor's expense.

When requested by the Contractor and approved by The County, seeding may be accomplished by broadcast or hydraulic type seeders at twice the rate specified in the Contract at no additional cost to the project.

All seed sown by broadcast-type seeders shall be "raked in" or covered with soil to a depth of at least 1/4 inch. Broadcasting seed will be permitted only on small areas not accessible to machine methods.

Hydraulic seeding equipment and accessories shall conform to the equipment and accessories described in subsection 212.04(c).

Seeded areas damaged due to circumstances beyond the Contractor's control shall be repaired and reseeded as ordered. Payment for this corrective work, when ordered, shall be at the contract prices.

Multiple seeding operations shall be anticipated as portions of job are completed to take advantage of growing conditions and to comply with Section 208 and subsection 212.03.

(d) Mulch. Mulch shall be in conformance of standard specifications set for in section 213.

METHOD OF MEASUREMENT

212.13 The quantities of seeding (special) will not be measured but shall be the quantities designated in the Contract, except that 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. The quantity of seeding (special) shall include soil preparation, water, fertilizer, and seed, completed, and accepted. When soil conditioner is measured and paid for separately, it will be measured by the actual number of acres where soil conditioner is applied and will be paid for as Soil Conditioning. The Contractor shall furnish the Engineer with seed certifications and analysis, fertilizer analysis, and bag weight tickers before placing any seed or fertilizer. Any seed or fertilizer placed by the Contractor without the Engineer's approval will not be paid for. Measurement for acres will be by slope distances.

BASIS OF PAYMENT

202.14 The accepted quantities of seeding (special) 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:

Pay Item	Pay Unit
Seeding (Special)	Acre

Soil preparation, seed, fertilizer, and mulching will not be paid for separately but shall be included in the work.

Cost for adjusting or re-adjusting the seeding or fertilizing equipment will not be paid for separately but shall be included in the work.

Costs for adjusting or re-adjusting the mulching equipment will not be paid for separately but shall be included in the work.

Water for seeding, mulching will not be paid for separately but shall be included in the work.

SECTION 240
PROTECTION OF MIGRATORY 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 during construction.

MATERIAL AND CONSTRUCTION REQUIREMENTS

240.02 The Contractor shall schedule clearing and grubbing operations and work on structures to avoid taking (pursue, hunt, take, capture, or kill; attempt to take, capture, kill or possess) migratory birds protected by the Migratory Bird Treaty Act (MBTA). The Contractor shall retain a qualified wildlife biologist for this project. The wildlife biologist shall have a minimum of three years' experience conducting migratory bird surveys and implementing the requirements of the MBTA. 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 shall be submitted to the Engineer.

(a) *Vegetation Removal.* When possible, vegetation shall be cleared before 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 within the work limits for active migratory bird nests. The Contractor's wildlife biologist shall also survey for active migratory bird nests within 50 feet outside work limits. Contractor personnel shall enter areas outside 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 active 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 before the beginning of work in each area of tree and shrub removal or trimming. The survey shall be conducted for each phase of tree and 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 before 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 Contractor's biologist. This buffer dimension may be changed if determined appropriate by the Contractor's 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.

(b) *Work on structures*. The Contractor shall prosecute 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 prosecute the work on structures during the primary breeding season, April 1 through August 31, unless he takes the following actions:

(1) 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.

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

(3) 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 become 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 wildlife 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.

(c) *Taking of a Migratory Bird.* 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 migratory bird.

SECTION 240
PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

METHOD OF MEASUREMENT

240.03 Wildlife Biologist will be measured by the actual authorized number of hours a wildlife biologist is on site performing the required tasks.

Removal of nests will be measured by the actual number of man-hours spent removing inactive nests just prior to and during the breeding season, April 1 through August 31. During this period, the Contractor shall submit to the Engineer each week for approval a list of the workers who removed nests and the number of hours each one spent removing nests.

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.

Payment will be made under:

Pay Item	Pay Unit
Removal of Nests	Hour
Wildlife Biologist	Hour
Netting	Square Yard

Payment for 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).

Payment for Removal of Nests will be full compensation for all work and material required to complete the work.

Payment for netting will be full compensation for all work and material required to complete the item. Overlaps of netting will not be measured and paid for separately but shall be included in the work. Maintenance and replacement, removal, and disposal of netting will not be measured and paid for separately but shall be included in the work.

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SECTION 240
PROTECTION OF MIGRATORY BIRDS
BIOLOGICAL WORK PERFORMED BY THE CONTRACTOR'S BIOLOGIST

Clearing and grubbing will be measured and paid for per 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 per Section 202.

Fence (Plastic) will be measured and paid for per Section 607

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 6) as shown in subsection 703.03

The aggregate base course (Class 6) must have a resistance value of at least 78.

REVISION OF SECTION 401
PLANT MIX PAVEMENTS - GENERAL

Section 401 of the Standard Specifications is hereby revised for this project as follows:

Materials, construction requirements, method of payment, and basis of payment for plant mix pavements shall follow the requirements set forth in Version 6 of the *Pikes Peak Region Asphalt Paving Specifications* unless otherwise specified in these Special Provisions or following approval by the Engineer.

REVISION OF SECTION 403
ASPHALT PATCHING

Section 401 of the Standard Specifications is hereby revised for this project as follows:

Subsection 403.05 shall include the following:

Aggregate base course placed under hot mix asphalt patching areas shall not be measured and paid for separately but will be included in the work.

REVISION OF SECTION 403
HOT MIX ASPHALT

Section 403 of the Standard Specifications is hereby revised for this project as follows:

Subsection 403.02 shall include the following:

The design mix for hot mix asphalt shall conform to the *Pikes Peak Region Asphalt Paving Specifications*, Version 6 unless otherwise specified in these Project Special Provisions or following approval by the Engineer. The Contractor shall prepare a quality control plan outlining the steps taken to minimize segregation of HMA. This plan shall be submitted to the Engineer and approved prior to beginning the paving operations. If the Engineer determines that segregation is unacceptable, the paving shall stop, and the cause of segregation shall be corrected before paving operations will be allowed to resume.

The materials for hot mix asphalt shall conform to the requirements described in Version 6, Sections 2, 3, and 4 of the *Pikes Peak Region Asphalt Paving Specifications* unless otherwise specified in these Project Special Provisions or following approval by the Engineer.
Warm Mix Asphalt (WMA) may be allowed on this project in accordance with CP 59. Unique requirements for WMA design, production and acceptance testing shall be submitted and approved prior to any WMA production on the project. Delays to the project due to WMA submittal and review will be considered within the Contractor's control and will be non-excusable.

Subsection 403.03 shall include the following:

The construction requirements shall be as described in Version 5, Section 4 of the *Pikes Peak Region Asphalt Paving Specifications* unless otherwise specified in these Project Special Provisions or following approval by the Engineer.

The Contractor shall construct the Work such that all roadway pavement placed prior to the time paving operations end for the year, shall be completed to the full thickness required by the plans. The Contractor's Progress Schedule shall show the methods to be used to comply with this requirement.

Delete subsection 403.04 and replace with the following:

Hot mix asphalt will be measured as described in Version 6, Section 4 of the *Pikes Peak Region Asphalt Paving Specifications* unless otherwise specified in these Project Special Provisions or following approval by the Engineer.

Delete subsection 403.05 and replace with the following:

403.05 The accepted quantities of hot mix asphalt will be paid for in accordance with subsection 401.22, at the contract unit price per ton for the bituminous mixture.

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REVISION OF SECTION 403
HOT MIX ASPHALT

Payment will be made under:

Pay Item	Pay Unit
Hot Mix Asphalt (Grading SX)(75)(PG 64-28)	Ton
Hot Mix Asphalt (Grading S)(75)(PG 64-22)	Ton
Hot Mix Asphalt (Patching)(Asphalt)	Square Yard

Aggregate, asphalt recycling agent, asphalt cement, additives, hydrated lime, and all other Work and materials necessary to complete each hot mix asphalt item will not be paid for separately but shall be included in the unit price bid. When the pay item includes the PG binder grade, any change to the submitted mix design optimum asphalt cement content to establish production targets will not be measured and paid for separately but shall be included in the Work. No additional compensation will be considered or paid for any additional asphalt cement, plant modifications and additional personnel required to produce the HMA as a result in a change to the mix design asphalt cement content.

The accepted quantities of HMA pavement shall be paid for at the contract unit price for each pavement type and/or thickness listed in the bid schedule. The price will be full compensation, furnishing all materials, preparation, mixing, placing and compaction of these materials and for all labor, equipment, tools, safety edges, and incidentals necessary to complete the Work.

The Contractor should anticipate the asphalt cement increases typical of their mixes. Contractors bidding the project should anticipate this change and factor it into their unit price bid.

REVISION OF SECTION 405
HEATING AND SCARIFYING TREATMENT

Section 405 of the Standard Specifications is hereby revised for this project as follows:

Delete the first sentence of Subsection 405.03 and replace it with the following:

Weather and temperature limitations shall be as described in Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

REVISION OF SECTION 407
BITUMINOUS MATERIAL

Section 407 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 407.02 and replace it with the following:

407.02 Bituminous Material. The type and grade of bituminous material used for tack coating will meet the specifications described in Version 6 of the *Pikes Peak Region Asphalt Paving Specifications*. The bituminous material for prime coating shall meet the requirements of Section 702. The rejuvenating agent shall be accepted before loading into the distributor.

REVISION OF SECTION 504
MASONRY LANDSCAPE WALL (DRY STACK)

Section 504 of the Standard Specifications is hereby deleted and replaced with the following:

DESCRIPTION

504.01 This work consists of the design and construction of a block retaining wall to the line and grades shown on the plans.

MATERIAL AND CONSTRUCTION REQUIREMENTS

504.02 The Contractor shall choose a concrete block wall system and prepare a design stamped by a Professional Engineer registered in the State of Colorado. The wall system noted in the contract plans was selected to limit impacts to the existing Woodmoor WSD waterline located behind Wall 416. The contractor shall verify waterline location in the field prior to beginning work. If a different wall system is proposed by the Contractor, no portion of Wall 416, including soil reinforcement or excavation, may cover or encroach upon the existing waterline. With approval of the County, the Contractor may make slight modifications to the wall profile shown in the plans for the purpose of accommodating the selected wall system. The Contractor shall submit the design to the County for approval. Up to two weeks should be expected for completion of the County review. The Contractor's plan shall explain the proposed method of temporary shoring if shoring is required by design. County approval of the Contractor's plan shall not relieve the Contractor of full responsibility for damage and costs to repair utilities and other infrastructure caused by construction of the wall. See the Wall General Notes in the plans for additional information.

METHOD OF MEASUREMENT

504.03 Masonry Landscape Wall (Dry Stack) shall be measured by the square foot along the vertical plane of retained soil, excluding surface texture or batter, and shall be calculated as the product of the height of retained soil by the length of wall. Retained soil height shall be measured plumb from the top of finished ground at the front face of wall to the top of finish grade at back face of wall. Length of wall shall be measured along the top of finished ground at the front face of wall.

BASIS OF PAYMENT

504.04 The accepted quantities of Masonry Landscape Wall (Dry Stack) will be paid for at the contract unit price per square foot.

Payment will be made under:

Pay Item	Pay Unit
Masonry Landscape Wall (Dry Stack)	Square Foot

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REVISION OF SECTION 504
MASONRY LANDSCAPE WALL (DRY STACK)

Payment for Masonry Landscape Wall (Dry Stack) will be full compensation for all work and materials necessary to complete the item including existing waterline location, masonry units, mortar, steel, underdrain pipe and backfill material, structure excavation, subgrade preparation, structure backfill, grading, survey, leveling pad, drainage fill, temporary shoring including but not limited to shotcrete, protection of underground utilities and above-ground utility boxes designated for protection, and all costs related to design of the wall including design by a Professional Engineer, submission of calculations, plans, and specifications for review and approval, and revision of the design following County review.

REVISION OF SECTION 603
REINFORCED CONCRETE PIPE

Section 603 of the Standard Specifications is hereby revised for this project as follows:

Subsection 603.02 shall include the following:

Reinforced concrete pipe shall be manufactured from concrete that meets the requirements for severity of sulfate exposure Class II specified in subsection 601.04.

Subsection 603.13 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
___Inch Reinforced Concrete Pipe (Complete In Place)	Linear Foot
___Inch x ___Inch Reinforced Concrete Pipe Elliptical (Complete In Place)	Linear Foot

Delete the second to last paragraph in Subsection 603.13 beginning with, “Structure excavation and structure backfill will…”, and replace with the following:

Pay items designated as “Complete In Place” and reinforced concrete end sections shall include all work and materials to complete the item including, but not limited to: structure excavation, structure backfill, bedding material, earthwork, hauling, disposal of excavated material, shoring, compaction, joints, elbows, collars, sawing, pipe, and other appurtenances.

Structure excavation, structure backfill, and embankment are calculated using the method outlined in Section 206 and shown in Standard Plan M-206-1 and provided as “For Information Only” in the plans will not be paid separately but shall be included in the work.

For pay items not designated as “Complete In Place” or are not reinforced concrete end sections, structure excavation and structure backfill will be measured and paid for per Section 206 except that any void in the structure excavation prism created by the removal of pipe or box culvert will be excluded from measurement and payment of structure excavation.

REVISION OF SECTION 609
CURB & GUTTER

Section 609 of the Standard Specifications is hereby revised for this project as follows:

Subsection 609.06 shall include the following:

Curb (Median) (Special) shall be measured by the square yard along the horizonal plane of the lip of gutter to the expansion joint.

Subsection 609.07 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
EPC Curb and Gutter Type A	Linear Foot
EPC Curb and Gutter Type B	Linear Foot
Curb (Median) (Special)	Square Yard

REVISION OF SECTION 613
LIGHTING

Section 613 of the Standard Specifications is hereby revised for this project as follows:

Subsection 613.02 (b) is hereby revised as follows:

(b) Light Standard. A complete light standard includes the metal light pole, mast arm or arms, base or transformer base, approved breakaway device, grounding system, and all hardware. When a transformer base is not used, the pole shall have a handhole.

Subsection 613.02 (e) is hereby revised as follows:

(e) Luminaire. A complete luminaire includes the housing, lens, Light Emitting Diode (LED) board, dimming driver, slip-fitting clamp or approved manufacturer mounting, all necessary internal wiring, and 7 pin photoelectric control receptacle. Luminaires shall operate at 120 VAC (Volts Alternating Current), 60Hz.

Subsection 613.02 (f) is hereby deleted for this project.

Subsection 613.02 (i.4) is hereby revised as follows:

4. Fusible

Subsection 613.02 (k.3) is hereby revised as follows:

3. Light standard type (steel)

Subsection 613.02 (k.8) is hereby revised as follows:

8. Photoelectric control device(s)

Subsection 613.02 (n) is hereby deleted for this project.

In subsection 613.06 delete the fourth paragraph.

In subsection 613.07 delete the last paragraph.

Subsection 613.09 is hereby revised as follows:
Each meter power pedestal, and secondary service pedestal shall include:

1. Integrated load center/panel board,
2. Contactors,
3. A maintenance receptacle (optional),
4. A meter housing,
5. A photoelectric control,
6. A grounding electrode system with ground wells,
7. A NEMA 3R enclosure with all related components,
8. A NEMA 3R enclosure with all related components,
9. Connections to the power supply.

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REVISION OF SECTION 613
LIGHTING

Subsection 613.11 is hereby deleted for this project.

In subsection 613.13 delete the fourth paragraph and the eleventh paragraph.

Subsection 613.14 shall include the following:

Pay Item	Pay Unit
2 Inch Electrical Conduit	Linear Foot
Type Two Pull Box	Each
Type Three Pull Box	Each
Wiring	Lump Sum
Luminaire (LED) (6,000 Lumens)	Each
Light Standard Steel (25 Foot)	Each
Light Standard Anchor	Each
Transformer Base Aluminum	Each

All work necessary and incidental to the installation of the electrical conduit as shown in the plans will not be measured and paid for separately but shall be included in the work.

In subsection 613.14 delete the second paragraph and the third paragraph.

SECTION 621
DETOUR PAVEMENT

Section 621 is hereby added to the Standard Specifications for this project as follows:

DESCRIPTION

621.01 The Contractor shall provide a paved surface for all detours. This work consists of one or more courses of asphalt mixture constructed on a prepared foundation in accordance with these specifications and the specific requirements of the type under contract, and in conformity with the lines, grades, thicknesses, and typical cross sections shown on the plans or established.

MATERIALS

621.02 Materials for pavement shall be in accordance with Section 401.02.

621.03 Materials for aggregate base course shall be in accordance with Section 703.03.

CONSTRUCTION REQUIREMENTS

621.04 Construction requirements for pavement shall be in accordance with Sections 401.07 through 401.20. The Contractor shall submit a pavement section and mix design to the Engineer prior to placement. The pavement design shall contain a minimum of four inches of asphalt. The Contractor shall maintain the detour pavement for the entire period that it is open to the traveling public. Detour pavement shall be maintained in good operating condition devoid of potholes, uneven surfaces, and rutting. The Engineer may direct the Contractor to perform detour pavement maintenance or repairs if the pavement is deemed to be in poor condition.

621.05 Construction requirements for aggregate base course shall be in accordance with Sections 304.04 through 304.06. The pavement design shall contain a minimum of six inches of aggregate base course.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

621.06 Detour pavement will not be measured and paid for separately but shall be included in the cost of Temporary Traffic Control Devices Lump Sum. Detour pavement shall include asphalt, base course, embankment, blading, shaping, scarifying, compacting, finishing, temporary drainage, repairs, maintenance, and removal.

REVISION OF SECTION 625
CONSTRUCTION SURVEYING

Section 625 of the Standard Specifications is hereby revised for this project as follows:

Subsection 625.01 shall include the following:

The Contractor shall complete an as-constructed survey of the project. At a minimum, the following items shall be surveyed:

- Final earthwork grades
- Edge of asphalt
- Edge of shoulder
- End sections
- Limits of riprap
- Permanent erosion control measures

Subsection 625.04 shall include the following:

Many utility relocations for this project must be installed to avoid proposed project features. The Contractor shall coordinate relocation plan with utility owners which may require staking for utility relocations performed by utility owners or their contractors. Refer to the Utility Project Special Provisions and the project plans for detailed information on the planned relocations.

Subsection 625.13 shall include the following:

Payment for construction surveying shall include the work necessary to stake utility relocations for utility owners or their contractors.

REVISION OF SECTION 626
PUBLIC INFORMATION MANAGEMENT SUPPORT

Section 626 of the Standard Specifications is hereby revised for this project as follows:

DESCRIPTION

626.03 This work consists of providing Public Information Management Support to the Engineer and El Paso County for the duration of the project.

Anticipated communications issues on this project include:

(1) Traffic Advisories
(2) Project Updates
(3) Project Fliers

CONSTRUCTION REQUIREMENTS

626.04 General

(a) *Contractor Public Information Manager (PIM) Support Employee*. The Contractor shall designate one primary and one alternate project staff member to perform all activities associated with PIM support for this project. The Contractor's PIM support employee may be the Project Superintendent or have another dual role responsibility. Within ten days of the Notice to Proceed date or five days before the Pre-construction Conference, whichever is later, and at least 14 days before the start of PIM work the Contractor shall submit the name(s) and contact information for PIM support personnel to the Engineer.

(b) *Contractor PIM Support Employee Activities*. The PIM support duties are:

a. Project Meetings.

The Contractor PIM support employee shall participate in the weekly project meetings, discuss communication issues, and provide a status on the items in this specification.

b. Lane Closure Reporting.

i. Weekly Lane Closures.

The Contractor PIM support employee shall notify the Engineer one week in advance of all planned "no work" periods and planned lane closures for EPC to enter into the electronic reporting system for the upcoming work period, Sunday through Saturday, by Thursday at 12:00 P.M. The Engineer will approve the Lane Closure and Updates by Friday at 3:00 P.M.

ii. Real-Time Lane Closure Changes.

The Contractor PIM support employee shall notify the Engineer at least 24 hours in advance on approved Lane Closure Changes.

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REVISION OF SECTION 626
PUBLIC INFORMATION MANAGEMENT SUPPORT

c. Public Information Collateral.

The Engineer will develop a variety of Public Information Collateral to share project information for project milestones such as long-term closures or impactful construction activities. Collateral includes the following:

i. Photographs and Video Recordings.

The Contractor PIM support employee shall take digital photographs and video recordings at regular intervals and submit them to the Engineer. The Contractor PIM support employee may use a cell phone camera. Photographs and video recordings shall capture a variety of work activities and other areas of work as identified by the Contractor or the Engineer. Public Information Collateral may include these photographs and video recordings. The Contractor PIM support employee shall submit a minimum of two digital photographs or video recordings of the project activities and progress each month. Each photograph and video recording shall include the project number, project code, date, time, location and station or milepost, and name of the person taking the photograph or video recording.

ii. Traffic Advisories, Project Updates, and Project Fliers.

The Contractor PIM support employee shall assist the Engineer in the development of traffic advisories, project updates, and project fliers by providing information regarding traffic related impacts such as changes in accesses, changes in travel patterns, closures and schedule related changes that affect the duration of the project or traffic related impacts. Other information gathering may be requested by the Engineer for support.

d. Response Protocol to EPC and the Public.

The Contractor PIM support employee shall refer all public inquiries to the Engineer. When the Engineer is informed of a claim of personal injury or property damage from members of the public that is referred to the contractor or one of its subcontractors, the Contractor PIM support employee is responsible for ensuring timely response from the Contractor or one of its subcontractors.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

626.05 Public Information Management Support will not be measured and paid for separately but shall be included in the cost of the project.

REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications is hereby revised for this project as follows: Subsection 630.02, sixth and seventh paragraphs, including Table 630-1, shall be deleted and replaced with the following:

Retroreflective sheeting shall be Type IV for all signs.

Subsection 630.10 shall be revised to include the following:

The key elements of the Contractor's Method of Handling Traffic (MHT) are outlined in subsection 630.10(a). The components of the Traffic Control Plan (TCP) for this project are included in the following:

(1) Subsection 104.04 and Section 630 of the Specifications

(2) Standard Plan S-630-1, Traffic Controls for Highway Construction

(3) Standard Plan S-630-2, Barricades, Drums, Concrete Barriers (Temp), & Vertical Panels

(4) MUTCD Part 6 (2009 edition)

(5) Standard Highway Signs, 2012 Supplement as revised by the Colorado Supplement to the Standard Highway Signs, Latest Edition.

(6) Suggested Construction Phasing

The following documents shall control the preparation of the MHT Plans and are listed in the order of precedence:

(1) Plans, Specifications and Special Provisions for this project

(2) Manual on Uniform Traffic Control Devices (MUTCD)

(3) El Paso County Engineering Criteria Manual (latest version including revisions)

(4) Colorado Department of Transportation Standard Specifications (2021 edition)

(5) Colorado Department of Transportation M&S Standards (2021 edition and updates)

The Contractor shall submit, in writing, the proposed MHT for the initial phase of construction. When a different MHT is required for a subsequent construction phase, it must be submitted a minimum of one week prior to approval to start that phase. Quality Assurance (EPC) MHT review times will be five (5) days per submittal. The Contractor shall follow all requirements included in the TMP prior to implementing an MHT. All proposed MHTs shall be signed by the TCS and Contractor and shall be approved, in writing, by the Engineer. Approval of an MHT does not constitute approval to deploy traffic control devices.

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REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

Approval of the proposed MHT does not relieve the Contractor of liability specifically assigned to him/her under the Contract.

Traffic lanes through the construction area shall have a clear width of at least 11 feet per lane with 2 foot shoulders.

The Contractor shall install construction traffic control devices where they do not block or impede other existing traffic control devices.

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

The Contractor and subcontractors shall equip their construction vehicles with flashing amber lights. Flashing amber light bars on vehicles and equipment shall be visible from all directions.

The Contractor shall coordinate with property owners at least seven (7) days prior to any construction activities adjacent to or within easements on their property. The Contractor shall maintain access to all private driveways at all times, unless otherwise directed by the Engineer. The Contractor may negotiate temporary closures of access with individual property owners to facilitate various operations, such as paving. All closures shall have written property owner consent and shall be approved in advance by the Engineer. The cost of maintaining access will not be paid for separately but shall be included in the Work.

The Contractor shall develop an Access Maintenance Plan in coordination with, and based on the requirements of, the affected property owners and tenants, and submit it to the Engineer. This plan shall detail all barricades, ramps, signs, and temporary means of access required by the property owners or tenants. The Access Maintenance Plan for that property must be submitted and incorporated in the MHT five (5) working days prior to commencing any work which affects access to a property.

The Access Maintenance Plan shall include documentation of this coordination, including the approval signature of each affected owner or tenant. Should the Contractor be unable to obtain approval and signatures, documentation of the efforts made to obtain said approval and signatures must be submitted. All access shall be maintained on traversable surfaces approved by the Engineer.

The Contractor’s and/or subcontractors’ personnel, suppliers, etc. shall not access the Work areas by crossing roadways open to traffic unless proper traffic control is provided and approved by the Engineer. Suitable transportation to the Work site for personnel whose vehicles are parked off-site shall be provided by the Contractor.

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REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

All construction vehicle ingress/egress to the limits of the project shall be along approved routes. Prior to construction, the Contractor shall submit site access plans for approval to the Engineer. Direct access to the Work zone from the roadway shall only be permitted when no other approach is available and shall be properly controlled, with adequate auxiliary lanes and traffic control devices. Direct access from multiple, uncontrolled and informal access points shall be prohibited, unless otherwise approved by the Engineer.

Subsection 630.10(b) shall be deleted and replaced with the following:

(b) Transportation Operations Plan (TO). The Contractor shall provide a TO that includes at a minimum the following:

(1) Procedures to respond to traffic incidents that may occur in the activity area or Work zone required to restore normal project operations. Describe the interface between Fire and Rescue, Public Information, Hazmat, Law Enforcement by Jurisdiction, Courtesy Patrol Services (CSP), etc.

(2) Contact Lists: Agency Contact Lists, Traffic Control, El Paso County.

(3) Procedures for coordinating with traffic incident management partners including: The project TCS, construction superintendent, law enforcement, fire and rescue, emergency medical services, public information personnel to support the traffic incident management plan within the corridor.

(4) Alternative route information and other TO elements that may change during the course of the Work.

(5) Details of the process to review incidents for the purpose of identifying elements of the TCP needed to reduce the frequency and severity of such accidents if not included in the Project Safety Plan.

(6) A post incident evaluation report shall be completed by the Contractor and submitted to the Engineer.

(7) Procedures for these types of incidents if not included in the Project Safety Plan:

a. Traffic slowdowns, delays or road closures caused by third party traffic accidents within the corridor not associated with construction activities.
b. Traffic slowdowns and delays of 30, 45, and 60 minutes caused by construction traffic ingress and egress or nightly lane closures
c. 3rd party property damage as a result of construction activity

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REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

Failure to follow the approved public information, traffic control plans or correct traffic control safety deficiencies identified by either quality control or quality assurance may result in the Project Engineer issuing a Stop Work Order per Standard Specification 107.06. If a safety stop Work provision has been initiated it will remain in place until the project is brought back into compliance without exception. No additional time will be granted for failure to comply with TMP requirements.

The Contractor shall revise the Project Safety Plan or Transportation Operation Plan (TO) to be consistent with revision to TCPs/MHT's during the course of Work. The revised Safety Plan or TO shall be submitted to the Engineer for approval.

Subsection 630.11 shall be revised to include the following: Special Traffic Control Plan (MHT) requirements for this project are as follows:

Project Specific Working Times and Traffic Control Plan Requirements

a) *Project Specific Working Time.* The Contractor shall perform any Work requiring traffic control devices on the roadway (traveled way and shoulder) within the hours of 7:00 am and 7:00 pm or during daylight hours, whichever is more restrictive or as directed or approved by the Engineer. The Contractor shall not perform any work on the roadways on Saturdays, Sundays, holidays, nor non-daylight hours on all other days, unless approved by the Engineer. Requests to Work on Saturday and/or Sunday shall be submitted to the Engineer in writing at least four (4) working days prior to the requested work. Weekend work will not be permitted unless it has been approved in writing by the Engineer.

   Work that interferes with traffic on holidays, any day of a three-day or four-day holiday weekend, or the day before any holiday or holiday weekend will not be permitted. Holidays on which this restriction applies shall be those holidays recognized by the State of Colorado listed subsection 101.02.

b) *Variance Process for Project Specific Working Time.* Contractor will have 10 working days to submit a variance request through the Engineer in advance of planned work requiring a proposed variance for review. At minimum, variance submittal request shall include: Current Project Schedule, Proposed Project Schedule (based on variance request), Proposed Working Times, MHT's and supportive reasoning narrative for variance request.

   The Contractor shall submit a written justification letter for any full roadway closures not identified in the project plans to the Engineer for approval at least three (3) weeks in advance of the requested closure. At a minimum, the letter shall include a

reasoning narrative, dates of the scheduled closure, working times of operation, and applicable MHT.

c) *Project Specific Traffic Control Requirements.* Any full roadway closures outside those shown and pre-approved in the project plans shall require a written justification from the Contractor submitted to the Engineer for review stating reasoning, dates scheduled, working times of operation, and applicable MHTs or TCPs that will be utilized.

The Contractor shall notify the Engineer a minimum of one (1) week prior to the date and time that construction is scheduled to begin or as directed by the Engineer.

The Contractor shall notify the Engineer of the date the Contractor intends to start at least two (2) weeks prior to starting the installation of advanced warning signs. Temporary poles, signs and placement for advanced warning will require preapproval. All advanced warning signs and devices shall be located in accordance with the details shown in the plans, specifications or approved MHT's and meet minimum performance criteria for the project duration unless otherwise approved.

Unless otherwise approved by the Project Engineer, the Contractor's equipment shall follow normal and legal traffic movements. The Contractor's ingress and egress of the Work area shall be accomplished with as little disruption to traffic as possible and shall be shown or noted on MHT's. Traffic control devices shall be removed by picking up the devices in a reverse sequence to that used for installation. This may require moving backward through the Work zone. When located behind a barrier or at other locations shown on approved traffic control plans, equipment may operate in a direction opposite to adjacent traffic. All devices shall be removed from the temporary traffic control clear zone when not in use unless approved by the Project Engineer. During extended non-Working hours, the roadways shall be restored to a safe travel condition for the free flow of traffic including the design clear zone distance listed in the construction plans for each roadway.

ATSSA Quality Guidelines for Temporary Traffic Control will be used to qualify and accept all devices. Marginal devices shall be replaced within 24 hours or as approved by the Engineer. Failure to replace out of specification devices may result in a Stop Work Order as determined by the Engineer.

TCS diaries shall include all requirements per CDOT Standard Specifications for Road and Bridge Construction, Section 630. The Engineer may require additional

information for specific tasks or construction activities if they are not included in the Project Safety Plan.

Any device damaged due to the Contractor's operations shall be replaced in kind or repaired by the Contractor at no additional cost to the project.

Vertical cuts or fills greater than 1 inch resulting from construction operations adjacent to traffic lanes unless approved by the Engineer shall be temporarily sloped at a 4:1 or a flatter slope and also be delineated immediately after removal operations to safeguard the traveling public. Material will not be measured and paid for separately.

When the Contractor removes, obliterates, or overlays any pavement markings, the Contractor shall replace them on a daily basis prior to opening the affected areas to traffic. All temporary pavement markings shall fully comply with the Standard Specifications and Special Provisions.

Any maintenance required to restore the roadways to this condition, including pavement patching and grading, shall be done prior to opening the areas to traffic or completing Work for the day.

Buffer zones shall be considered and dimensioned on all MHT's. Both the posted speed limit and TMA vehicle weights shall be used in determining Roll Ahead Distances (RAD) per the manufacturer's recommendations.

The Contractor shall not place tack coat on any surface to be paved where traffic will be forced to travel upon prior to bituminous material application.

The Contractor is restricted from storing materials, equipment, or construction traffic control devices (signs, cones, etc.) in the shoulder (clear zone).

The Contractor shall notify the Engineer within 48 hours of anticipated schedule change. The Contractor shall notify all identified stakeholders, as directed by the Engineer, on all lane closure submittals.

Subsection 630.17 shall include the following:

TCM Days will not be paid beyond the number given in the plans unless directed by the Engineer. TCI will be paid on all other calendar days (excluding days paid for TCM) throughout construction, from after initial devices are setup until devices are completely removed from the project in preparation for project acceptance.

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REVISION OF SECTION 630
CONSTRUCTION ZONE TRAFFIC CONTROL

Subsection 630.18 shall include the following:

Payment will be made under:

Pay Item	Pay Unit
Temporary Traffic Control Devices	Lump Sum
Traffic Control Management (TCM)	Day
Traffic Control Inspection (TCI)	Day
Portable Message Sign Panel	Each

The following, but not limited to the following, will not be measured and paid for separately but shall be included in the Work:

(1) Flagger hand devices
(2) Electrical power, including batteries, for all temporary lighting or warning devices
(3) Temporary masking signs, including the covering materials and fastening devices
(4) Placement, unmasking, removal, and masking of reduced speed limit and double fines signs
(5) Preparation and implementation of the Traffic Management Plan
(6) Vehicles necessary for temporary traffic control
(7) Permitting and necessary forms
(8) Coordination with EPC and County Sherriff
(9) Coordination with the Engineer
(10) General maintenance and basic repair of control measures (Rev.208.12)

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 includes furnishing, operating, and maintaining a portable message sign panel.

Add subsection 630.031 immediately 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 an LED legend on a flat black background. LED signs shall have a pre-default message that activates before a power failure. The sign shall be solar powered with independent back-up battery power. The sign shall be capable of 360 degrees rotation and shall be able to be elevated to a height of at least five feet above the ground measured at the bottom of the sign. The sign shall be visible from one-half mile under both day and night conditions. The message shall be legible from a minimum of 750 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.

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:

(a) In addition to the onboard solar power operation with battery back-up, each sign shall be capable of operating on a hard wire, 100-110 VAC, external power source.
(b) All electrical wiring, including connectors and switch controls necessary to enable all required sign functions shall be provided with each sign.
(c) Each sign shall be furnished with an operating and parts manual, wiring diagrams, and trouble-shooting guide.
(d) The portable message sign shall be capable of maintaining all required operations under Colorado mountain-winter weather conditions.
(e) Each sign shall be furnished with an attached license plate and mounting bracket.
(f) Each sign shall be wired with a 7-prong male electric plug for the brake light wiring system.

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REVISION OF SECTION 630
PORTABLE MESSAGE SIGN PANEL

Subsection 630.13 shall include the following:

The portable message sign panel shall be on the project site at least 14 calendar days prior to the start of active roadway construction. 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 630.17 shall include the following:

Portable message sign panels will be measured by the maximum number of approved units in use on the project at any one time.

Subsection 630.18 shall include the following:

Portable message sign panels will be measured:

(1) By the maximum number of approved units in use on the project at any one time.

The cost of Portable Message Sign Panel shall be included in the cost of Temporary Traffic Control Devices.

REVISION OF SECTION 630
IMPACT ATTENUATOR (TEMPORARY)

Section 630 of the Standard Specifications is hereby revised to add the following:

DESCRIPTION

630.27 This work consists of furnishing, installing, certifying, moving, repairing, maintaining, and removing temporary impact attenuators in accordance with these specifications and in conformity with the lines and details shown on the plans or established.

MATERIALS

630.28 Each impact attenuator shall be selected from the Crash Cushion and End Treatment Application Chart as listed in the *Safety Selection Guide* on the CDOT Design and Construction Project Support web site. Impact attenuators shall conform to the requirements of the manufacturer and be capable of bi-directional shielding of the objects detailed and located on the plans. Filler materials shall be treated according to the manufacturer's recommendations to prevent freezing to a temperature of -50 °F.

If the posted speed limits of the construction zone are 45 miles per hour or less, the impact attenuator shall comply with the crash test requirements contained in NCHRP Report 350 (only applicable for impact attenuators developed prior to 2011) or MASH (acceptable for all impact attenuators), TL-2. For posted speed limits in the construction zone greater than 45 miles per hour, the attenuator shall meet the requirements of TL-3.

CONSTRUCTION REQUIREMENTS

630.29 If sand barrel arrays are used, the Contractor shall paint, with white epoxy paint, an outline and the weight of each barrel on the pavement prior to final placement. All numbers shall be a minimum of 6 inches high. Barrel type shall be one of those listed in the *Safety Selection Guide*.

The site shall be prepared to receive the impact attenuator by filling, excavating, smoothing, constructing the paved foundation pad, installing approved transition and anchoring, and all other work necessary for the proper installation of the attenuator.

The impact attenuator shall be fabricated and installed in accordance with the manufacturer's recommendations. The Contractor shall provide a copy of the manufacturer’s installation instructions and parts list to the Engineer prior to installation of the device.

Each installation shall be supervised and certified as correct upon completion by a representative of the device manufacturer or by an employee of the Contractor who is a certified installer. The certified installer shall have completed device training and shall be registered with the manufacturer as a certified installer. The Contractor shall submit all

REVISION OF SECTION 630
IMPACT ATTENUATOR (TEMPORARY)

appropriate documentation to validate that the certified installer has completed device training and has been registered with the manufacturer as a certified installer.

METHOD OF MEASUREMENT

630.30 Impact Attenuator (Temporary) will be measured by the number of attenuators shown on the plans, installed, certified, and accepted; or the actual number of authorized 24-hour periods that the attenuator is used.

BASIS OF PAYMENT

630.31 Impact Attenuator (Temporary) shall not be paid for separately but will be included in the cost of Temporary Traffic Control Devices.

REVISION OF SECTION 702
BITUMINOUS MATERIALS

Section 702 of the Standard Specifications is hereby revised for this project as follows:

Delete Table 702.01 and replace it with Table 2.05 from Version 6, Section 2 of the *Pikes Peak Region Asphalt Paving Specifications*.

TABLE 2.05 - PROPERTIES OF PERFORMANCE GRADED BINDERS

Property	PG Graded Binder Requirements				AASHTO Test No.
	58-28	64-22	64-28	76-28[1]	
Original Binder Properties					
Flash Point Temperature, °C, minimum	230	230	230	230	T 48
Viscosity at 135 °C, Pa·s, maximum	3	3	3	3	T 316
Dynamic Shear, Temperature °C, where G*/Sin @ 10 rad/sec ≥ 1.00 kPa	58	64	64	76	T315
Ductility, 4°C (5cm/min) cm, minimum			50		T 51
Toughness, joules, minimum			12.4		CP L-2210[2]
Tenacity, joules, minimum			8.5		CP L-2210[2]
RTFO Residue Properties AASHTO T 240					
Mass Loss, percent maximum	1	1	1	1	T 240 CPL 2215
Dynamic Shear, Temperature °C where G*/Sin @ 10 rads ≥ 2.20 kPa	58	64	64	76	T315
Elastic Recovery, 25 °C, percent minimum				50	T-301
Ductility, 4 °C (5 cm/min) cm, minimum			20		T 51
Pressure Aging Vessel Residue Properties, Aging Temperature 100 °C AASHTO R28					
Dynamic Shear, Temperature °C where G*/Sin @ 10 rads ≤ 5000 kPa	19	25	22	28	T315
Creep Stiffness, @ 60 s, test Temp. in °C	-18	-12	-18	-18	T-313
S, maximum, MPa	300	300	300	300	T313
m-value, minimum	0.3	0.3	0.3	0.3	T313

[1] Special grades used for unique loading or climate conditions.
[2] CDOT Test Method.

Section 703 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 703.04 and replace it with Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

Delete Subsection 703.06 and replace it with Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

REVISION OF SECTION 703
AGGREGATES

Section 703 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 703.04 and replace it with Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

Delete Subsection 703.06 and replace it with Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

REVISION OF SECTION 712
MISCELLANEOUS

Section 711 of the Standard Specifications is hereby revised for this project as follows:

Delete Subsection 712.03 and replace it with Version 6 of the *Pikes Peak Region Asphalt Paving Specifications.*

REVISION OF SECTION 715
LIGHTING AND ELECTRICAL MATERIALS

Sections 715 of the Standard Specifications is hereby revised for this project as follows:
The first paragraph of subsection 715.03 (b) is hereby revised as follows:

(b) Metal Light Standards. Metal light standards shall be fabricated of steel unless otherwise specified. Whenever the light standard metal is not specified, the Contractor shall furnish steel. Material type and shape of light standards shall be the same throughout the project, unless otherwise shown in the Contract.

The ninth paragraph of subsection 715.03 (b) is hereby revised as follows:

Base flanges for steel poles shall have continuous welds both inside and outside, unless otherwise permitted. Base flanges inserted into the pole and bonded shall meet the requirements for materials and strength stated.

In subsection 715.03 (b) delete the fourth, fifth, sixth, and tenth paragraphs.

In subsection 715.03 (c) delete the second sentence.

The second sentence in subsection 715.04 (a.4) shall be revised as follows:

4. Luminaires shall operate at 120 VAC or be adaptable to the type of power distribution system to be used.

Subsection 715.04 (b.3) shall be revised as follows:

3. The luminaire shall have a Type II distribution for non-median mounted luminaires.

Subsection 715.04 (c.3) shall be revised as follows:

3. LEDs shall be temperature rated for operation and storage within the range of -40°C to +40°C.

Subsection 715.05 (a) is hereby revised as follows:

(a) Dimming signal protocols are 0-10V direct current (DC).

Subsection 715.05 (g) is hereby revised as follows:

(g) The rated case temperature for operation and storage shall be rated for up to +85°C. The LED driver shall be rated for an ambient operating temperature within the range of -40°C to +40°C.

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REVISION OF SECTION 715
LIGHTING AND ELECTRICAL MATERIALS

Subsection 715.06 shall be deleted for this project.
The first paragraph of subsection 715.09 is hereby revised as follows:

Secondary Service Pedestals and Meter Power Pedestals shall be metal conforming to ANSI C47.12.28, Pad Mounted Enclosure Integrity Standard and shall be the nominal size and dimensions shown in the Contract.

The ninth paragraph of subsection 715.09 is hereby revised as follows:

Secondary service pedestals and meter power pedestals shall be rated for 600 VAC, installed with protection against damage from greater currents. The pedestals and centers shall be grounded with grounding electrodes in conformance with the current edition of the National Electric Code (NEC). The following equipment is for a typical installation and may or may not be required as shown on the plans:

In subsection 715.09 is delete items 11 and 12.

The twelfth paragraph of subsection 715.09 is hereby revised as follows:

Multiple Pole Light Contactors shall be "lighting" type, specifically rated for the type of lighting load specified. The contactors shall have a 600-Volt rating. All multiple pole light contactors shall be unenclosed, single phase with the number of poles specified on plans; they shall be open type lighting contactors with the rating shown or specified. Contactors shall be constructed for surface mounting on a false back or bracket within a weatherproof cabinet. The contactor coil shall operate on 120 Volt for 120/240 Volt circuits. Contact material shall be designed for LED driver loads and require no maintenance such as filing, burnishing, or dressing at any time the contactor is in service.

The twelfth paragraph of subsection 715.09 is hereby revised as follows:

A 120 VAC rated test switch or hand-off auto (HOA) switch shall be installed in the control cabinets if shown. The test switch shall be a heavy-duty single pole switch or circuit breaker rated at 20 amps and shall be installed in the control cabinet as a roadway lighting test switch. The switch shall be wired to shunt the photoelectric control relay power contactor and energize the lighting circuit contactors. The HOA switch shall be single or double pole, double throw, center off with 15A contacts. The HOA switch shall be wired to the photocell control when switch is in the Auto position, lighting contactor(s) shall close when photocell in in low light closure. HOA shall be wired to energize the lighting contactor(s) closure when the HOA is in the Hand position. The HOA's off position will turn off the control circuit.

The second paragraph of subsection 715.10 is hereby revised as follows:

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REVISION OF SECTION 715
LIGHTING AND ELECTRICAL MATERIALS

Switches rated 30 A to 600 A shall have reinforced, rejection type fuse clips. Switchblades shall be readily visible in the "ON" and "OFF" position. Switch operating mechanism shall be non-teasible, positive quick-make/quick-break type. Bail type mechanisms are not acceptable. Fusible switches shall be suitable for service entrance equipment. Switches shall have line terminal shields (except for non-fusible double throw switches).
The fourth paragraph of subsection 715.10 is hereby revised as follows:

All enclosures shall be NEMA 3R unless otherwise noted. All enclosures shall have a factory installed ground terminal block. Nameplate shall be front cover mounted, containing a permanent record of switch type, ampere rating, and maximum voltage rating.

FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the Department'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 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.

Force Account Item	Pay Unit	Estimated Cost
F/A Minor Contract Revisions	FA	$400,000*
F/A Asphalt Cement Cost Adjustment	FA	$10,000*
F/A Adjust Utilities	FA	$30,000
F/A Erosion Control	FA	$50,000*

Descriptions:
F/A Minor Contract Revisions - Consists of minor work authorized and approved by the Engineer, which is not included in the contract plans or specifications, and is necessary to accomplish the scope of work of this contract.

F/A Asphalt Cement Cost Adjustment - Adjustment will be made in accordance with the subection 109.06(j).

F/A Adjust Utilities - Cost of making unanticipated adjustments to utilities.

F/A Erosion Control - Supplemental erosion control measures suggested by the Erosion Control Supervisor, but not provided for in the contract plans or specifications. All items shall be approved by the Engineer prior to installation or they will be at no cost to the project.

UTILITIES

The known utilities within the limits of this project are:

UTILITY	OWNER	CONTACT/EMAIL	PHONE
Gas	Black Hills Gas	Adam Magoon Adam.magoon@blackhillsenergy.com	719-400-8995
Water & Wastewater	Woodmoor Water & Sanitation District #1	Cydney Salens cydneys@woodmoorwater.com	719-488-2525
Electric	Mountain View Electric	Les Ulfers les.u@mvea.coop Kevin Dimmett kevin.d@mvea.coop Jim Kennel jim.k@mvea.coop	719-494-2682
Fiber Optic/Telephone	Terra Tech/Lumen	Robert Mcleod rmcleod@terratechllc.net	303-949-2187
Fiber Optic/Telephone	Lumen (CenturyLink)	Ken Davis Ken.davis2@centurylink.com	719-636-4413
Fiber Optic/Television	Comcast	Steven Creighton steven_creighton@comcast.com	720-8545745
Fiber Optic	Verizon	David McAllister David.mcallister@verizon.com	801-301-0937

The work described in these plans and specifications requires full cooperation between the Contractor and the utility owners in accordance with Subsection 105.11 in conducting their respective operations, so the utility work can be completed with minimum delay to all parties concerned. Also, in accordance with the plans and specifications, and as directed by the Engineer, the Contractor shall keep each utility owner advised of any work being done to its facility, so that each utility owner can coordinate its inspections for final acceptance of the work with the Engineer.

The Contractor shall coordinate the work with the owners of the utilities impacted by the work. Coordination with utility owners includes, but is not limited to, progress meetings, staking construction features, providing and periodically updating an accurate construction schedule which includes all utility work elements, providing written notification of upcoming required utility work elements as the construction schedule indicates, allowing the expected number of working days for utilities to complete necessary relocation work, conducting necessary utility coordination meetings, and all other necessary accommodations as directed by the Project Engineer. Surveying and staking of utility relocations to be performed by the owner shall be the responsibility of the utility owner. The Contractor shall provide surveying staking as described in Revision of Section 625 Construction Surveying for proposed roadway improvements including but not limited to the proposed storm drain system.

Prior to excavating or performing any earthwork operations, the Contractor shall positively locate all potential conflicts with existing underground utilities and proposed construction, as determined by the Contractor according to proposed methods and schedule of construction. The Contractor shall modify construction plans to avoid existing underground facilities as needed, and as approved by the Engineer.

UTILITIES

The Contractor shall provide traffic control for any utility work expected to be coordinated with construction, as directed by the Engineer. However, traffic control for utility work outside of typical project work hours shall be the responsibility of the utility owner.

All costs incidental to the foregoing requirements will not be paid for separately but shall be included in the work. Any delay due to discovery of unanticipated utilities will not be compensable.

Part 1 - CONTRACTOR SHALL PERFORM THE WORK LISTED BELOW

General Requirements

Coordinate Pre-Construction conference and progress meetings with subcontractors, the Project Engineer and each utility owner or utility owner's representative at least fourteen (14) days prior to beginning construction. Utility owners/representatives shall be notified at least 7 days prior to the meeting.

The Contractor shall contact, in writing, the utility owner or utility owner's representative upon receipt of Notice to Proceed.

Coordinate project construction with the performance by the utility owner of each utility work element listed in Part 2 below. Perform preparatory work specified in Part 2 for each utility work element. Provide an accurate construction schedule that includes all utility work elements to the owner of each impacted utility.

The Contractor shall note that the project limits are highly congested with existing utilities and expected durations for utility elements listed below are approximate. The Contractor shall work with utility owners to identify required work elements, traffic control, stormwater management, and to verify schedules. No added time will be granted to the construction schedule unless approved by the Engineer. Changes to phasing or schedule by the Contractor shall be clearly communicated with the utility owners immediately.

Provide each utility owner with weekly updates to the schedule or more frequent updates, as applicable. Conduct detailed utility coordination during weekly project progress meetings, with utility representatives of utilities affected by that week's planned construction activities, to coordinate all requirements and schedules, and provide other necessary accommodations as directed by the Engineer. Notify each utility owner in writing, with a copy to the Engineer, prior to the time each utility work element is to be performed by the utility owner. Provide the notice with the number of days specified in Part 2 immediately prior to the time the utility work must commence to meet the project schedule.

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UTILITIES

Provide traffic control for any utility work by the utility owner expected to be coordinated with construction. Traffic control for utility work outside of typical project work hours or current phase of construction shall be the responsibility of the utility owner. Utility owner, in coordination with the Contractor, shall provide MHT's to the Engineer and shall not proceed with utility work until the Contractor and the Engineer have approved utility owner's MHT's.

Provide erosion control for any utility work by the utility owner expected to be coordinated with construction. Erosion control for utility work outside of typical project work hours or current phase of construction shall be the responsibility of the utility owner. Utility owner, in coordination with the Contractor, shall provide erosion control plans and specifications to the Engineer shall not proceed with utility work until the Contractor and the Engineer have approved utility owner's erosion control plan and measures.

Perform each utility work element for every utility owner listed in Part 1. Notify each utility owner in advance of any work being done by the Contractor to or near its facility, so that the utility owner can coordinate its inspections for final acceptance of the work with the Engineer, as applicable.

The Contractor shall identity all existing utilities (by potholing if necessary) and protect in place when constructing the project, including sub-excavation work (work done below the base course.) If existing utilities are within proximity horizontally or vertically, the Contractor shall alter the sub-excavation work limits, construction methods, or equipment to protect and avoid impacting existing utilities.

The Contractor shall contact, in writing, the utility owner immediately upon receipt of Notice to Proceed. The Contractor shall schedule a pre-construction meeting with the Engineer and Utility Stakeholders fourteen (14) days prior to any work beginning.

Water & Wastewater Utilities

Woodmoor Water & Sanitation

The Contractor shall protect in-place all existing, adjusted, relocated, and modified Woodmoor Water & Sanitation water and sanitary infrastructure as noted in the plans. The Contractor shall work with Woodmoor Water & Sanitation to protect and support existing water lines, other nearby utilities, and associated appurtenances as necessary to facilitate excavation for the construction of proposed water line improvements. Any damage to existing or relocated Woodmoor Water & Sanitation infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost.

The Contractor shall coordinate with Woodmoor Water and Sanitation District prior to construction to establish the need for watch and protect. The Contractor shall assume Woodmoor Water and Sanitation District watch and protect is required unless otherwise

notified by Woodmoor Water and Sanitation District. The Contractor shall coordinate all required inspections with Woodmoor Water and Sanitation District. Adjusted valves and manholes shall be inspected and approved by Woodmoor Water and Sanitation District unless written approval is obtained from Woodmoor Water and Sanitation District and the Engineer.

Portions of existing Woodmoor Water & Sanitation water infrastructure will be lowered in place, manholes adjusted, and valves adjusted by the Contractor to accommodate proposed construction as noted in the plans. The Contractor shall follow the Woodmoor Water & Sanitation District No. 1 System Specifications for Design and Construction of Public or Private Water or Sewer System Improvements Version: 2023.1 or the most current specifications at time of construction.

The Contractor shall confirm with Woodmoor Water & Sanitation that previously abandoned existing water lines and sanitary sewer lines are indeed abandoned prior to performing any removal necessary to complete proposed roadway improvements. Removal of any previously abandoned existing water line and sanitary sewer line required to meet Contract requirements shall be completed by the Contractor. The Contractor shall coordinate with Woodmoor Water & Sanitation to ensure proper clearance between the existing water lines and sanitary lines and proposed drainage/proposed cuts & fills. The Contractor shall construct the water line lowerings and manhole/valve adjustments as noted in the Utility Conflict Plans. This work is to be coordinated with Woodmoor Water and Sanitation District.

Early procurement of pipeline materials is advisable to avoid schedule delays resulting from material availability. No additional compensation will be granted for schedule delays resulting from water line procurement issues. The Contractor shall obtain approval from Woodmoor Water and Sanitation District regarding allowable times for shutting down water lines for project work. Any delay due to Woodmoor Water and Sanitation District restrictions will not be compensable or result in additional time for completion of the project.

Gas

Black Hills Gas

The Contractor shall coordinate with Black Hills Gas prior to working within the vicinity Black Hills Gas infrastructure to establish the need for watch and protect. The Contractor shall assume Black Hills Gas watch and protect is required unless otherwise notified by Black Hills Gas for each location. The Contractor shall protect in-place all existing, adjusted, relocated, and modified Black Hills Gas infrastructure as noted in the plans. Any damage to existing and relocated gas infrastructure due to the Contractor’s construction activities will be repaired at the Contractor’s cost.

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UTILITIES

Electric

Mountain View Electric

The Contractor shall coordinate with Mountain View Electric (MVE) prior to working within the vicinity MVE infrastructure to establish the need for watch and protect. The Contractor shall assume MVE watch and protect is required unless otherwise notified by MVE for each location. The Contractor shall protect in-place all existing, adjusted, relocated, and modified MVE electric infrastructure as noted in the plans. Any damage to existing and relocated electric infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost. When the Contractor is working near underground or overhead electric, it shall be assumed the line is energized and the Contractor shall not be closer than ten feet (10') in any direction from the energized conductors. If work will be within ten feet (10') of energized conductors, the Contractor shall contact MVE a minimum of thirty (30) days in advance to arrange for an outage. An outage will be arranged if it is determined to be necessary. The outage will be a day-by-day situation.

Comcast Cable

The Contractor shall protect in-place all existing, adjusted, relocated, and modified Comcast infrastructure as noted in the plans. Any damage to existing and relocated Comcast infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost.

Portions of existing Comcast infrastructure will be adjusted, relocated, and modified by Comcast to accommodate proposed construction as noted in the plans. Once relocation work has been completed Comcast will retire and abandon existing fiber optic lines in place within the project area. The Contractor shall confirm with Comcast that existing fiber optic lines have been abandoned prior to performing any removal of existing fiber optic facilities necessary to complete proposed roadway improvements. Removal of abandoned fiber optic conduits/cables that may impact construction shall be completed by the Contractor and shall be included in the work.

The Contractor shall coordinate with Comcast to protect, support, relocate, or adjust in place fiber optic lines in the areas of ditch grading, storm drain installation, and other project construction, as noted on the plans. The Contractor will expose the lines for Comcast. Comcast shall over excavate the lines to generate enough slack so the storm drain facilities and other project infrastructure can be installed; and ditch grading can avoid conflict with the fiber optic lines. All required work for the supporting, relocating, and adjustment of Comcast infrastructure will be completed by Comcast at no cost to the project.

The Contractor shall notify Comcast prior to working within the vicinity of Comcast infrastructure to establish the need for watch and protect. The Contractor shall assume Comcast watch and protect is required unless otherwise notified by Comcast for each location.

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UTILITIES

Lumen (CenturyLink) Technologies (Local Fiber/Copper)

The Contractor shall protect in-place all existing, adjusted, relocated, and modified Lumen infrastructure as noted in the plans. Any damage to existing and relocated Lumen infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost.

Significant portions of existing Lumen infrastructure will be relocated by Lumen to accommodate proposed construction as noted in the plans. Once relocation work has been completed Lumen will retire and abandon existing fiber optic and telephone lines in place within the portions of the project area. The Contractor shall confirm with Lumen that existing fiber optic and telephone lines have been abandoned prior to performing any removal of existing fiber optic and telephone facilities necessary to complete proposed roadway improvements. The Contractor shall provide Lumen seventy-two (72) hours prior notice to confirm and cut off abandoned facilities. Removal of abandoned fiber optic conduits and cables and telephone lines that may impact construction shall be completed by the Contractor and shall be included in the cost of the work.

As needed to complete the work, the Contractor may need to remove abandoned underground conduits and remaining conductors that may impact construction. All conduits and conductors removed by the Contractor will become the property of the Contractor.

The Contractor shall coordinate with Lumen to protect, support, relocate, or adjust in place fiber optic and telephone lines in the areas of storm drain installation and other project construction as noted on the plans. The Contractor shall advise Lumen three (3) weeks prior to this work. The Contractor will expose the lines for Lumen. Lumen shall over excavate the lines in order to generate enough slack so the storm drain facility, and other project infrastructure can be installed. All required work for the supporting, relocating, and adjustment of Lumen infrastructure will be completed by Lumen at no cost to the project.

If during construction a conflict is found with existing Lumen communication line, the Contractor shall contact the Engineer and Lumen immediately. A communication line may serve critical customers so damage or downtime must be avoided. If replacement of a communication line is needed, expect design, construction, and splicing with proper approvals to take approximately three (3) months.

The Contractor shall notify Lumen prior to working within the vicinity of Lumen infrastructure to establish the need for watch and protect. The Contractor shall assume Lumen watch and protect is required unless otherwise notified by Lumen for each location.

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UTILITIES

Verizon Business (MCI)

The Contractor shall protect in-place all existing, adjusted, relocated, and modified Verizon infrastructure as noted in the plans. Any damage to existing and relocated Verizon infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost.

The Contractor shall coordinate with Verizon to protect, support, or adjust in place fiber optic lines in the areas of project construction as noted on the plans. All required work for the supporting or adjustment of Verizon infrastructure will be completed by Verizon at no cost to the project.

The Contractor shall notify Verizon prior to working within the vicinity of Verizon infrastructure to establish the need for watch and protect. The Contractor shall assume Verizon watch and protect is required unless otherwise notified by Verizon for each location.

The Contractor shall contact, in writing, the utility owner immediately upon receipt of Notice to Proceed. The Contractor shall schedule a pre-construction meeting with the Engineer and Verizon fourteen (14) days prior to any work beginning in areas that will affect Verizon-owned infrastructure.

The Contractor shall coordinate all required inspections with Verizon. The Contractor shall provide the utility owner written notice fourteen (14) days immediately prior to each required work element or inspection to be completed by Verizon.

PART 2 - UTILITY OWNERS SHALL PERFORM THE WORK LISTED BELOW

Although the Contractor shall provide Method of Handling Traffic (MHT) and traffic control for utility work expected to be coordinated with construction, traffic control for utility work outside of typical project work hours and current phase shall be the responsibility of the utility owner. The utility owner, in coordination with the Contractor, shall prepare and submit to the Engineer a Method of Handling Traffic Plan for utility work to be performed outside typical project work hours. The utility owner shall obtain acceptance of the Method of Handling Traffic Plan from the Engineer and the Contractor prior to beginning the utility work to be performed outside typical project work hours.

Utilities

Comcast

Attend Project Pre-Construction meeting(s), Comcast Work Element Pre-construction meeting(s), Weekly Progress Meetings, and Utility Coordination meeting(s) as applicable with a minimum fourteen (14) day notice of meeting location and time. Comcast shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Comcast and the Contractor.

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UTILITIES

Comcast shall work with the Contractor to protect, support, relocate or adjust in place existing conduits and cables as necessary to facilitate ditch grading, storm drain installation, and other project construction noted in the plans. The Contractor will expose the lines for Comcast. Comcast shall over excavate the lines in order to generate enough slack so ditch grading, storm drain installation, and other project construction can be installed. This work is anticipated to take three (3) working days to complete at each location. All required work for the supporting, relocating or adjustment of Comcast infrastructure will be completed by Comcast at no cost to the project. Comcast shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Comcast and the Contractor.

Comcast shall relocate existing fiber optic conduits, cables, and pull boxes as noted on the plans. This work is anticipated to be coordinated and completed by Comcast during the construction of the project. Comcast shall coordinate all work with the Contractor.

Construction schedule to be determined and agreed upon between Comcast and the Contractor.

Comcast shall adjust pull boxes to finished grade as construction progresses. This work is anticipated to take one (1) working day at each location. As specified in Part 1, the Contractor shall establish finished grade and provide marking and staking necessary for Comcast to complete the work.

If during construction additional conflicts are found, Comcast shall relocate their facility within fourteen (14) working days from notice of the conflict.

Comcast shall adjust Comcast-owned pull boxes to finished grade. The Contractor shall establish finished grade and provide marking and staking necessary for Comcast to complete the work.

The Contractor shall contact, in writing, the utility owner immediately upon receipt of Notice to Proceed. The Contractor shall schedule a pre-construction meeting with the Engineer and Comcast fourteen (14) days prior to any work beginning in areas that will affect Comcast-owned infrastructure.

The Contractor shall coordinate all required inspections with Comcast. The Contractor shall provide the utility owner written notice fourteen (14) days immediately prior to each required work element or inspection to be completed by Comcast. Any additional conflict with Comcast infrastructure found during construction will be relocated, adjusted, or modified by Comcast at no cost to the project.

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UTILITIES

Lumen

Lumen shall adjust Lumen owned manholes, vaults, and pull boxes to finished grade. The Contractor shall establish finished grade and provide marking and staking necessary for Lumen to complete the work. The Contractor shall advise Lumen three (3) weeks prior to this work.

The Contractor shall contact, in writing, the utility owner immediately upon receipt of Notice to Proceed. The Contractor shall schedule a pre-construction meeting with the Engineer and Lumen three (3) weeks prior to any work beginning in areas that will affect Lumen-owned infrastructure.

The Contractor shall coordinate all required inspections with Lumen. The Contractor shall provide the utility owner written notice three (3) weeks immediately prior to each required work element or inspection to be completed by Lumen.

Attend Project Pre-Construction meeting(s), Lumen Work Element Pre-construction meeting(s), Weekly Progress Meetings, and Utility Coordination meeting(s) as applicable with a minimum fourteen (14) day notice of meeting location and time.

Lumen shall work with the Contractor to protect, support, relocate, or adjust in place fiber optic and telephone lines in the areas of storm drain installation and other project construction as noted on the plans. The Contractor will expose the lines for Lumen. Lumen shall over excavate the lines to generate enough slack so the storm drain facility, and other project infrastructure can be installed. This work is anticipated to take three (3) working days to complete at each location. Lumen shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Lumen and the Contractor.

Lumen shall relocate fiber optic and telephone infrastructure, including but not limited to fiber optic or telephone conduit and cables, repeaters, manholes, pedestals, vaults, and pull boxes as noted on the plans. This work is anticipated to be coordinated and completed by Lumen during construction of the project. Lumen shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Lumen and the Contractor.

Lumen shall remove all pedestals, pull boxes, vaults, manholes, and all lines and appurtenances associated with their system to accommodate proposed construction as shown on the plans. Lumen shall coordinate this work with all other utility owners within the corridor. As needed to complete the work, the Contractor is free to remove abandoned underground conduits and remaining conductors that may impact construction. All conduits and conductors removed by the Contractor shall become the property of the Contractor. This work is anticipated to be coordinated and completed by Lumen during Construction of the project. Lumen shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Lumen and the Contractor.

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UTILITIES

Lumen shall adjust fiber optic and telephone infrastructure, including but not limited to fiber optic or telephone pull boxes, and pedestals as noted on the plans to finished grade as construction progresses. This work is anticipated to take one (1) working day at each location. As specified in Part 1, the Contractor shall establish finished grade and provide marking and staking necessary for Lumen to complete the work.

If, during construction, additional conflicts are found, Lumen shall relocate their facilities within 14 working days from notice of the conflict.

Any conflict with Lumen infrastructure found during construction will be relocated, adjusted, or modified by Lumen at no cost to the project.

Verizon Business (MCI)
Attend Project Pre-Construction meeting(s), Verizon Work Element Pre-construction meeting(s), Weekly Progress Meetings, and Utility Coordination meeting(s) as applicable with a minimum fourteen (14) day notice of meeting location and time.

Verizon shall adjust pull boxes to finished grade as construction progresses. This work is anticipated to take one (1) working day at each location. As specified in Part 1, the Contractor shall establish finished grade and provide marking and staking necessary for Verizon to complete this work.

If during construction additional conflicts are found, Verizon shall relocate their facility within 14 working days from notice of the conflict.

Any conflict with Verizon infrastructure found during construction will be relocated, adjusted, or modified by Verizon at no cost to the project.

Mountain View Electric (MVE)
Attend Project Pre-Construction meeting(s), Weekly Progress Meetings, and Utility Coordination meeting(s) as applicable with a minimum fourteen (14) day notice of meeting location and time.

MVE shall work with the Contractor to protect or support in place existing gas lines not slated for relocation to facilitate construction.

Portions of existing MVE infrastructure will be relocated by MVE to accommodate proposed construction as noted in the plans. Once relocation work has been completed, MVE will retire and remove existing gas lines within the project area. The Contractor shall confirm with MVE that existing electric lines have been removed prior to complete proposed roadway improvements. The Contractor shall protect in place all relocated MVE infrastructure. Any damages to relocated MVE infrastructure due to the Contractor's construction activities will be

repaired at the Contractor's cost. MVE shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between MVE and the Contractor.

MVE to relocate, in coordination with the project construction, existing electric infrastructure as noted in the plans. Any conflict with MVE infrastructure found during construction will be relocated, adjusted, or modified by MVE at no cost to the project unless conflict is agreed upon by El Paso County as being reimbursable.

Black Hills Gas

Attend Project Pre-Construction meeting(s), Weekly Progress Meetings, and Utility Coordination meeting(s) as applicable with a minimum fourteen (14) day notice of meeting location and time.

Black Hills Gas shall work with the Contractor to protect, support, or adjust in place existing conduits and cables as necessary to facilitate construction.

Significant portions of the Black Hills Gas infrastructure will be relocated by Black Hills Gas to accommodate proposed construction as noted in the plans. Once relocation work has been completed, Black Hills Gas will retire, remove, or abandon existing gas lines in place within the project area. The Contractor shall confirm with Black Hills Gas that existing gas lines have been abandoned prior to performing any removal of existing underground gas lines necessary to complete the construction of the proposed roadway improvements. The Contractor shall protect in place all relocated Black Hills Gas infrastructure. Any damages to the relocated Black Hills Gas infrastructure due to the Contractor's construction activities will be repaired at the Contractor's cost. Black Hills Gas shall coordinate all work with the Contractor. Construction schedule to be determined and agreed upon between Black Hills Gas and the Contractor. Black Hills Gas to relocate, in coordination with the project construction, existing gas infrastructure as noted in the plans.

If during construction a conflict is found, Black Hills Gas shall relocate their facility within 14 working days from notice of the conflict.

Any conflict with Black Hills Gas infrastructure found during construction will be relocated, adjusted, or modified by Black Hills Gas at no cost to the project unless conflict is agreed upon by El Paso County as being reimbursable. Black Hills Gas shall adjust gas valves to finished grade as construction progresses. This work is anticipated to take five (5) working days at each location. As specified in Part 1, the Contractor shall establish finished grade and provide marking and staking necessary for Black Hills Gas to complete this work.

GENERAL

The Contractor shall comply with Article 1.5 of Title 9, CRS ("Excavation Requirements") when excavating or grading is planned near underground utility facilities. The Contractor shall notify

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UTILITIES

all affected utilities at least two (2) business days, not including the actual day of notice, prior to commencing such operations. The Contractor shall contact the Utility Notification Center of Colorado (UNCC) at phone no. 811, to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective owner. Utility service laterals shall also be located prior to beginning excavation 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.

All costs incidental to the foregoing requirements will not be paid for separately but shall be included in the work, except as noted within this specification.