

NOTIFICATION REGARDING SUBMISSION PROCESS AND REGISTRATION INSTRUCTIONS

The Incorporated County of Los Alamos ("County") has recently implemented a new on-line eProcurement portal. This new platform, Euna Procurement powered by Bonfire, provides the County's electronic Bid and Proposal process ("County's Procurement Portal"). It is where the County will post solicitation opportunities, including Invitation for Bids (IFB), Request for Proposals (RFP), Request for Qualifications (RFQ) and Request for Information/Interest (RFI). The County's Procurement Portal will streamline the County's Bid process for Bid or Proposal submission, acceptance, evaluation, and award. For vendors, the County's Procurement Portal will enhance communication, allow for fast and accurate Bids and Proposals, and provide automatic notification about projects.

Registered vendors will view and submit Bids and Proposals electronically. The past practice of submitting electronic Bids and Proposals by email or submitting paper Bids and Proposals is being phased out. If you are seeing this notification in a solicitation document, **submissions will be accepted ONLY electronically through the County's Procurement Portal for this solicitation.** It is every Offeror's responsibility to read, understand, and submit Bids and Proposals in accordance with the instructions provided in and specific to each solicitation document.

Required Action: Please register as a vendor on the County's Procurement Portal by visiting <https://losalamosnm.bonfirehub.com> and click on "Register". Registration is free and only takes a few minutes. Please be sure to select the applicable NIGP: The Institute for Public Procurement ("NIGP") Commodity Codes for your business when you are prompted so that you can receive notification of recommended opportunities when they are sent out by the County to the NIGP Commodity Codes you have selected.

Already Have a Bonfire Vendor Account? If you already have a Bonfire vendor account and are already registered for another agency's portal, you will still need to visit the County's Procurement Portal at <https://losalamosnm.bonfirehub.com> and click on "Log In" to provide County-requested information, view open opportunities, receive opportunity notifications, and submit Bids and Proposals through the County's Procurement Portal. You will be able to manage the multiple agencies with whom you do business through the button labelled "My Supplier Hub" in your Bonfire account.

For Bonfire Support, visit the Vendor Help Center at <https://vendorsupport.gobonfire.com> where you can view support articles and videos and search FAQ's on all aspects of Bonfire. For personal assistance, you can email Support.Bonfire@eunasolutions.com. Support is available Monday to Friday from 6:00 a.m. to 6:00 p.m. Mountain Time.

INCORPORATED COUNTY OF LOS ALAMOS

BID AND SPECIFICATIONS

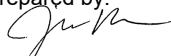
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390 INVITATION FOR BIDS NO. IFB26-30

Advertised on March 26, 2026 in the LA Daily Post, Albuquerque Journal, and on March 27, 2026 in the Santa Fe New Mexican

IFB26-30

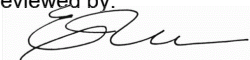
Incorporated County of Los Alamos Trinity Drive (NM 502) CN 5101390

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1.0 BIDDING PHASE

1.1 Invitation for Bids

The Incorporated County of Los Alamos ("County") reserves the right, in its sole discretion, to accept any bid and to reject any or all bids.

Bids are invited from all responsible bidders.

1. **ELECTRONIC SUBMISSIONS ONLY**

A full copy of the solicitation and all associated documents can be found on the County's Procurement Portal at <https://losalamosnm.bonfirehub.com/>. **Only Bids submitted through the County's Procurement Portal by the Bid Due Date stated herein, or as may be modified by addendum, will be considered.** Late responses will not be considered. To register to view and download solicitation documents and submit a Bid through the County's Procurement Portal, follow the instructions on page 1 of this solicitation.

Only Bids received through the Procurement Portal prior to 2:00 p.m. MST, April 16, 2026 will be reviewed.

2. **ADDITIONAL DOCUMENTS AND INFORMATION INCLUDED AS A PART OF THIS IFB**

Additional documents are referenced in this IFB, which may include, but are not limited to, exhibits, attachments, links to documents online, and documents that are provided through the County's Procurement Portal. Any such documents are considered to be a part hereof and constitute, along with this solicitation document and any addenda, the complete solicitation package. Documents required to be submitted as a component of Bidders' Response will be noted as such in each individual solicitation posted on the County's Procurement Portal, and Bidders will be unable to submit their Bids through the County's Procurement Portal until all required documents and information have been uploaded or provided by Bidders.

Please also reference "1.3.3 The Bidder's Bid Response Documents " below.

3. **GRANT RELATED INFORMATION**

Federal Funding. This project is wholly or partially funded with Federal funds, which are administered by the New Mexico Department of Transportation (NMDOT) through the subrecipient grant agreement CN 5101390 between NMDOT and the County. As part of any response to this solicitation, Bidders shall affirm their ability to meet federal grant requirements contained herein. Bidders who cannot affirm ability to meet these requirements may be deemed non-responsive or non-responsible.

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

Bid security in the amount of five percent (5%) of the bid must accompany the bid. Such cash, certified checks or bid bonds will be returned to all except the three finalist bidders within three days after the opening of bids. The remaining cash, checks and bid bonds will be returned promptly after the County and the accepted Bidder have executed the contract, or if no award has been made within sixty (60) days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as Bidder has not been notified of the acceptance of Bidder's bid. In submitting their Bid Bond, it is not mandatory that Bidders use the Bid Bond form provided in the packet. The County strongly encourages all Contractors to use this form, but if the contractor elects not to use it, the Bid Bond must be submitted on a form acceptable in the construction industry and approved by the County Project Manager in advance of the bid due date.

A Non-Mandatory Pre-Bid Conference will be held on April 2, 2026 at 10:00 AM via Microsoft Teams. The meeting link is provided in the Project in the Procurement Portal.

This conference is held to answer questions from the prospective bidders as well as familiarize bidders with the project. Questions regarding the meaning of plans, specifications or other documents related to the project should be submitted in writing prior to the pre-bid conference. The County will preside over the pre-bid conference and provide for the recording and distribution of minutes. The pre-bid conference will include, but not be limited to the following:

1. Discussion of schedule for procurement, progress, values for progress payments and submittals.
2. Critical work sequencing and priorities.
3. Use of construction site premises, storage areas, office areas, security, cleaning, and County's needs.
4. Transmittal, review, and distribution of submittals.
5. Field decision process.
6. Maintain record documents.
7. Public Information.

QUESTIONS

Any questions must be received in writing at least six (6) business days prior to the submission due date, unless otherwise stated herein or in an addendum. **Questions must be submitted through the County's Procurement Portal.** Please follow the instructions on page one (1) of this document to register for the County's Procurement Portal to submit written questions. Bidders who submit questions via e-mail or by phone shall be redirected to submit written questions through the County's Procurement Portal.

Bidders must submit in writing through the County's Procurement Portal, as stated herein, any questions or requested clarification necessary for Bidder to provide a complete Response with all Bid response components and pricing included. Bidders are asked to refrain from including in Bids statements such as "more information available upon request," "pricing to be determined," or other similar statements. Such statements and failure of Bidder to seek clarification needed for Bidder to provide the requested information may result in a Bidder being found non-responsive or non-responsible. This in no way may be construed to conflict with County's right to hold interviews and discussions for clarification with Bidders, as further described herein. Failure of any bidder to receive any addendum or interpretation shall not relieve such bidder from any obligation under its bid as submitted. All addenda so issued shall become part of the solicitation documents.

The County reserves the right to issue addenda to the solicitation documents including construction specifications and plans during the advertising period as provided in the solicitation documents. Bidders are responsible for determining if any addenda have been issued. The terms, bid and solicitation are interchangeable. Also, the defined terms contract and agreement are interchangeable.

1.2 Summary of Work

Incorporated County of Los Alamos

Bid Number: IFB26-30

TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390

This project is issued by and under the control of The Incorporated County of Los Alamos. The contracting office is the Public Works Department. The location of the project is in the County of Los Alamos, New Mexico.

The summary of work is as follows, but is not limited to the following:

Part 1 Project Scope of Work:

NM 502 pavement maintenance from Oppenheimer Drive to Knecht Street. This will be an extension of the road diet from Diamond Drive and will enhance multimodal infrastructure along Trinity Drive (NM502). The project includes removal of median islands and reconstruction of pavement to allow for a continuous two-way left turn lane. The addition of bicycle lanes, and reconstruction of widened sidewalks, and ADA-compliant curb ramps, and the installation of a bus bay.

Utilities – Replacement of 2,200 linear feet of the existing 8-inch cast iron water mains which were installed in 1955 with new 8-inch C-900 PVC. The water line runs from approximately Oppenheimer Drive to 20th Street with lateral connections to existing services. All water services and fire hydrants will be replaced. Install new medium density polyethylene gas valves at six locations. Install 6-inch electric conduit crossings of Trinity Drive for future use at two locations.

Bid Alternate 1 (Microsurfacing): Use of microsurfacing rather than High Density Mineral Reinforced Asphalt Emulsion

Bid Alternate 2 (Mill and Inlay): Use of Mill and Inlay rather than High Density Mineral Reinforced Asphalt Emulsion

Part 2 Work Sequence:

The Contractor shall prepare and submit a logical construction sequence and traffic control plan for approval. Once approved, the contractor shall execute the sequenced construction plan as submitted and resubmit for approval any revisions needed to allow for constructability purposes. The Contractor shall furnish all materials, and supplies required to complete the work. All materials incorporated into the project shall have certificates of compliance and required testing results submitted for approval by the County, before final acceptance of the project.

Part 3 Incidental Work:

1. Contractor shall provide, as part of the contract price, all labor, superintendence, machinery, equipment, supplies, temporary utility services, third party compliance testing and analysis, necessary to complete the various items of work in accordance with these contract documents, to provide a complete, functional, and ready-to-use installation.
2. Contractor shall, as part of the contract price, acquire all necessary approvals for access to all project sites.
3. Contractor shall, as part of this contract price, furnish all environmental protection including, but not limited to all necessary work to prevent storm water and other

environmental pollution on any construction site or adjacent areas, as well as anywhere in the vehicle and pedestrian routes used by the contractor's vehicles and equipment.

4. Contractor shall be responsible for the restoration, reseeding/replanting and cleanup of any areas affected by the project, including any work and materials and labor necessary to return the project site(s) to its original state (prior to construction), by removing all evidence of construction debris, repairing all damage to vegetation, landscapes and finished ground surfaces, scarifying any hard-pack and driven-over earth areas, reseeding any areas disturbed by the contractor's construction activities, and installing erosion protection as indicated on the drawings, or as required by Contractor's Stormwater Pollution Prevention Plan ("SWPPP").
5. Contractor is responsible to attend, at no additional cost to the Owner, the following meetings:
 - a. Preconstruction meeting to be scheduled by Owner.
 - b. Weekly progress meetings held at the Project Managers request.
 - c. Special and final field observation meetings when requested or scheduled by the Owner.
 - d. Construction coordination meetings requested or scheduled by the County.
 - e. Stakeholder/utility customer meetings when deemed necessary by the County to keep them informed or to resolve unanticipated concerns.

Project Dates (Start and Substantial Completion) are as follows:

- A. Project to start on or before – June 22, 2026
- B. Substantial Completion (Mandatory Substantial Completion Base Bid Only) – November 20, 2026.
- C. Substantial Completion (Mandatory Substantial Completion Base Bid with Bid Alternates Awarded) – December 4, 2026.
- D. Project Final Completion with or without Bid Alternates Awarded – December 18, 2026.

Non-Mandatory Pre-Bid Meeting	4/3/2026
Bids Due	4/16/2026
Bid Award	5/19/2026
Pre-Construction Meeting	6/1/2026
Notice to Proceed	6/5/2026
Mandatory Substantial Completion Date for Base Bid	11/20/2026
Base Bid and Bid Alternate (if awarded) Mandatory Substantial Completion	12/4/2026
Final Completion Date	12/18/2026

Restrictions to Dates and Times for Work Zones: Due to scheduled events (Section 1.4.8), restrictions on construction activities on the phases as outlined below shall be followed:

Base Bid

- **ADA and Pedestrian access in front of Ashley Pond (from Oppenheimer to 20th) shall be maintained Friday through Sunday at all times to accommodate**

events unless otherwise approved by Project Manager. Contractor shall coordinate work in that area to ensure compliance.

- Utility water tie ins shall be completed after 9 PM, unless otherwise approved by the Project Manager.

Liquidated Damages for Work: Failure to complete all work on time will result in Liquidated Damages applied to this contract in accordance with the current edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction section 108, Table 108.8:1 Schedule of Liquidated Damages. Liquidated damages will be charged per day for failure to complete work by any of the substantial and/or final completion dates listed.

Work to achieve Final Completion, including all Operations and Maintenance Manuals, final Certified Payrolls, As-built drawings, Warranty Certificates, Final Inspection by the Manufacturer and approval of the Installation, and other close-out documents by required Final Completion Date.

1.3 Requirements for Bidders

Bids must be made with the understanding and in accordance with these conditions for bidders:

1.3.1 Bid Evaluation Criteria

Bid acceptance and bid evaluation. Bids shall be unconditionally accepted without alteration or correction, except as authorized in this article. Bids shall be evaluated based on the requirements set forth in the IFB, which may include criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery and suitability for a particular purpose. Those criteria that will affect the bid price and be considered in evaluation for award shall be objectively measurable, such as discounts, transportation costs, and total of life cycle costs. The IFB shall set forth the evaluation criteria to be used. Only criteria that are set forth in the IFB may be used in bid evaluation. Interviews are to be used only for the purpose of clarification. The final evaluation results shall be forwarded to the purchasing agent.

The evaluation criteria for this Bid are:

1. Accurate submission of Bid Response Documents
2. Cost

The County may make such investigations as deemed necessary to determine the ability of the Bidder, and any prospective subcontractors of the Bidder, to perform the work, and the bidder shall furnish to the County all such information and data for this purpose as the County may reasonably request. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the Contract and to timely

complete the work contemplated herein. Conditional bids may not be accepted in the sole discretion of the County.

When bids are received from a bidder who requests preference, and the bidder has provided evidence that the bidder qualifies for preference as described in section 1.3.16 below the following procedure shall be utilized: When bids are received, the price quoted by the qualifying vendor shall be multiplied by 0.95. After application of the preference factor, the contract shall be awarded to the lowest bidder. If one or more scores are equal, the same procedure shall be followed with respect to the next category of offerors listed, and the next, until an offer qualifies for award. The priority of categories of offers is as follows:(1) Local business; (2) Resident business.

1.3.2 Required Bid Response Documents

The bidder shall follow the instructions described in Section 1.1 Invitation for Bids.

1.3.3 The Bidder's Bid Response Documents

The following documents must be completed and included, the documents identified with section numbers below are available in the Procurement Portal as part of the solicitation document, the document should be submitted in this preferred order:

1. Copy of Bidder's State of New Mexico Contractor's License(s) with proper classifications.
2. Bid Form (Section 1.5.1)
3. Alternatives and Allowances, if applicable (Section 1.5.2)
4. List of Subcontractors **with Company Name, license number(s) and classification(s)** (Section 1.5.3).
5. Bid Bond (Section 1.5.4)
6. Campaign Contribution Form (Section 1.5.5)
7. Certification – Debarment, Suspension, and other Responsibility Matters (Section 1.5.6)
8. Permanent Main Office Address of Company (Section 1.5.7) – Note requirement to provide a Certificate of Good Standing and Compliance from the New Mexico Secretary of State, if incorporated.
9. Authorization for Verification of Information (Section 1.5.8)
10. Provide proof of online registration and payment of \$400.00 for Certificate of Contractors Registration (Section 1.5.9) with New Mexico Department of Workforce Solutions.
11. Non-Collusion Affidavit (Section 1.5.10)

The County may consider a bid to be non-responsive or non-responsible if the Contractor fails to include any of the items described in items 1 through 11, above.

1.3.4 Liquidated Damages for Failure to Enter into Contract

The successful Bidder, upon failure or refusal to execute and deliver the Contract and required Bonds within ten (10) calendar days after Bidder has received the Notice of Award, shall forfeit the Bidder's Bond to the County, as liquidated damages for such failure or refusal, the bid security deposited with Bidder's bid.

1.3.5 Conditions of Work

Each bidder must inform itself fully of the conditions relating to the construction of the Project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of its obligation to furnish all material and labor necessary to carry out the provisions of the Contract. Insofar as possible, the Contractor in carrying out the Work must employ such methods or means as will not cause any interruption of, or interference with the Work of any other contractor, or the daily operations of County offices. The Work in this Contract will be carried out during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday unless otherwise scheduled with and approved by the County. Noise Ordinance Waivers are required for work occurring between the hours 9:00 p.m. and 7:00 a.m.

1.3.6 Addenda and Requests for Interpretation

- A. No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally and bidders understand that no oral interpretation once made may be relied upon. Every request for such interpretation shall be in writing addressed to the Project Manager. Requests for interpretation must be received at least six (6) working days (Monday-Friday) prior by 5:00 p.m. to the date fixed for the opening of bids. Failure of any bidder to acknowledge all addenda on the Addendum Acknowledgement Form shall not relieve such bidder from any obligation under its bid as submitted and may render the bidder non-responsive. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall specifically acknowledge their receipt in the bid. All addenda so issued shall become part of the Contract documents.
- B. Addenda will be e-mailed to all who are known by the County to have requested Bid Documents.
- C. No Addenda will be issued later than four (4) working days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

1.3.7 Power of Attorney

Attorneys-in-Fact who sign any required bonds must file with each bond a certified properly executed and dated copy of their power of attorney.

1.3.8 Obligation of Bidder

Complete sets of Solicitation Documents must be used in preparing Bids; neither the County nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Solicitation Documents.

The Submission of a bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of the Bid, which without exception the Bid is premised upon performing and furnishing the Work required by the Solicitation Documents. The bidder will be required to establish to the satisfaction of the County the qualifications and capability of the persons proposed to furnish and perform the Work

described in the Solicitation documents. Contractor, by signing the Bid also acknowledges that the Contract Time is reasonable for the weather and climactic conditions.

Prior to the award of the Contract, the County will notify the bidder in writing if the County after due investigation has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid, or (2) submit a substitute person or entity acceptable to the County with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost, if any, occasioned by such substitution. The County may accept the adjusted bid price. In the case that the adjusted price makes them no longer the low bidder, County reserves the right to award to the subsequent low bidder. In the event of withdrawal, bid security will not be forfeited. Persons proposed by the Bidder and to whom the County has made no reasonable objection must be used to perform the Work for which they were proposed and shall not be changed except with the prior written consent of the County.

1.3.9 Safety Standards and Accident Prevention

With respect to all work performed under this contract, the Bidder shall:

- A. Comply with the standard provisions of the most current versions of all applicable laws, rules and regulations that apply to the work contracted for.
- B. Provide a Safety Management Plan to the County after award acceptable to the Project Manager (see Section 3).

1.3.10 Substitutes or Brand Name or Equal

During solicitation, it may be determined that a "brand name or equal" is in the County's best interests, and in many cases is the "Basis of Design" for a particular item or system. The Contractor may provide a substitution of a particular item or items. The Contractor shall provide proof that the proposed substitute item is equal to or exceeds the basis of design. The County reserves the right to accept or reject the substitution at its sole discretion.

All re-design and evaluation costs that may be incurred shall be paid by the Contractor.

The Contractor shall provide an alternate bid based on the original plans and specifications and shall provide separately the cost for the substituted item, which the County reserves the right to accept or reject.

The procedure for submission of any such application by Contractor and consideration by County is set forth in Section 3.

1.3.11 Bids to Remain Subject to Acceptance

All bids will remain subject to acceptance for sixty (60) calendar days after the day of the Bid Opening. The County may, at its sole discretion, release any Bid and return that Bidder's Bid Security prior to that date. County may request an extension, agreeable to both the Bidder and County.

1.3.12 Withdrawal of Bids

- A. Bidder may withdraw its bid by written notice and received by Purchasing Agent prior to bid opening.
- B. After bid opening, no changes in bid prices or other provisions of bids prejudicial to the interests of the County or fair competition shall be permitted. In lieu of bid correction, a low bidder alleging a material mistake of fact may be permitted to withdraw its bid if: (1) The mistake is clearly evident on the face of the bid document; or (2) The Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made.

1.3.13 Acceptance or Rejection of Bids

The County reserves the right to accept any bid, reject any or all bids without cause, to waive any or all technicalities in any Bid in the interest of the County and the right to reject all non-conforming, non-responsive or conditional Bids.

1.3.14 Award

Bids shall be evaluated based on the requirements set forth in the IFB, which may include criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery and suitability for a particular purpose and the Contract shall be awarded on the basis of the lowest responsible and responsive bidder in accordance with Chapter 31-101 (i) of the Los Alamos Code of Ordinances.

1.3.15 Registration of Contractors and Subcontractors

Any bidder that submits a bid valued at more than the dollar amount required by the New Mexico Public Works Minimum Wage Act [13-4-11 through 13-4-17 NMSA 1978] and the New Mexico Subcontractors Fair Practice Act [13-4-31 through 13-4-43] for a public works project shall be registered with the labor and industrial division of the labor department. County will not accept bids for a public works project subject to the New Mexico Public Works Minimum Wage Act from the contractor that does not provide proof of required registration for itself and its subcontractors.

1.3.16 Procurement Preferences

In accordance with Incorporated County of Los Alamos ("County") Code Section. 31-261(b) and NMSA 1978 Section 13-1-21 et al., if the chief purchasing officer determines preference is applicable to the solicitation, Offeror(s) must submit a written request for preference, with a valid copy of the applicable New Mexico state-issued preference certificate with its Bid to qualify for the requested preference. If requesting local preference, Offeror(s) must also submit with its Bid a current valid Los Alamos County Business License and must maintain its principal office and place of business in Los Alamos County to qualify for Local Business preference. County reserves the right, for any reason, to (1) verify the accuracy and validity of any information and documents submitted by Offerors prior to applying any preference factors; and (2) deny any request for preference if Offeror(s) have not met applicable requirements to qualify for any requested preference. Bidders requesting preference shall submit the Request for Preference form included with this solicitation as well as the required documents described above.

1.4 Notices to Contractors

1.4.1 Applicable Law

Work shall be performed in accordance with applicable federal, state and local laws (Los Alamos County Code of Ordinances, Section 31.2 Procurement Code).

1.4.2 Gross Receipts Tax

All bids submitted are to exclude the applicable gross receipts taxes. County will pay the applicable taxes to the Contractor including any increase in the applicable taxes becoming effective after the execution date of the contract. The applicable gross receipts taxes will be shown as a separate amount on each payment application made under the contract. The Contractor is responsible for payment to the State of New Mexico for all gross receipt's taxes collected.

1.4.3 Minimum Wage Rates

Pursuant to the New Mexico Public Works Minimum Wage Act, Section 13-4-11 through 13-4-17 NMSA 1978 (comp.) all certified payrolls submitted must contain required information as stated on the pertinent information sheet of the Wage Rate Decision issued on said project.

The Contractor, Sub-contractor and all tiers shall provide the Statement of Intent to Pay Prevailing Wages form to County's Project Manager.

1.4.4 Work Conditions

This contract will be performed in and adjacent to Los Alamos County for the contract duration specified in the Contract. The Contractor shall be aware of the conditions that may normally exist within the project area during performance of the work. Those conditions may include but are not limited to:

- Extended freezing temperatures,
- Intense rainfall events,
- Snowfall and snow accumulation,
- Limited direct sunlight.

Delays due to normal weather conditions are not eligible for time extensions and/or additional compensation. Contractor is required to protect their work and the project from normal weather events. Unusual weather-related time extensions may be awarded by the County pursuant to an approved change order at the County's sole discretion. Please refer to Section 2, Contract Articles 2 and 3.

1.4.5 Public Information

The Contractor is required to be an active participant in the execution of the Public Information and Involvement Plan (PIIP) to be developed by the County. County retains edit and approval rights to any documents being released to the public and requires two (2) working days advance notice to allow for said edit/approval. Contractor will perform/assist the County in successfully implementing PIIP activities that may include, but not be limited to:

- Weekly updates by Wednesday noon of traffic control expected on this project for the following week;
- Placement of door hangers 48 hours prior to any Utilities service disconnections (gas, water, and electric);

- Five (5) working days advance notification to Project Manager regarding impacts to school or transit bus stops and safe routes to schools;
- Inform businesses and residents 48 hours prior to direct impacts during construction.
- County policy is to advertise in the local newspaper in advance of posting traffic control signs or barricades. The Contractor will submit information concerning posting of traffic control signs and barricades at least five (5) working days in advance to the County.

Project Manager shall determine the need, size, and location for a project sign(s) that may include the following:

1. Project name
2. Contractor business name and contact information
3. Budget
4. Project start and end months
5. County Project Manager contact information
6. A rendering of the improvement(s) if available.

1.4.6 Performance and Labor and Material Bonds Requirements

Performance Bond and Labor-Materials Bond shall be executed after receipt of Notice of Award to the successful bidder in an amount equal to one hundred percent (100%) of the total amount payable by the terms of the contract. Bonds must be prepared and executed on the Performance Bond and Labor-Materials Bond forms attached hereto or on such other forms as may be approved in writing by the County. Surety shall be by a company licensed to do business in the State of New Mexico and acceptable to the County.

1.4.7 Project Liaison

The Contractor shall provide a designated project 'Liaison' that will always represent LAC and the Contractor in regard to the general traveling public and be responsible for public communication with residents' questions and concerns pertaining to the Project. This liaison shall also be responsible for project duties such as passing out fliers, informing residents of impacts to their services and/or homes, be the point of contact with the Project Manager when issues arise.

The 'Liaison' shall also be responsible for reporting to the Contractor's TCS (Traffic Control Supervisor) should traffic related issues effect the travelling public

1.4.8 Important Dates

The Contractor is to keep the following dates in mind during the construction phasing/scheduling of the project. The Contractor may have to make adjustments and accommodations to work zone prior to and during the events for pedestrians and vehicle access. See Section 1.2 for Restrictions to Dates and Times for Work Zones that account for the majority of these events.

- WinterFest – December 2026
 - Parade December 2026
- Spring Arts and Crafts Fair - TBD (Fuller Lodge Grounds)
- Summer Concerts - May 22, 2026 - August 28, 2026 (Ashley Pond)
- 4th of July - July 4, 2026 (TBD Ashley Pond OR White Rock)
- Movies in the Park - TBD (Ashley Pond)

- Summer Arts and Crafts Fair - TBD (Fuller Lodge Grounds)
- Fair & Rodeo Parade - August 8, 2026 (Ashley Pond and Central Ave.)
- Fall Arts and Crafts Fair - TBD (Fuller Lodge Grounds)
- Los Alamos Chain Reaction Road Bike Race - August 28, 2026 (Ashley Pond & various roadways)
- Trans-Rockies Mountain Bike Race Series - September 19, 2026 (Ashley Pond & various roadways)
- Day of Arts and Culture - TBD (Downtown area)
- Holloweekend - TBD (Fuller Lodge Grounds and Various Roadways)
- ScienceFest - TBD in Sept. 2026 (Ashley Pond and Fuller Lodge Grounds)
- NOTE: County has contracted an artist for installation of an art installment at the Justice Center on a wall near the intersection of Oppenheimer and Trinity, Contractor shall accommodate installation activities from June 5 through June 20, 2026.

1.4.9 Fitness for Work and Drug and Alcohol Policy

If, at any time, personnel of the Contractor's workforce are deemed unfit for work in a manner resulting in an unsafe condition by the Owner, or Owner's representative, it shall be brought to the attention of the Contractor's Superintendent. It is the Contractor's responsibility to remove said personnel for action in accordance with the provided Safe Work Practices and/or Safety Program documentation, and/or Drug and Alcohol Testing Program.

The Contractor shall have and provide an active and documented Drug and Alcohol Testing Program, as well as a Safe Work Practices and/or Safety Program as a submittal to the Project Manager for review and acceptance.

1.4.10 New Mexico Employees Health Coverage [February 20, 2023]

If the Bidder has, or grows to, six (6) or more employees who Work, or who are expected to Work, an average of at least 20 hours per week over a six (6) month period during the term of this Contract, the Bidder certifies by the submission of its Bid and if Awarded the Contract agrees to have in place, and agrees to maintain for the term of the Contract, health insurance for those employees and to offer that health insurance to those employees if the expected annual value in the aggregate of any and all Contracts between the Bidder and the County exceeds \$250,000.00.

The Bidder agrees to maintain a record of the number of employees who have:

- A. Accepted health insurance;
- B. Declined health insurance due to other health insurance coverage already in place;
or
- C. Declined health insurance for other reasons.

These records are subject to review and audit by a representative of the County.

The Bidder agrees to advise all employees of the availability of State publicly financed health care coverage programs.

For all Contracts exceeding \$250,000, the Bidder Awarded the Contract will be required to provide a letter stating that they currently offer health insurance to its New Mexico employees.

1.4.11 NMDOT Standard Specifications

The New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction, 2019 Edition shall govern construction of this Project except as modified in the Special Provisions, and Supplemental Technical Specifications. These specifications do not apply to utility work which, in most cases, occurs beneath the road prism.

1.4.12 Permits, CPM Schedule, and Roadway Material Submittals

Permits, CPM Schedule, and roadway materials submittals having significant lead time for delivery shall be received by the Project Manager **within 30 days** following the Notice of Award issued to the Contractor.

The Contractor is responsible for determining which materials require significant lead time that would affect the critical path of the project schedule.

Traffic Permit for Road Closures and Traffic Impedance and an Excavation Permit is required for this project.

Also, if more than one acre of soil disturbance occurs, the Contractor is required to submit the Notice of Intent (NOI) as an "Operator" of the SWPPP. The Contractor is required to submit the NOI on-line at the site identified in the 2019 Edition of the New Mexico Department of Transportation ("NMDOT") Standard Specifications for Highway and Bridge

1.4.13 Storm Water Control

The Work under this contract will occur in existing drainage ways and roadways with active drainage systems. This Work consists of preparing a Storm Water Pollution Prevention Plan (SWPPP), and constructing, inspecting, and maintaining erosion, sediment control, and storm water pollution prevention facilities for the discharge of storm water associated with construction activity. This Work includes construction phase activities through final stabilization. The Contractor shall at all times be responsible for protecting all materials, and work being performed from damage due to storm water runoff at no additional cost to the County. The Contractor shall maintain the SWPPP in accordance with the NPDES Construction General Permit until final grading, erosion control, and seeding operation completion.

Dewatering operations, required under any circumstance (e.g., including but not limited to flooding resulting from months when recorded rainfall/precipitation is higher than normal/average, and/or flooding resulting from nonfunctional storm drain systems during construction, and/or unprotected open trenches), are incidental to the cost of the work being performed and shall be at no additional cost to the County.

1.4.14 Flowable Fill as an Alternative to Select Backfill

The Contractor may use flowable fill as an alternative to select backfill. In this case NMDOT Section 206.2.2 flowable fill shall apply.

1.4.15 Field Offices

The Contractor, at his expense, is responsible for providing his own field office and/or Caretaker unit under the terms of the Staging Agreement. The County will arrange a meeting place or conference room to conduct weekly meetings.

The Contractor may provide a caretaker unit to serve as a field office at no additional cost to the County; Contractor shall provide a locked storage container for (1)-nuclear densometer which will be used by his qualified testing laboratory designee unless other appropriate accommodations are to be provided. If a nuclear densometer is to be stored on site, the local Fire Marshall shall be informed of its location with the appropriate signage.

1.4.16 Security

The Contractor shall provide security for all Contractor's equipment, materials, supplies, offices, temporary utilities, etc. The County is not responsible for theft and/or damage of Contractor's equipment, materials, supplies, offices, vehicles, or work in progress.

1.4.17 Maintenance During Construction

The Contractor shall be responsible for all maintenance within the project limits until Final Completion. Work includes but is not limited to sweeping, pothole patching, snow/ice removal, providing a suitable concrete washout location, and providing smooth pavement transitions.

Sweeping- A suitable street sweeper shall be required for this project to minimize displacement of dirt and other debris. The sweeper shall have an operational/working water storage tank, shield, and drip system as to minimize dust displacement. If such sweeping equipment is ineffective (i.e., Complaints persist due to poor sweeping operations), the Contractor shall use a sweeper with wet vacuum capabilities at no expense to the County.

The Contractor shall sweep all streets and sidewalks that exhibit mud-tracking that originates from the work zone and/or its staging areas. Failure to maintain a clean workspace that contributes to storm water pollution can result in penalties in the form of liquidated damages as identified in Section 603 of the 2019 NMDOT Standard Specifications.

1.4.18 Preconstruction Walk-Through

Representatives from the Contractor, Owner, and Engineer shall perform a walk-through inspection at a minimum of seven (7) calendar days prior to construction of the Project.

The preconstruction walk-through will be performed to discuss/verify the following activities:

1. Construction Staking
2. Location of existing property survey pins
3. Location of all existing utilities
4. Verify all driveway and curb ramp locations
5. Verify trees/vegetation for pruning, removal and protection
6. Review traffic control plan and procedures
7. Walk entire Project Limits
8. SWPPP procedures and BMP placements
9. Staging area locations and usage

10. Identify pedestrian detour routes and respective maintenance procedures
11. Update Cone Zone report (local newspaper traffic notice)

Prior to the walk-through, the Contractor shall perform ample construction staking for an effective coordination of construction, including the locations of all existing utilities. The Contractor shall budget a minimum of eight (8) hours for the preconstruction walk-through. The preconstruction walk-through will be considered incidental to the completion of the work and no separate measurement or direct payment will be made, therefore.

1.4.19 Cast Iron Truncated Domes – ADA Detectable Warning Surfaces

Contractor shall be responsible for providing all cast iron detectable warning surfaces on the project. The ADA curb ramps at the intersections that callout for the ADA curb ramps with detectable warning surfaces shall be constructed per Curb Ramp Details shown in the plan sets and shall be in compliance with all NMDOT and federal regulations. Cast iron truncated domes are incidental to the Concrete Sidewalk Bid Item No. 608004.

1.4.20 Traffic Control Supervisor

As per Section 618 - Traffic Control Management, 2019 Edition of the New Mexico Department of Transportation (“NMDOT”) Standard Specifications for Highway and Bridge Construction.

1.4.21 Bidding Alternates

Two (2) bidding alternates (“Bidding Alternates”) have been established for this Project. Los Alamos County has established certain Bidding Alternates in order to determine Award of the Contract. The preference for Bidding Alternates from the lowest Responsible Bidder are as follows:

Base Bid – Bid items 1 through 82 as listed in bid form.

Bid Alternate 1 (Microsurfacing): Use of microsurfacing rather than High Density Mineral Reinforced Asphalt Emulsion. Alternate includes item 83 as listed in bid form and subtracts item 6.

Bid Alternate 2 (Mill and Inlay): Use of Mill and Inlay rather than High Density Mineral Reinforced Asphalt Emulsion Alternate includes items 84 through 89 as listed in bid form and subtracts item 6, 7, and 8.

The base bid is the County's preferred Bidding Alternate. The County may Award to the lowest Responsible Bidder for the base bid if the Bid submitted by such Bidder does not exceed the budgeted Project funds. If the Bid submitted by the lowest Responsible Bidder for the base bid exceeds the budgeted Project funds, all Bids for base bid may be rejected.

Additive Alternate #1

If all Bids are rejected for the base bid, the Bids for additive alternate #1 will then be reviewed. If the Bid submitted by the lowest Responsible Bidder for additive alternate #1 exceeds the budgeted Project funds, all Bids for additive alternate #1 may be rejected.

Additive Alternate #2

If all Bids are rejected for the base bid, the Bids for additive alternate #2 will then be reviewed. If the Bid submitted by the lowest Responsible Bidder for additive alternate #2 exceeds the budgeted Project funds, all Bids for additive alternate #2 may be rejected.

1.4.22 Utility Specifications and Quantities

The Utilities Specifications are in Section 3.3 - Department of Public Utilities Technical Specification 101 - 601 and take precedent over New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction. All estimated utility quantities for unit price items stipulated in the bid proposal are approximate and are to be used only (a) as a basis for estimating the probable cost of the work and (b) for the purpose of comparing the bids submitted for the work. The actual amounts of the work done, and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done, and materials furnished at the unit price bid. If actual quantities exceed or are less than estimated quantities Contractor will not be eligible for a price adjustment or additional time. The Contractor is responsible for obtaining a copy of the current Utility Specifications and becoming familiar with them.

1.4.23 Supplemental Technical Specifications

The Supplemental Technical Specifications included in this Invitation for Bids shall supersede any and all provisions in the Standard Specifications related to utility work. All estimated utilities quantities for unit price items stipulated in the bid schedule are approximate and are to be used only (a) as a basis for estimating the probable cost of the work and (b) for the purpose of comparing the bids submitted for the work. The actual amounts of the work done, and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished at the unit price bid.

1.4.24 Special Project Accommodations

The Contractor shall make special accommodations for delivery trucks to adjacent businesses.

Project area may have elderly residents that require medical assistance, so the Contractor is to provide access to businesses and emergency vehicles at all times. The Project Manager will notify Contractor at preconstruction meeting of this need.

County Solid Waste and Recycle services are once a week, the Contractor shall assist in making roll-off carts accessible for curb side service and dumpster pick up accessible from their storage locations. The Contractor and Project Manager shall coordinate these activities with Environmental Services Department.

Contractor shall allow for pedestrian and parking access during construction to local businesses and residences.

1.4.25 Abandoned Utilities

Los Alamos has utilities and structures that have been abandoned in place. These abandoned utilities are not owned or operated by the previous owner of the utilities. They cannot be located and do not appear on the Plans. The Contractor upon uncovering an abandoned utility that may conflict with construction and or utility installation must request verification that the utility is in actual fact abandoned. If the line or conduit is verified as abandoned, the Contractor has the choice of working around it or cutting, removing and capping its ends. No additional payment or time will be granted for the removal of abandoned utilities or working around abandoned utilities. Some of the abandoned utilities could be transite asbestos pipe or conduit. If removal of the transite material is required

no additional payment or time will be granted for the proper removal and disposal per the appropriate local, state, and federal regulations.

1.4.26 Coordination with County Gas, Water, Sewer (GWS) & Electric Operations

Contractor shall coordinate with County Utility Operations, prior to initiating any work associated with the pipelines, conduits, electric distribution lines and other appurtenant utility items. All costs associated with the Contractor's coordination efforts shall be incidental to the project's cost. Utility service interruptions shall only occur upon the Contractor receiving approval of their service interruption plan by the Project Manager. Plan shall be submitted for approval no less than 48 hours in advance of the proposed interruption. Contractor shall not make any connections to existing facilities, until a Penetration Permit has been issued by the County. Furthermore, no roadway work should be initiated until all utility work under that roadway has been completed.

1.4.27 Time of the Essence

Time is of the essence with respect to all provisions of this Agreement that specify a time for performance; provided; however, that the foregoing shall not be construed to limit or deprive a party of the benefits of any grace or use period allowed in this Agreement.

1.4.28 Coordination with Century Link / Lumen

Coordination with CenturyLink/Lumen will be required. The County is providing a new roadway and infrastructure with this project. The Contractor may need to provide access to CenturyLink/Lumen or its agents to install the new facilities at the proper depth. Scheduling and coordination will be the responsibility of the Contractor, so it does not interfere with other operations on the Project. No additional payment or time will be granted for this additional coordination.

1.4.29 Coordination with Comcast Cable

Coordination with Comcast Cable will be required. The County is providing a new roadway an infrastructure with this project. The Contractor may need to provide access to Comcast or its agents to install the new facilities at the proper depth. Scheduling and coordination will be the responsibility of the Contractor, so it does not interfere with other operations on the Project. No additional payment or time will be granted for this additional coordination.

1.4.30 Trenching and Backfill

The trenching, bedding and backfill for utilities pipes, storm drainpipes, and appurtenances in soil or rip able tuff are incidental to the unit cost for the pipe and associated appurtenances, conduit, vault, or splice box and not compensated separately. Actual width and depth of trench will be used to calculate excavation quantities of hard rock. Additional excavation for trench sloping and/or trench boxes and shoring are considered incidental. No additional payment or time will be granted for this additional incidental excavation. Trenching quantities of hard rock for utilities will be calculated using the outside dimensions of the utilities plus 12 inches. Additional excavation for trench sloping and/or trench boxes and shoring are considered incidental. No additional payment or time will be granted for this additional incidental excavation and backfill. The contractor is encouraged to use trench shoring or trench boxes to reduce excavation and disturbance area.

1.4.31 Potholing

All utilities and storm drains crossed, in proximity to each other, and at tie-in locations shall be potholed by the Contractor. The pothole shall have a diameter of at least 12 inches. If the initial pothole of a located utility does not result in the discovery of the utility line, the pothole shall be expanded 18 inches in all directions. If the expanded pothole does not discover the utility line, the utility owner shall be contacted to have the utility owner relocate the utility line. If upon relocation the utility line cannot be discovered by potholing it is the responsibility of the utility owner to pothole and physically locate the utility line. The depth and location of each potholed utility shall be recorded by the Contractor and referenced against excavation for roadbed, curb, and sidewalk to determine if utility line conflicts with roadway construction. All potential conflicts shall be reported in a timely manner to the County Project Manager. Potholing is considered incidental to the installation work and is not compensated separately.

1.4.32 Utilities Submittals

Submittals should be sent to the Project Manager as soon after the Notice of Award as possible. All Utilities Submittals shall be sent to the Project Manager within 30 days of the Notice of Award so that timely delivery of materials does not delay the Project.

1.4.33 Pre-paving and Permanent Signing & Striping Placement Meetings

The Contractor is required to coordinate a pre-paving, striping, and a permanent signing placement (if applicable to the project) meeting prior to the respective work beginning to allow for discussion of contract requirements and quality control requirements.

The purposes of such meetings are to include but is not limited to the following:

Pre-paving - Verify the mix designs being used, paving schedules, paving operations QC plan provided by the Contractor, identify shake-down period, lot size determination, joint placement locations with respect to striping placement, discuss Asphalt Price Adjustment/Composite Pay Factor determination procedures applied to the lots determined, hauling restrictions, and weather & field condition limitations.

Striping - Verify all striping is per plans and per Los Alamos County Traffic & Streets Division specifications. Prior to the layout of the striping, the pre-striping meeting will be conducted so if any field adjustments are necessary or anticipated the changes can be made ahead of the operation. This will include pavement striping, curb paint, and traffic symbol placement.

Permanent Signing Placement - Ensure that One-call verification prior to sign placement is done. It is anticipated that minor field adjustments will occur during permanent signing placement operations as determined by Los Alamos County Traffic Division.

Note all operations shall have an approved traffic control plan which requires lead time as determined by the Los Alamos County Traffic & Streets Division. All operations shall be included into the 2-week schedule to allow for notification to the public and/or provide notice on traffic message boards of the upcoming operations.

1.4.34 Monthly Asphalt Binder Price Adjustment Procedures

CN 5101390

Adjustments will be made to the Bid Item Unit Price for asphalt binder if the asphalt binder price placed on the Project increases or decreases based on the New Mexico Asphalt Rack-Price Index ("price index") per ton of asphalt binder. Historical price index data and the basis for the method of calculation for the price index is available at the hyperlink below:

<https://www.dot.nm.gov/highway-operations-program/operations-support-division-director/state-materials-bureau/>

The increase or decrease is based on the price index corresponding to the month the asphalt binder was actually placed on this Project.

Bid Items subject to adjustment are: 301 – Full Depth Reclamation (FDR), 301-B – Cold Central Plant Recycling (CCPR) Foamed Asphalt Stabilized Base, 403 - Open Graded Friction Course Complete, Warm Mix Open-Graded Friction Course Complete and Rubberized Open-Graded Friction Course Complete, 416 Minor Paving, 423 Hot Mix Asphalt (HMA) (Major Paving) and 424 Warm Mix Asphalt (WMA) (Major Paving).

The Department will use the MT-1 spreadsheet to calculate the monthly sum of daily strap AC PAY values (D on the formulas below) for inclusion in the price adjustment for the Pay Items listed above in the Contract. The Construction and Civil Rights Bureau will provide the Contractor with an electronic version of the MT-1 spreadsheet.

Monthly Adjustment:

The Progress Payment shall reflect the monetary monthly adjustment to the Contract for asphalt binder as determined by equation (1) or (2), as appropriate.

The variables applicable to the equations below are:

A – Monetary monthly adjustment to the Contract for asphalt binder.

B – Price per ton of asphalt binder corresponding to the month the binder was actually placed on the Project based on the price index.

C – Price per ton of asphalt binder at time of Bid Opening based on price index.

D – Tons of asphalt binder placed on the Project corresponding to the subject month.

For increasing prices (The monthly adjustment shall apply on those Contracts whose monthly fluctuations have a (B / C) ratio greater than 1.1). Use Equation (1).

Equation (1): $A = (B - (1.1 * C)) * D$

For decreasing prices (The monthly adjustment shall apply on those Contracts whose monthly fluctuations have a (B / C) ratio less than 0.9). Use Equation (2).

Equation (2): $A = (B - (0.9 * C)) * D$

1.4.35 ADA Construction Inspection Procedure [April 6, 2023]

General Comments

For this project, to ensure Americans with Disabilities Act (“ADA”) compliance is met, the Contractor shall implement the New Mexico Department of Transportation (“NMDOT”) ADA Construction Inspection Policy and Procedure. This Work shall be considered incidental to the completion of the Project and no additional payment shall be made. Failure to comply with this Notice to Contractors may be deemed a Non-Conformance in accordance with Specification Section 101.4 “Terms and Definitions” and subject the Contractor to Specification Section 108.9 “Default of Contract”.

ADA Construction Compliance Requirement:

All constructed ADA facilities meet the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (“PROWAG”), July 26, 2011, which may be accessed through the State Construction Bureau webpage (<http://dot.state.nm.us/content/nmdot/en/Construction.html>).

Construction Inspection Procedure

The ADA Curb Ramp Documentation forms attached to this Notice to Contractors will be used for the inspection process to ensure compliance with both PROWAG guidelines and the construction Plan design. The ADA Curb Ramp documentation forms and this procedure will be discussed at the mandatory Pre-Bid Meeting, if one is held, and the Pre-Construction Conference.

Procedure: The following procedure describes the use of the NMDOT ADA Curb Ramp Documentation form and the inspection process.

- 1) The Contractor must provide notice to the Project Manager in accordance with Standards Specification 105.10 “Inspection of Work”.
 - The Contractor shall use only a 24 inch electronic digital (“Smart”) level with 0.1% slope accuracy shall be permitted for ADA construction and inspection Acceptance.
 - The Contractor and the Tribal/Local Public Agency (“TLPA”) shall calibrate each Smart level prior to performing the next step.
 - The Contractor and TLPA shall select which curb ramp form best aligns with the type to be inspected.
 - Before scheduling delivery of concrete and with a TLPA inspector present, the Contractor shall complete the Pre-Pour Inspection Form verifying that the concrete formwork is constructed to dimensions and grades shown on plans and meets PROWAG, 2011 technical design criteria and the Construction Plans.
 - The TLPA inspector will verify that the measurements on the Pre-Pour Form meet the requirements or require correction of all discrepancies in accordance with Standard

Specification 105.11 "Removal of Unacceptable and Unauthorized Work", before scheduling of concrete to ensure the finished concrete Work will meet PROWAG and the Construction Plans.

- When all measurements meet the Contract requirements then the TLPA inspector will permit the concrete pour.
- The Contractor shall repeat the procedure using the Constructed Inspection Form after the concrete pour to ensure the curb ramp(s) meets PROWAG compliance and the Construction Plan design criteria.
- The TLPA inspector will verify measurements on the Constructed Inspection Form. Once the inspector has verified the measurements the Work will be eligible for payment. Unacceptable Work will be subject to Standard Specification 105.11 "Removal of Unacceptable and Unauthorized Work".

The Contractor shall prepare the final documentation to include all applicable field measurements documented on the ADA Curb Ramp Documentation inspection forms; verification of measurements by the inspector; and a minimum of two (2) pictures of the constructed curb ramp(s). The Contractor shall submit the completed forms to the Project Manager, before the next Progress Payment. Payment for ADA Curb Ramps will not occur until all documents have been submitted and accepted by the Project Manager.

The Contractor shall protect and maintain the constructed ADA facilities until such time that Final Acceptance of the ADA facility occurs. Final Acceptance occurs in accordance with Standards Specification section 109.10 "Project Closure".

1.4.36 Davis Bacon Act (DBA) Conformance Requirements

[January 1, 2019]Additional Classification and Rate Request:

As indicated in the Advertisement for this Contract, the higher wage rate shall govern in the event of a discrepancy between the minimum wage rates for the U.S. Department of Labor ("USDOL") and the Department of Workforce Solutions ("DWS"). **Additionally, the Contractor shall submit a completed conformance USDOL standard form 1444, attached, to the Project Manager ("PM") when the Contractor or Subcontractor, at any tier, intends to use a DBA classification NOT listed on the federal wage decision incorporated into this Contract.**

Submissions of the standard form 1444 shall be in accordance with the 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction, Section 108.2 – "Notice to Proceed and Pre-Construction Conference" or a minimum of 10 Days prior to the planned use of the classification.

Upon submittal of the standard form 1444 the Contractor shall pay the DWS rate for the classification(s) listed on the standard form 1444 until notified by the PM of the USDOL decision.

If the USDOL decision is equal to or higher than the DWS rate being paid by the Contractor, the Contractor and PM shall utilize the newly established DBA classification in LCPtracker.

USDOL Classification Notes in LCPtracker:

When the DWS rate is higher than the USDOL rate, the Contractor and/or Subcontractor, at any tier, shall indicate in the LCPtracker "notes" section, for each employee, the corresponding USDOL classification. This shall be completed by the Contractor and/or Subcontractor, at any tier, when the employee's time is being entered.

During the course of a Day, when an employee switches between multiple USDOL classification(s) that are within the DWS trade classification group, the Contractor and/or Subcontractor, at any tier, shall provide an hourly breakdown of the time worked in each USDOL classification in the "notes" section of LCPtracker when the employee's time is being entered.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND RATE			CHECK APPROPRIATE BOX ☐ SERVICE CONTRACT ☐ CONSTRUCTION CONTRACT		OMB Control Number: 9000-0066 Expiration Date: 5/31/2025	
Paperwork Reduction Act Statement - This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0066. We estimate that it will take .5 hours to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.						
INSTRUCTIONS: THE CONTRACTOR SHALL COMPLETE ITEMS 3 THROUGH 16, KEEP A PENDING COPY, AND SUBMIT THE REQUEST, IN QUADRUPPLICATE, TO THE CONTRACTING OFFICER.						
1. TO: ADMINISTRATOR, WAGE AND HOUR DIVISION U.S. DEPARTMENT OF LABOR WASHINGTON, DC 20210				2. FROM: (REPORTING OFFICE)		
3. CONTRACTOR					4. DATE OF REQUEST	
5. CONTRACT NUMBER	6. DATE BID OPENED (SEALED BIDDING)	7. DATE OF AWARD	8. DATE CONTRACT WORK STARTED	9. DATE OPTION EXERCISED (IF APPLICABLE) (SERVICE CONTRACT ONLY)		
10. SUBCONTRACTOR (IF ANY)						
11. PROJECT AND DESCRIPTION OF WORK (ATTACH ADDITIONAL SHEET IF NEEDED)						
12. LOCATION (CITY, COUNTY, AND STATE)						
13. IN ORDER TO COMPLETE THE WORK PROVIDED FOR UNDER THE ABOVE CONTRACT, IT IS NECESSARY TO ESTABLISH THE FOLLOWING RATE(S) FOR THE INDICATED CLASSIFICATION(S) NOT INCLUDED IN THE DEPARTMENT OF LABOR DETERMINATION						
NUMBER:			DATED:			
a. LIST IN ORDER: PROPOSED CLASSIFICATION TITLE(S); JOB DESCRIPTION(S); DUTIES; AND RATIONALE FOR PROPOSED CLASSIFICATIONS (Service contracts only) (Use reverse or attach additional sheets, if necessary)			b. WAGE RATE(S)		c. FRINGE BENEFITS PAYMENTS	
14. SIGNATURE AND TITLE OF SUBCONTRACTOR REPRESENTATIVE (IF ANY)			15. SIGNATURE AND TITLE OF PRIME CONTRACTOR REPRESENTATIVE			
16. SIGNATURE OF EMPLOYEE OR REPRESENTATIVE			TITLE		CHECK APPROPRIATE BOX-REFERENCING BLOCK 13. ☐ AGREE ☐ DISAGREE	
TO BE COMPLETED BY CONTRACTING OFFICER (CHECK AS APPROPRIATE - SEE FAR 22.1019 (SERVICE CONTRACT LABOR STANDARDS) OR FAR 22.406-3 (CONSTRUCTION WAGE RATE REQUIREMENTS))						
☐ THE INTERESTED PARTIES AGREE AND THE CONTRACTING OFFICER RECOMMENDS APPROVAL BY THE WAGE AND HOUR DIVISION. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.						
☐ THE INTERESTED PARTIES CANNOT AGREE ON THE PROPOSED CLASSIFICATION AND WAGE RATE. A DETERMINATION OF THE QUESTION BY THE WAGE AND HOUR DIVISION IS THEREFORE REQUESTED. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED. (Send 3 copies to the Department of Labor)						
SIGNATURE OF CONTRACTING OFFICER OR REPRESENTATIVE			TITLE AND COMMERCIAL TELEPHONE NUMBER		DATE SUBMITTED	

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS USABLE

STANDARD FORM 1444 (REV. 4/2013)
Prescribed by GSA-FAR (48 CFR) 53.222(f)

1.4.37 Buy America

The following clarifies the 2019 Edition of the New Mexico Department of Transportation's (NMDOT) Standard Specifications for Highway and Bridge Construction Section 106.12 - "Buy America Requirements" which requires the Contractor to provide Materials that comply with the Buy America requirements in 23 CFR § 635.410.

Previous interpretations of the Buy America requirements allowed exclusions for certain steel and iron manufactured products that contained less than 90% steel or iron components. Previous interpretations also allowed exclusions for miscellaneous steel and iron components, subcomponents and hardware. These exclusions no longer apply.

Since these exclusions no longer apply, the Contractor shall provide certification proving that all steel or iron Materials were manufactured in the United States before performing Work that uses steel or iron Materials. Additionally, the Contractor shall provide certification that all coatings on the steel or iron Materials were applied in the United States. If these certifications are not provided, the NMDOT may take any remedies available under the Contract.

Other exclusions to the Buy America requirements remain in effect, including but not limited to, minimal use of foreign steel and iron Materials. The exclusion allows the Contractor to use foreign steel or iron Material that does not exceed one-tenth of one percent (0.1%) of the Total Bid Amount or that does not exceed \$2,500.00 whichever is greater. To comply with the minimal use exclusion, the Contractor shall provide to the NMDOT Project Manager invoices showing the cost of the foreign steel or iron Material that cannot be certified as delivered to the Project.

1.4.38 Federal Requirements [October 23, 2023]

1. DISADVANTAGED BUSINESS ENTERPRISE (DBE)
2. SUBCONTRACTOR PROMPT PAYMENT PROVISION
3. NS
4. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS AND SUPPLEMENTS
5. SUPPLEMENTAL EEO REQUIREMENTS
6. INDIAN PREFERENCE
7. NMDOT ON THE JOB TRAINING/SUPPORTIVE SERVICES ("OJT/SS") PROGRAM
8. WAGE RATES
9. LABOR REPORTING AND SUBMISSION OF WEEKLY PAYROLLS
10. TITLE VI ASSURANCES APPENDIX A AND APPENDIX E

References made to the New Mexico Department of Transportation ("NMDOT") web page can be accessed through the following link: <https://dot.nm.gov>

1. TITLE VI

The text United States Department of Transportation (USDOT) Order No. 1050.2A has been excerpted for this section with minimal modification by the NMDOT.

The Contractor (herein referred to as the "Recipient"), HEREBY AGREES THAT, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through the NMDOT, is subject to and will comply with the following:

Statutory/Regulatory Authorities

Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); 49 C.F.R. Part 21 (entitled Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964); 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

"No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity," for which the Recipient receives Federal financial assistance from DOT, including NMDOT.

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Nondiscrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

"The NMDOT, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively insure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award".

The NMDOT's Title VI Assurances, Appendices A and E are included in Section X at the end of this Notice to Contractors ("NTC").

For further information, contact the Title VI coordinator for the NMDOT through the following link: <http://dot.state.nm.us/content/nmdot/en/OEOP.html>.

2. DISADVANTAGED BUSINESS ENTERPRISE ("DBE")

Per 49 C.F.R. § 26.13(b) (2014), the Contract NMDOT signs with the Contractor (and each Subcontract the Contractor signs with a Subcontractor) must include the following assurance:

"The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out

applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) withholding of monthly progress payments;
- (2) assessing sanctions;
- (3) liquidated damages; and/or
- (4) disqualifying the contractor from future bidding as non-responsible.”

For the purposes of the assurance, DOT-assisted Contracts means Contracts that receive federal funding and recipient means the NMDOT.

Terms and Definitions

Terms and Definitions contained in 49 C.F.R. § 26.5 are incorporated in this NTC by reference. Terms and definitions in the same control over terms that conflict with the terms and definitions in the 2014 Edition of the NMDOT Standard Specifications for Highway and Bridge Construction (“Standard Specifications”) Section – 101.4 “Terms and Definitions”.

Pre-Award Procedures

Projects that have DBE goals established in the Advertisement are subject to race-conscious measures. When a DBE goal is established the following DBE form and NTC, or evidence of the Bidder’s good faith efforts, are required in order for the Bid to be considered responsive:

1. Disadvantaged Business Enterprise Goal Form A-585 (“A-585”); and
2. NTC Disadvantaged Business Enterprise (DBE) Bidder’s Commitment and DBE’s Confirmation Form A-644 (“A-644”).

In the event the Bidder is also a certified DBE Contractor, and intends to self-perform a portion of the Work, the Bidder shall list itself and any other DBE it will use on Form A-585. Failure to comply with this requirement shall render the Bid non-responsive.

Pre-Award Bidder’s Good Faith Efforts

When a Project has an established DBE goal, a Bidder may meet the requirements even if it doesn't meet the goal through documenting adequate good faith efforts. This means that the Bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful. The documentation of good faith efforts shall include, but is not limited to, copies of each DBE and non-DBE quote submitted to the Bidder when a non-DBE was selected over a DBE for Work on the Contract.

Per 49 C.F.R. § 26.53 (b)(3) (2014) and 49 C.F.R. § 26 Appendix A the NMDOT has the responsibility to make a fair and reasonable judgment as to whether a Bidder, that did not meet the goal, made adequate good faith efforts.

The below contains a list of types of actions, which the NMDOT may consider as part of the Bidder's good faith efforts to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive, as other factors or types of efforts may be relevant in appropriate cases. The following is a list of the type of actions, and documentation, which the NMDOT will consider as part of the Bidder's good faith efforts to obtain DBE participation:

- 1) The Bidder's copies of each DBE and non-DBE subcontractor quote submitted to the Bidder when a non-DBE subcontractor was selected over a DBE for Work on the Contract to review whether DBE prices were substantially high; and the NMDOT may contact the DBEs listed on the Bidder's List of Quoters submitted by the Bidder to inquire whether DBE primes were contacted by the Bidder. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under this NTC or rule;
- 2) The Bidder's solicitation of the interest of DBEs as early in the acquisition process as possible and as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the Subcontract. The Bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow-up initial solicitations;
- 3) The Bidder's selection of portions of the Work to be performed by the DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out Contract Work items into economically feasible units to facilitate DBE participation even when the Bidder might otherwise prefer to perform these Work items with its own forces;
- 4) The Bidder's negotiations in good faith with interested DBEs. It is the Bidder's responsibility to make a portion of the Work available to DBE subcontractors, sub-consultants and Suppliers and to select those portions of the Work or material needs consistent with the available DBE subcontractors, sub-consultants and Suppliers, so as to facilitate DBE participation. Evidence of such negotiations includes the names, addresses and telephone numbers of DBEs that were considered, a description of the information provided regarding the construction plans and specifications for the Work selected for subcontracting or requirements of Work, and evidence as to why additional agreements could not be reached for DBEs to perform the Work; and,
- 5) The Bidder's rejection of DBEs as being unqualified. The Bidder shall not reject a DBE as being unqualified without sound reasons based on a thorough investigation of their capabilities. The DBE's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of Bids in the Bidder's efforts to meet the Project goal. Another practice considered insufficient good faith effort is the rejection of the DBE because its quotations for Work were not the lowest received. However, nothing in this paragraph will be considered to require the Bidder to accept unreasonable quotes to satisfy the Contract goal.

If the NMDOT determines that the Bidder has failed to make adequate good faith efforts to meet the DBE goal requirements, the NMDOT shall reject the Bid as non-responsive. The Bidder may dispute this determination and rejection of the Bid through the procedures in Standard Specification Section - 103.3 "Bidding Dispute Resolution Procedures".

Post-Award

Counting DBE Participation Toward Goals

This section in no way alters the obligations in Standard Specification Section - 108.1 "Subcontracting" and is only used to determine DBE participation levels for each Bidder. The Contractor must still comply with Standard Specification Section - 108.1 and perform with its own organization at least 40% of the Work based on the Total Bid Amount.

Only the value of the Work actually performed by the DBE will be counted towards DBE Project goals. DBE participation shall be credited as follows:

1. Count the entire amount of that portion of the Contract Work that is performed by the DBE's own forces. Include the cost of supplies and Materials obtained by the DBE for the Work including supplies purchased or equipment leased by the DBE. Supplies and equipment purchased or leased by a DBE from a prime contractor shall not be counted toward the DBE Project goal.
2. Count the entire amount of fees or commissions charged by a DBE for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required of the performance of the Contract, toward DBE goals, provided NMDOT determines the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.
3. When a DBE subcontracts part of its Work to another firm, the value of the subcontracted Work may be counted toward DBE goals only if the DBE's Subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE does not count toward DBE goals.

When a DBE performs as a participant in a joint venture, count the portion of the total dollar value of the Contract equal to the distinct, clearly defined portion of the Work of the Contract that the DBE performs with own forces toward DBE goals.

The NMDOT counts expenditures to a DBE toward DBE goals only if the DBE is performing a commercially useful function ("CUF") on the Contract.

1. A DBE performs a CUF when it is responsible for execution of the Work of the Contract and is carrying out its responsibilities by actually performing, managing, and supervising the Work involved. To perform a CUF, the DBE must also be responsible, with respect to Materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the Material and installing (where applicable) and paying for the Material itself.
2. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, Contract, or Project through which funds are passed in order to obtain the appearance of DBE participation.
3. If a DBE Contractor, Subcontractor, at any tier, or Supplier does not perform or exercise responsibility for at least 30% of the total cost of its Contract with its own forces, or the DBE subcontracts a greater portion of the Work of a Contract than would be expected on the basis of normal industry practice for the type of Work involved, it will be presumed that the DBE is not performing a CUF.
4. When a DBE is presumed not to be performing a CUF as provided in paragraph 3 of this section, the DBE may present evidence to rebut this presumption.
5. Decisions concerning CUF matters are not administratively appealable to USDOT.

DBE Trucking

Per the Standard Specification Section 108.1 "Subcontracting"... "A Trucker is not a Subcontractor unless the Contractor is using the Trucker to meet the DBE requirement associated with the Project". The following factors shall be used to determine whether DBE trucking Subcontractors are performing a CUF:

1. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular Contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
2. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the Contract.
3. The DBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers it employs.
4. The DBE may lease trucks from another DBE, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the Contract.
5. The DBE may also lease trucks from a non-DBE, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the Contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement.
6. The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.
7. For purposes of this DBE trucking section a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

DBE Supplying Materials

1. If the Materials or supplies are obtained from a DBE manufacturer, count 100 % of the cost of the Materials or supplies toward the DBE goal. A DBE manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises the Materials, supplies, articles, or Equipment required under the Contract.
2. If the Materials or supplies are purchased from a DBE regular dealer, count 60 % of the cost of the Materials or supplies toward DBE goals. A DBE regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the Materials, supplies, articles or Equipment required under the Contract are bought, kept in stock and regularly sold or leased to the public in the usual course of business. The DBE regular dealer must be an established regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
A DBE may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as required in paragraph 1 of this section if the DBE both owns and operates distribution equipment for the products. Any supplementing of regular

dealers' own distribution equipment shall be by a long-term lease agreement and not on ad hoc or contract-by-contract basis.

Packagers, brokers, manufacturers' representatives, or other person who arrange or expedite transactions are not regular dealers for the purpose of paragraph 2 of this section.

3. With respect to Materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees and commissions charged for assistance in the procurement of the Materials and supplies, or fees or transportation charges for the delivery of Materials and supplies required on a job site, toward DBE goals, provided the NMDOT determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the Materials or supplies themselves is not creditable toward DBE goals.

Credit for Work performed shall not be counted toward the DBE project goal until the amount committed has been paid to the DBE.

Pre-Award Substitution/Replacement and Post-Award Termination of DBE for Projects Having a DBE Goal

The Contractor shall use the DBE listed on the A-585 and confirmed on the A-644 to perform the specific Work identified. The Contractor shall not substitute, replace or terminate a DBE listed on the A-585 and confirmed on the A-644 (or an approved substitute DBE) without the prior written consent of NMDOT. The NMDOT considers it an improper DBE substitution, replacement or termination when a Contractor performs Work originally designated for a DBE with its own forces or those of an affiliate, or with a non-DBE, or with a substitute DBE. Unless NMDOT consent is provided, the Contractor shall not be entitled to any payment for Work or Materials unless it is performed by the listed DBE.

NMDOT will provide written consent to the termination request only if NMDOT agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate the DBE. For purposes of this paragraph, good cause includes the following circumstances:

1. The listed DBE fails or refuses to execute a written Contract;
2. The listed DBE fails or refuses to perform the Work consistent with normal industry standards, provided, however, that good cause does not exist if the failure or refusal to perform results from the bad faith or discriminatory action of the Contractor;
3. The listed DBE fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;
4. The listed DBE becomes bankrupt, insolvent, or exhibits credit unworthiness;
5. The listed DBE is ineligible to Work on public works projects because of suspension or debarment proceedings pursuant to 26 CFR Parts 180, 215 or 1200 or applicable state law;
6. The listed DBE is not a responsible Contractor;
7. The listed DBE voluntarily withdraws from the Project and provides to NMDOT written notice of its withdrawal;
8. The listed DBE is ineligible to receive DBE goal credit for the type of Work required;
9. A DBE owner dies or becomes disabled with the result that the listed DBE is unable to complete its Work on the Project; or

10. Other documented good cause that NMDOT determines compels the termination of the DBE. Provided that good cause does not exist if the Contractor seeks to terminate a DBE it relied on to obtain the Contract so that the Contractor can self-perform the Work for which the DBE was engaged or so that the Contractor can substitute another DBE or non-DBE after Contract Award.

Before seeking concurrence from the NMDOT to substitute, replace or terminate a DBE (or an approved substitute DBE) the Contractor must provide the DBE written notice including the reason of its intent to substitute, replace or terminate and give the DBE 5 Days to respond to the Contractor's notice. If required in a particular case as a matter of public necessity the NMDOT may allow a response period shorter than 5 Days. The DBE in response to the notice may provide the Contractor and NMDOT with the reasons, if any, why it objects to the proposed substitution, replacement or termination and why NMDOT should not approve the Contractor's request.

After receipt and review of the DBE response the NMDOT will provide a written response to the Contractor's request. NMDOT's decision is not appealable to USDOT.

After an approved termination of a DBE the Contractor shall make good faith efforts to subcontract with a substitute DBE which can perform the same type of work on the Project as the substituted, replaced or terminated DBE or to subcontract with a replacement DBE which can perform other types of work remaining on the Project. The good faith efforts shall be documented by the Contractor. The NMDOT may request a copy of the documented good faith efforts and the Contractor shall submit the same in 7 Days, which may be extended to an additional 7 Days at the request of the Contractor. The NMDOT will provide a written determination stating whether or not good faith efforts have been demonstrated. The Contractor may refer to Appendix A of 49 C.F.R. § 26 for guidance on good faith efforts.

NMDOT may allow a DBE contract goal waiver, adjust the DBE goal, or assess construction contract liquidated damages or design contract liquidated damages as may be appropriate, depending on the individual project's overall circumstances. NMDOT's decision to waive or adjust the contract goal is not appealable to USDOT.

Record Keeping Requirements

The Contractor shall keep such records as necessary to ensure compliance with its DBE utilization obligations, in accordance with Standard Specification Section - 107.28 "Contractor Records".

Compliance Procedures

The Contractor is solely responsible and obligated to ensure DBE compliance at all tiers until the final payment is made in accordance with Standard Specification Section - 109.10 "Project Closure".

If it is found that the Contractor or Subcontractor at any tier is not in compliance with this NTC and DBE program, NMDOT will notify the non-compliant party in writing. Failure to be compliant is a material breach of the Contract and may result including, but not limited to, the NMDOT exercising the remedies below. The NMDOT may conduct a compliance conference with the non-compliant party or parties to discuss the area(s) of non-compliance. In the event

that the non-compliant party or parties fails or refuses to perform in compliance the NMDOT will send the non-compliant party or parties a "Notice of Non-Compliance" containing a deadline for the compliance. If the non-compliant party becomes compliant after the "Notice of Non-Compliance" the NMDOT will rescind the "Notice of Non-Compliance" and notify the party or parties. If the deficiencies are not corrected, NMDOT will initiate administrative action against the non-compliant party or parties, which may include but not be limited to:

1. Termination of the Contract;
2. Withholding of monthly progress payments;
3. Initiation of appropriate suspension or debarment proceedings;
4. Referral of any unlawful actions to the appropriate enforcement agencies; or
5. Other actions as appropriate, at the discretion of NMDOT.

3. SUBCONTRACTOR PROMPT PAYMENT PROVISIONS

This NTC does not alter the sole discretion of the NMDOT to make good cause determinations concerning Contractor prompt payment matters.

To ensure that all obligations to promptly pay Subcontractors are met Contractors shall pay all Subcontractors, Suppliers and Fabricators their respective Subcontract amount by electronic transfer, if available, for NMDOT undisputed Accepted Work within the timeframes specified in the Standard Specification Section 108.1 - "Subcontracting".

The Contractor is solely responsible and obligated to ensure prompt payment obligations and compliance reporting through all tiers until the final payment is made in accordance with Standard Specification Section 109.10 - "Project Closure". Contractors, Subcontractors or Suppliers, at all tiers, shall be required to submit payment information, as provided for in the B2GNow supporting software system, indicating when payments are made to any Subcontractor, Supplier and or Fabricator, regardless of DBE status. The Subcontractor, Supplier or Fabricator shall in B2GNow timely select whether payment was or was not received for the undisputed and Accepted Work. The NMDOT may recognize supporting documentation of such payment(s) in one or more of the following forms:

1. Proof of the timely deposit of funds into the Subcontractor, Supplier and or Fabricator bank account;
2. Proof of timely hand delivery of payment to the Subcontractor, Supplier and or Fabricator; or
3. Proof of timely mailing payment to the Subcontractor, Supplier and or Fabricator.

The Contractor shall notify the NMDOT in writing in all situations when it will not make full prompt payment to its Subcontractor, Supplier or Fabricator before the payment becomes due. The Contractor shall also notify the Subcontractor, Supplier or Fabricator in writing in all situations when it will not make full prompt payment before the payment becomes due. For purposes of notification of failure to make prompt payment "in writing" shall be delivered via certified mail or electronic mail. A Contractor will be required to fully document any alleged disputes with its Subcontractors, Suppliers and or Fabricators and provide the documentation to the NMDOT upon request.

The Contractor shall have good cause for any failure to fully or partially provide prompt payment for Accepted Work. The NMDOT determines good cause. Good cause recognized by the NMDOT to excuse a failure to promptly pay includes, but is not limited to, a claim concerning the Subcontractor's or Supplier's Work, failure to provide certified payrolls, and other required Project documentation. The amount withheld cannot exceed the amount in dispute between the Contractor and Subcontractor or Supplier. The Contractor has the burden to support the Contractor's assertion of good cause. If the failure to fully or partially provide prompt payment is based on a claim, the Contractor shall submit a verifiable explanation and/or proof of the claim between the parties to the Project Manager.

Retainage

The NMDOT will require Contractors to pay all retainage owed to the Subcontractor, Supplier or Fabricator within 30 Days of the Progress Payment indicating Acceptance of the completed Subcontract Work, even if the NMDOT continues to withhold retainage from the Contractor. The Subcontract Work is completed when all the tasks called for in the Subcontract have been accomplished, documented and Accepted by the NMDOT. The Contractor may request partial acceptance in accordance with Standard Specifications Section - 105.18.1 "Partial Acceptance" upon satisfactory completion of the Subcontract Work. Good cause recognized by the NMDOT to excuse a failure to promptly release retainage includes, but is not limited to, a claim concerning the Subcontractor's or Supplier's Work, failure to provide certified payrolls, and other required Project documentation. The amount withheld cannot exceed the amount in dispute between the Contractor and Subcontractor or Supplier. The Contractor has the burden to support the Contractor's assertion of good cause for the failure to promptly release retainage. If the failure to promptly release retainage is based on a claim, the Contractor shall submit verifiable explanation and/or proof of the claim between the parties to the Project Manager.

Cross-Project Offsets

The NMDOT will not recognize cross-Project offsets as "good cause" excusing untimely payment for Accepted Work. The Contractor's Contract with Subcontractors or Suppliers shall not contain any provision that allows the Contractor to withhold payment from the Subcontractor or Supplier as a result of the Subcontractor's or Supplier's performance on separate Contract(s). Any such provision will be without effect, and shall not be recognized as good cause excusing a failure to make prompt payment.

4. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS AND SUPPLEMENTS

FHWA-1273 -- Revised October 23, 2023

5. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions

- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

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

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design- build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

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

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504

of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

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

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such

advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

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

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

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

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral

practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

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

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

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

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

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

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

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

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

(1) The number and work hours of minority and non- minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

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

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non- minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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

1. Minimum wages (29 CFR 5.5)

a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid

the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph

1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

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

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the

amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to

all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

- (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements

(1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts- covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid

electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

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

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. Required disclosures and access

(1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) Apprenticeship ratio. The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph

4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

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

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated

damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the

underpayment or loss, due to any workers of lower- tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

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

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish

(a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long- standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph

(1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII.FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal- aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

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

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

(42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387).

Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first

tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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

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

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause.

The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan,

the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted

directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor).
46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

5. SUPPLEMENTAL EEO REQUIREMENTS

Incorporated in this Contract, by reference, are supplemental requirements to the Department of Labor, Office of Federal Contract Compliance Programs ("OFCCP") Equal Employment Opportunity Program ("EEO"). The supplemental requirements are:

1. Exec. Order No. 11246, 30 FR 12319 (September 24, 1965);
2. 41 C.F.R. § 60-4.1 through 60-4.9 (2015);
3. Exec. Order No. 13665 Non-Retaliation for Disclosure of Compensation Information (April 8, 2014); and
4. Further Amendments to Exec. Order No. 11478, Equal Employment Opportunity in the Federal Government and Exec. Order No. 11246, Equal Employment Opportunity (July 21, 2014).

Per 41 C.F.R. § 60-4.2 all federally-assisted Contracts shall include (information has been interlineated applicable to this Contract as required):

"(a) All Federal contracting officers and all applicants shall include the notice set forth in paragraph (d) of this section and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth in § 60-4.3 of this part in all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts to be performed in geographical areas designated by the Director pursuant to § 60-4.6 of the part. Administering agencies shall require the inclusion of the notice set forth in paragraph (d) of this section and the specifications set forth in § 60-4.3 of this part as a condition of any grant, contract, subcontract, loan, insurance or guarantee involving federally assisted construction covered by this part 60-4.

(b) All non-construction contractors covered by Executive Order 11246 and the implementing regulations shall include the notice in paragraph (d) of this section in all construction agreements which are necessary in whole or in part to the performance of the covered non-construction contract.

(c) Contracting officers, applicants and non-construction contractors shall give written notice to the Director within 10 working days of award of a contract subject to these provisions. The notification shall include the name, address and telephone number of the contractor; employer identification number; dollar amount of the contract, estimated starting and completion dates of the contract; the contract number; and geographical area in which the contract is to be performed.

(d) The following notice shall be included in, and shall be a part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess

of \$10,000 to be performed in geographical areas designated by the Director pursuant to § 60–4.6 of this part (see 41 CFR 60–4.2(a)):

Notice of Requirement for Affirmative Action To Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

The most current participation goals for minorities and females can be found at <https://www.dol.gov/sites/dolgov/files/ofccp/ParticipationGoals.pdf> and are:

New Mexico:

160
Albuquerque,
NM: SMSA
Counties.

0200 Albuquerque,
NM-38.3% NM
Bernalillo; NM
Sandoval. Non-SMSA
Counties-45.9%
NM Catron. NM Colfax; NM De Baca; NM Guadalupe; NM San Juan; NM San Miguel; NM
Santa Fe; NM Socorro; NM Taos; NM Torrance; NM Valencia.

Goals for females:
Nationwide goal-6.9%

These goals apply to all of a contractor's construction work sites in the geographic area (whether or not these sites are also the result of a federal contract or are federally assisted contract). The goals apply to the contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a federal or federally assisted contract or subcontract.

The contractor's compliance with Executive Order 11246 and the regulations in 41 CFR Part 60-4 will be assessed based on its implementation of the equal opportunity clause and its good faith efforts to meet the goals by undertaking the specific affirmative action obligations required by the specifications outlined in 41 CFR 60-4.3(a). Each goal is a target percentage of hours to be worked by minorities or women. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor must make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the

contractor's goals is a violation of the contract, Executive Order 11246, and the regulations in 41 CFR Part 60-4.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

For more information: [Contract Award Notification Requirement | U.S. Department of Labor \(dol.gov\)](#)

The most current OFFCP staffing can be found at <http://www.dol.gov/ofccp/contacts/regkey.htm> and are:

SOUTHWEST and ROCKY MOUNTAIN REGION

Covered States/Territories: Arkansas, Colorado, Louisiana, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Wyoming

Regional Director: Melissa L.

Speer Deputy Regional Director:

Ronald Sullivan

Director of Regional Operations:

LaQuandra Adebajo Director of Planning

Support: Antonio Mendez Regional

Outreach Coordinator: Allen Boyd

Contact Information:

U.S. Department of Labor

Office of Federal Contract Compliance

Programs 525 South Griffin St.

Room 840

Dallas, TX 75202-5092

Main Number: 972-850-2550

Fax: 972-850-2552

Regional Director Contact: OFCCP-SWARM@dol.gov

Construction Award Email: OFCCP-SW-ConstructionAward@dol.gov Pre-Award Email: OFCCP-SW-PreAward@dol.gov

Complaints Email: OFCCP-SW-CC4@dol.gov

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is in the Advertisement."

6. INDIAN PREFERENCE

This Contract preference requirement is an expansion of the provisions of the equal employment opportunity responsibilities for Contractors contained elsewhere in this NTC and the provisions contained under FHWA-1273.

For the full Policy Statement on Indian Preference: [Policy Statement on Indian Preference under Title VII | U.S. Equal Employment Opportunity Commission \(eeoc.gov\)](#)

If the Project is located on or near a reservation the Contractor, or its Subcontractor at any tier, may be required to extend a publicly announced preference in employment to Indians living on or near an Indian reservation in connection with employment opportunities on or near an Indian reservation. The word “near” includes all areas where a person seeking employment could reasonably expected to commute in the course of a workday. Contractors or Subcontractors, at any tier, shall not discriminate among Indians on the basis of religion, sex, tribal affiliation, and the use of such a preference shall not excuse compliance with the remaining EEO provisions of this NTC.

If the Contractor extends an Indian preference, then this NTC requires that Contractors shall afford preference to initial hiring, reassignment, transfer, competitive promotion, reappointment, reinstatement, or any personnel action to fill a vacant position to qualified and enrolled members of federally recognized Indian tribe. The extended preference shall extend to Indians and not extend to a specific tribe or tribal affiliation. There may be tribal laws and regulations that the Contractor is required to follow if an Indian preference is extended. Contractors shall make themselves aware of any labor requirements, taxes, fees, licenses, permits or conditions that may be imposed by the affected tribes for the Project work performed in the area. In order to be apprised of the tribal law or regulation requirements, the Contractor shall establish a liaison with local tribe employment offices and provide this individual's name and contact information to the Project Manager at the Pre-Construction Conference per Standard Specification Section 108.2 “Notice to Proceed and Pre-Construction Conference”. The tribe's employment office may then assist the Contractor in identifying qualified and tribally enrolled individuals and assist in guidance related to applicable tribal laws or regulations. Verification of available, qualified and enrolled individuals will be provided to the Contractor by the tribe's employment office. A list of contacts to facilitate the Contractor's coordination with the tribal liaison is at: <https://api.realfile.rtsclients.com/PublicFiles/f260a66b364d453e91ff9b3fedd494dc/f3934a69-6444-4189-88de-c08ae301c683/Tribal%20Leader%20Contact%20List>

7. NMDOT ON-THE-JOB TRAINING (OJT) PROGRAM

The primary objective of the Special Provision referenced in the link below is to address the underrepresentation of minority and female workers in the construction trades through the assignment of OJT goals. The primary objective of the OJT program is the training and upgrading of minorities and females to journeyman status. The Contractor shall make every effort to enroll minority, female, and economically disadvantaged persons to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and will not be used to discriminate against any applicant for training, whether or not they are a member of a minority group.

The Contractor or Subcontractor, at any tier, shall comply with the procedures outlined in Appendix B to Subpart A of 230 C.F.R. § 230. The OJT program implemented by the

Contractor or Subcontractor, at any tier, must be formally approved by the NMDOT before use of the program. In lieu of the use of a formally approved OJT program the Contractor, or Subcontractor at any tier, may submit its own individual OJT program for NMDOT and FHWA consideration and approval. Until formal approval is received from the NMDOT and FHWA, the individual Contractor or Subcontractor OJT program cannot be used.

[On The Job Training Program and Partnership Agreement \(rtsclients.com\)](https://www.rtsclients.com)

Contractors meeting the selection criteria for implementation of an OJT program will be notified by the NMDOT of its training assignment by September 1st. The reporting year and the training assignment will be identified in the notification from the NMDOT.

The Contractor shall fulfill all of the requirements of the OJT program including the maintenance of records and submittal of periodic reports documenting program performance. The requirements and reports related to the OJT program shall include the Contractor's use of forms A-2201, A-2202, and A-2203. The forms are incorporated herein by reference. The Contractor shall submit Form A-2202 by the tenth (10th) of each month of the reporting period or as indicated on the form itself.

The Contractor has the option to pay its trainees either the full prevailing wage for the trainee's job classification or at least 60% of the minimum prevailing wage for the trainee's job classification for the first half of the training period, 75% for the third quarter, and 90% for the last quarter. Prevailing wages are those specific to this Contract.

For Federal-aid projects, and if requested, the Contractor may be reimbursed \$0.80 per training hour by the NMDOT. Requests for reimbursement shall be submitted by the Contractor to the Project Manager in writing and after Substantial Completion for the Project is declared. Reimbursement is not available for 100% state-funded Projects.

Noncompliance with the responsibilities and requirements of this section, including being a non-responsive participant in the program, may be cause for the NMDOT to issue a show cause notice and other action as deemed necessary by the NMDOT.

8. WAGE RATES

The higher wage rates shall govern in the event of a discrepancy between the minimum wage rates in the Wage Decision of the DWS and the U.S. Department of Labor Wage Decision applicable to this Contract.

9. LABOR REPORTING AND SUBMISSION OF WEEKLY PAYROLLS

Contractors and Subcontractors must pay employees weekly. Certified Payrolls and Statements of Compliance on federally funded Projects are due to the NMDOT seven (7) Days after date that the actual payment is processed by Contractor or Subcontractor, at any tier, to its employee.

The date that the actual payment is processed to the employee may be different than the payroll end date in some situations. Notwithstanding the difference between a payroll end date and actual payment date, the Contractor or Subcontractor at any tier shall make actual full payment to the employee no later than seven

(7) Days after the payroll end date. And then shall submit the Certified Payrolls and Statements of Compliance no later than seven (7) Days after the actual payment date.

The Contractor and Subcontractors at all tiers Working on federal-aid Projects shall use the following EEO Software Programs to report specific EEO, Labor Compliance and DBE information as required by the Contract and as specified by this NTC. The two software programs are:

- B2GNow software
- LCPtracker software

Use of B2GNow and LCPtracker software programs is required and shall be considered Incidental. Failure of a Contractor or Subcontractor to use the required software programs to report specific EEO, Labor Compliance and DBE information may result in the issuance of a Non-Conformance per Standard Specification Section – 109.8.2 “Non-Conformance” or other Contract remedies.

B2GNow -, is a web-based software program used to collect, verify and manage payment information for Contractors and Subcontractors working on federal-aid Projects. Additionally, the software is used to collect and report DBE participation and utilization on federal-aid Projects. Information related to the use of the software is available at <https://nmdot.dbesystem.com/>.

The Contractor shall upload the fully executed contract between the Contractor and Subcontractor at any tier, the completed permission to subcontract form and associated attachments, and subcontract checklist to B2GNow.

LCPtracker - (Labor Compliance Program Tracker) is a web-based software program used to collect, verify and manage prevailing wage certified payrolls and related labor compliance documentation for Contractors and Subcontractors on federal-aid Projects. Information related to the use of the software is available at

<https://prod.lcptracker.net/Lcp/WebForms/Login.aspx>. On all Projects, the Contractor shall submit and shall ensure all Subcontractors submit weekly payroll information into the LCPtracker software program.

To adequately track timely submission of weekly payrolls the Contractor shall enter the actual payment date in the field on the weekly Certified Payroll reporting form in LCPtracker titled “payment date”.

Information on access to the software programs, log-on information, use of the programs, available training, user manuals, etc. can be obtained by accessing the web page referenced in this NTC.

10. TITLE VI Assurances Appendix A and E

Appendix A of the Title VI
Assurances 49 C.F.R. § Pt.
21, App. A

Appendix A of the Title VI Assurances

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time-to-time, (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate either directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of the 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the New Mexico Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the New Mexico Department of Transportation (NMDOT), or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of the contractor's non-compliance with the nondiscrimination provisions of this contract, the New Mexico Department of Transportation (NMDOT) will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating or suspending the contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the NMDOT or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a

subcontractor, or supplier because of such direction, the contractor may request the NMDOT to enter into any litigation to protect the interests of the NMDOT. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Appendix E of the Title VI Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et. seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (29 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the program or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your program (70 Fed. Reg. at 74087 to 74100);

- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (U.S.C. 1681 *et seq.*)

FEDERAL-AID HIGHWAY CONSTRUCTION CONTRACTORS ANNUAL EEO REPORT																						
1. MARK APPROPRIATE BLOCK ☐ Contractor ☐ Subcontractor			2. COMPANY NAME, CITY, STATE:		3. PROJECT NUMBER:		4. DOLLAR AMOUNT OF CONTRACT:		5. PROJECT LOCATION: (County and State)													
This collection of information is required by law and regulation 23 U.S.C. 140a and 23 CFR Part 230. The OMB control number for this collection is 2125-0019 expiring in March 2025.																						
6. WORKFORCE ON FEDERAL-AID AND CONSTRUCTION SITE(S) DURING LAST FULL PAY PERIOD ENDING IN JULY 20 (INSERT YEAR)																						
TABLE A																						
JOB CATEGORIES	TOTAL EMPLOYED		TOTAL RACIAL/ETHNIC MINORITY		BLACK or AFRICAN AMERICAN		WHITE/HISPANIC OR LATINO		AMERICAN INDIAN OR ALASKA NATIVE		ASIAN		NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER		TWO OR MORE RACES		WHITE/NON-HISPANIC OR LATINO		APPRENTICES		ON THE JOB TRAINEES	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
OFFICIALS	0	0	0	0																		
SUPERVISORS	0	0	0	0																		
FOREMEN/WOMEN	0	0	0	0																		
CLERICAL	0	0	0	0																		
EQUIPMENT OPERATORS	0	0	0	0																		
MECHANICS	0	0	0	0																		
TRUCK DRIVERS	0	0	0	0																		
IRONWORKERS	0	0	0	0																		
CARPENTERS	0	0	0	0																		
CEMENT MASONS	0	0	0	0																		
ELECTRICIANS	0	0	0	0																		
PIPEFITTER/PLUMBERS	0	0	0	0																		
PAINTERS	0	0	0	0																		
LABORERS-SEMI SKILLED	0	0	0	0																		
LABORERS-UNSKILLED	0	0	0	0																		
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TABLE C (Table B data by racial status)																						
APPRENTICES	0	0	0	0																		
OJT TRAINEES	0	0	0	0																		
8. PREPARED BY: (Signature and Title of Contractors Representative)															9. DATE		10. REVIEWED BY: (Signature and Title of State Highway Official)		11. DATE			
Form FHWA- 1301 (Rev. 06-22)															PREVIOUS EDITIONS ARE OBSOLETE							

1.4.39 Return of Lobbying Disclosure [January 1, 2019]

Pre-Award

This Project is Federal-aid funded. Per 49 C.F.R. § 20.105 and 31 U.S.C. 1352 the Bidder is prohibited from using Federal-aid funds for certain lobbying activities. In addition to this prohibition, the Bidder is required to certify that no Federal-aid funds have been or will be used for such lobbying activities. The Bidder makes this certification through the submission of its Bid with its digital id. The terms and conditions of the certification appear in the Notice to Contractors ("NTC") titled "Federal Requirements" in the section called "Required Contract Provisions Federal-aid Construction Contracts and Supplements (FHWA-1273)" in subsection "XI Certification Regarding Use of Contract Funds for Lobbying".

In addition to the certification above, if any funds other than Federal-aid funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Project the attached form titled "Disclosure of Lobbying Activities" ("Disclosure") shall be submitted. After receipt of the notice of preliminary award of contract letter the successful Bidder shall complete and return the Disclosure with the documents in the notice of preliminary award of contract letter.

Failure by the successful Bidder to comply with this Notice to Contractors may constitute just cause for cancellation of the Award and the forfeiture of the Bid Guaranty.

Post-Award

At the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any Disclosure previously submitted the Contractor shall immediately submit an updated Disclosure to the Project Manager.

In addition, for subcontracts at any tier over \$100,000.00, the Contractor as a recipient of Federal-aid funds is required to:

1. Add the NTC titled "Federal Requirements" in all subcontracts at any tier. The inclusion of the NTC ensures that the terms and conditions of the certification are incorporated into the Subcontract at any tier;
2. If any funds other than Federal-aid funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee or any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Project require its Subcontractors at any tier to complete and return the Disclosure with its permission to subcontract request form A-1086; and
3. Require its Subcontractors at any tier to submit an updated Disclosure to the Contractor at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any Disclosure previously submitted by the Subcontractor. The Contractor shall immediately submit the same to the Project Manager.

Per 31 U.S.C.A. § 1352 (d)(1)(A)(C)(2) exclusions exist regarding the requirements of this lobbying certification and completion of Disclosure. Some of the applicable exclusions are:

1. Payment of a reasonable compensation made to employed officers or employees of a person requesting or receiving Federal-aid funds.
2. A request of or receipt of a Contract that does not exceed \$100,000.00.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure.)

Approved by OMB

0348-0046

1. Type of Federal Action: ☐ a. contract ☐ b. grant ☐ c. cooperative agreement ☐ d. loan ☐ e. loan guarantee ☐ f. loan insurance		2. Status of Federal Action: ☐ a. bid/offer/application ☐ b. initial award ☐ c. post-award		3. Report Type: ☐ a. initial filing ☐ b. material change For Material Change Only: year _____ quarter _____ date of last report _____	
4. Name and Address of Reporting Entity: ☐ Prime ☐ Subawardee Tier _____, if known: Congressional District, if known: _____			5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known: _____		
6. Federal Department/Agency:			7. Federal Program Name/Description: CFDA Number, if applicable: _____		
8. Federal Action Number, if known:			9. Award Amount, if known: \$ _____		
10. a. Name and Address of Lobbying Entity (if individual, last name, first name, MI): (attach Continuation Sheet(s) SF-LLLA, if necessary)			b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): (attach Continuation Sheet(s) SF-LLLA, if necessary)		
11. Amount of Payment (check all that apply): \$ _____ ☐ actual ☐ planned			13. Type of Payment (check all that apply): ☐ a. retainer ☐ b. one-time fee ☐ c. commission ☐ d. contingent fee ☐ e. deferred ☐ f. other; specify: _____		
12. Form of Payment (check all that apply): ☐ a. cash ☐ b. in-kind; specify: nature _____ value _____					
14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment Indicated in Item 11: (attach Continuation Sheet(s) SF-LLLA, if necessary)					
15. Continuation Sheet(s) SF-LLLA attached: ☐ Yes ☐ No					
16. Information requested through this form is authorized by 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.			Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____		
Federal Use Only:			Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)		

1.4.40 Approved Products List (April 15, 2023)

Products used on federally funded Projects that are permanently incorporated into the Project shall be approved by the New Mexico Department of Transportation's ("NMDOT") product evaluation program and listed on the NMDOT's approved products list ("APL").

The Bidder's Bid Item Unit Price for the Project shall be deemed to rely on the use of the products listed on the APL. The Contractor shall comply with all APL procedures required by the hyperlink below:

<http://dot.state.nm.us/content/nmdot/en/APL.html>

As used in this Notice to Contractors, "product" means any manufactured item, Material, traffic operational device or other feature used in the maintenance or construction of this Project.

Approval to use a non-APL product may be granted by the Project Manager on a Project specific basis with written concurrence from the NMDOT Product Evaluation Program Engineer. Project specific approvals are for said Project and do not constitute placement of said product on the NMDOT APL. When requesting to use a non-APL product on a Project, the Contractor shall submit a written request to include a reasonable justification as to why the manufacturer could not acquire product approval through the conventional NMDOT product evaluation process. For products currently not on the APL and prior to a project specific approval being granted, the Project Manager shall ensure that the Contractor and/or manufacturer has submitted an application to be evaluated consistent with the processes described in the above hyperlink.

If a non-APL product is used by the Contractor without written approval of the Project Manager, the Contractor shall remove any non-APL product. Removal and replacement will be made at the sole expense of the Contractor if a non-APL Product is used. Any disruption to the Project schedule related to the Contractor's use of a non-APL Product is solely the Contractor's responsibility and no additional Contract Time will be granted.

1.4.41 Cooperation with Utilities

For construction purposes this Notice to Contractors ("NTC") does not supersede or alter the obligations in the 2019 Edition of the New Mexico Department of Transportation ("NMDOT") Standard Specifications for Highway and Bridge Construction, ("Standard Specifications") Section 105.6, "Cooperation with Utilities". This Project's Work affects utilities. The NMDOT may or may not own the utilities that are within the Project limits. Therefore the Contractor shall coordinate with both the NMDOT and the respective utility identified in this NTC. Failure by the Contractor to comply with this NTC and the Contract may result in delays to the Project and may result in Non-Conformances. This coordination and associated Work shall be considered incidental to the completion of the Project and no separate measurement or payment will be made.

The Contractor shall preserve line location markings or provide an offset mark before obliterating a locate mark. Restrictions exist regarding the use of emergency line locates. An emergency is defined as an excavation that must be performed due to circumstances beyond the control of the Contractor and that affects public health, safety or welfare. Emergency locate request shall not be used to circumvent poor job planning or economic consequences.

NMDOT Owned Facility Infrastructure

If a Contractor's or Subcontractor's activities at any tier, destroys, obliterates, covers or in any way alters utility markings put in place by the NMDOT, the Contractor shall ensure that those line markings are reestablished or provide offset markings before the Contractor or its Subcontractor at any tier begins Work in the affected area. The Contractor shall both photo document the utility markings in their construction area prior to disturbing those markings and photo document the remarked utility alignment or the offset markings to ensure accuracy to the original markings. Photos will clearly identify distances and/or recognizable features needed to ensure re-markings or offset markings are accurate.

If the Contractor or Subcontractor at any tier fails to accurately reestablish previously placed line markings and damage occurs to any NMDOT owned facility infrastructure the Contractor shall be responsible for all associated repair costs and no additional Contract Time will be granted for repairs. If any NMDOT owned facility is damaged, the Contractor shall bear the cost of repair to the satisfaction of the NMDOT. NMDOT incurred costs related to damage to NMDOT owned facility infrastructure may be recovered from the Contractor by Progress Payment offset or the Contractor's Project performance bond. All damaged infrastructure will be repaired as an emergency repair (within 24-hours) and shall be performed in accordance with the Standard Specifications.

Non-NMDOT Owned Utility Infrastructure

Utilities shown on the Plans, which will not be relocated, shall require the Contractor to take the necessary precautions to protect the utility from damage caused by the Work. If any such utility is damaged, the Contractor shall bear the cost of repair to the satisfaction of the utility owner. The Contractor shall be responsible for all associated repair costs and no additional Contract Time will be granted for repairs.

Utility Relocation

Utilities detailed below, shall require the Contractor to take the necessary precautions to protect the utility from damage caused by the Work. If any such utility is damaged, the Contractor shall bear the cost of repair to the satisfaction of the utility owner. The Contractor shall be responsible for all associated repair costs and no additional Contract Time will be granted for repairs.

All timeframes listed below are reflected in Days. Per Standard Specification Section 108.3 "Schedule" the Contractor shall include the timeframes listed below as an activity in the CPM Baseline Schedule or Bar Graph Baseline Schedule, as called for in the Contract, and all schedule updates so that the NMDOT can readily identify the Work and measure the progress of the same.

Contractor shall perform the following relocations and adjustments:

UTILITY OWNER: Los Alamos County Department of Public Utilities

Work Location: Trinity Drive (NM-502)
Subsurface

An itemized Bid Item Unit Price list is required on this Project for Utility Work supporting the following four bid items:

- **663200 – General - Utilities** shall reflect all costs associated with the General itemized list; Item No 1 - Item 8 below.
- **663206 – Water System** shall reflect all costs associated with the Water itemized list; Item 9 – Item 20 below.
- **663202 – Gas System** shall reflect all costs associated with the Gas itemized list; Item 21 – Item 34 below.
- **663210 – Electric System** shall reflect all costs associated with the Electric itemized list; Item 35- Item 38 below.

All Bidders shall submit their completed itemized list contained in this Notice to Contractors (“NTC”) the day of the Bid Opening with other required bid documents.

Failure to comply with this NTC shall result in the Bidder’s Bid being rejected as non-responsive.

If quantities are increased or decreased the itemized list will be used to determine payment to the Contractor for the quantities of actual Work Accepted.

The total Lump Sum costs derived from the completed itemized list shall be entered in the Bid Schedule for the following Bid Items Numbered:

- **663200 – General - Utilities (LUMP SUM)**
- **663206 – Water System (LUMP SUM)**
- **663202 - Gas System (LUMP SUM)**
- **663210 - Electric System (LUMP SUM)**

Water System Description

In addition to information specified herein, all water components shall be installed in accordance with all local regulations as well as Los Alamos County Plans and Specifications included in this Bid.

1. Refer to Specification Section Measure and Payment for work included in each pay item.
2. A penetration permit issued by the Los Alamos County Utility Department shall be obtained by the Contractor, not less than 48 hours in advance of a connection to any active water main.
3. The existing water distribution system may have been constructed using unrestrained cast-iron, or steel pipe. Contractor shall apply any necessary measures to secure any such unrestrained piping during construction. The proposed restraining method shall be presented to the Project Manager for approval prior to construction.
4. All water, water valve boxes, locate wires, and concrete collars shall be constructed per project detail sheets.
5. Utility Line Locates shall be in accordance with New Mexico Excavation Law. Damages to utilities shall be reported to Department of Public Utilities for evaluation and repair.
6. Existing water valves will only be operated by LAC staff.

GAS System Description

In addition to information specified herein, all gas components shall be installed in accordance with all local regulations as well as, CRF 49, Los Alamos County Plans and Specifications provided in this bid.

1. Refer to Specification Section Measure and Payment for work included in each pay item.
2. Contractor's and subcontractor's personnel performing the installation of gas mains and appurtenances within the corridor of live system, including excavation and backfilling, shall be operator-qualified (OQ) workers, and they shall be enrolled in an approved Drug and Alcohol Program, in accordance with the U.S. Department of Transportation Pipeline Safety Regulations. Contractor and subcontractors shall submit a list of all covered-task employees, the covered tasks for which they have been approved by the Contractor's OQ program, copies of Operator Qualification statements, Operator Qualification Plan, and Drug and Alcohol Program to Los Alamos County Utilities, via the project manager, for approval prior to beginning any work.
3. All gas mains, services lines and appurtenances shall be installed in full compliance with 49 CFR Part 192 and with Los Alamos County Technical Specifications Section 301.
4. All gas, gas valve boxes, locate wires, and concrete collars shall be constructed per project detail sheets.
5. Contractor shall maintain basic services uninterrupted throughout the execution of the project, unless controlled outages are approved by the specific utility company or

- the County and appropriate notice is made to affected customers.
6. Prior to a controlled outage approval, the Contractor shall submit a plan to be approved by the County, no less than 7 days hours in advance of the event.
 7. Utility Line Locates shall be in accordance with New Mexico Excavation Law. Damages to utilities shall be reported to Department of Public Utilities for evaluation and repair.
 8. Excess flow valves shall be installed in accordance with applicable regulations at the time of installation.

ELECTRIC SYSTEM DESCRIPTION

In addition to information specified herein, all electric and communication system components shall be installed in accordance with all local regulations as well as Los Alamos County Plans and Specifications included in this bid.

1. Refer to Specification Section Measure and Payment for work included in each pay item.
2. Electrical Conduits shall be PVC Schedule 40 Conduit. Electric Fittings shall be Rigid Galvanized Steel with Pressure Tape. All elbows shall have a 36" radius.
3. Conduit trench depth must be maintained to provide proper placement of fittings with respect to finish grade.
4. Contractor shall not alter trench route when additional fittings would be needed. There will be a maximum of 3- 90° bends or a total of 270° for any number of fittings in any electrical conduit run.
5. All changes to trench route must be approved by Utility Engineering prior to the work.

Owner shall perform the following relocations and adjustments:

UTILITY OWNER: Lumen

Work Location: Trinity Drive (NM-502)
Subsurface

Lumen has facilities within the project limits. Terra Technologies anticipates that due to the roadway improvements the Lumen facilities (buried cables, ducts, manholes & pedestals) may be impacted. Anticipated impacts to Lumen facilities are listed below. Lumen will work with the County Contractor to protect in place any of their substructure facilities along the north side of the project. There are several potential conflicts that are listed below that the contractor will need to work with Lumen on adjustments or protecting in place. These locations will be discussed at the pre-construction meeting with the County Contractor.

No.	Station	Offset	Facility	Conflict	Action	Days to complete
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						(concurrent with construction)
1	27+50	Lt	Manhole	New sidewalk	Field adjust manhole to elevation of new sidewalk	2
2	33+75	Lt	Manhole	New sidewalk	Field adjust manhole to elevation of new sidewalk	2
3	37+05	Lt	Manhole	New sidewalk	Field adjust manhole to elevation of new sidewalk	2

Owner shall perform the following relocations and adjustments:

UTILITY OWNER: Comcast

Work Location: Trinity Drive (NM-502)
Subsurface

Comcast will work with the County Contractor to protect in place any of their substructure facilities. The facilities include an underground conduit and coaxial cable facility located on the north side of Trinity Drive, between 15th Street (coordinates: 35.879826, -106.298460) and Knecht Street (coordinates: 35.879952, -106.296462). These facilities span approximately 700 feet and are buried at a depth of 18 to 24 inches within the proposed construction zone. Comcast is prepared to either relocate the facilities or protect them in place. These locations will be discussed at the pre-construction meeting with the County Contractor.

1.5 Bid Forms

This Bid Submitted to:

Incorporated County of Los Alamos

Bid Number: IFB26-30

TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390

- A. The undersigned Bidder proposes and agrees, if this Bid is accepted; to enter into an agreement with County in the form included in the solicitation documents; to perform and furnish all work as specified or indicated in the solicitation documents for the contract price; and within the contract time indicated in this bid; and in accordance with all of the other terms and conditions of the solicitation documents.
- B. Bidder accepts all the terms and conditions of the solicitation and Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for sixty (60) calendar days after the day of the Bid opening. Bidder will sign and submit the Agreement and the Performance, Labor and Material Bonds, Certificate of Insurance and all other documents required by the Solicitation Requirements within ten (10) calendar days after receipt of the County's Notice of Award.
- C. Notice to Proceed shall be issued no later than twenty-eight (28) calendar days from Notice of Award.
- D. Bidder shall promptly provide written notice to the County of any conflicts, errors, or discrepancies discovered in the solicitation documents.
- E. Bidder represents this Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid. Bidder has not solicited or induced any person, firm or corporation to refrain from bidding, and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over County.
- F. By submitting the bid, each bidder represents to the County that it has inspected the site, is familiar with local conditions that may affect cost, progress, performance or furnishing of the work, has considered federal, state, and local laws and regulations that may affect cost, progress, performance, or furnishing of the Work and has read and is thoroughly familiar with the technical specifications and plans and the Solicitation and Contract document (including all addenda). The failure or omission of any such bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to its bid.
- G. Bidder represents that a complete set of Solicitation Documents was used in preparing the Bid and acknowledges that the County assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Solicitation Documents.

- H. Bidder represents that the submission of this bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of the Bid, that without exception the Bid premised upon performing and furnishing the Work required by the Solicitation Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Solicitation Documents, and that the Solicitation Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- I. The Solicitation Documents are intended to describe a functionally complete project to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically required. When words or phrases which have a well-known technical or construction industry or trade meanings are used to describe work, materials or equipment, such words or phrases shall be interpreted in accordance with those meanings. Clarifications and interpretations of the Technical Specifications and Contract Drawings shall be issued by the County.
- J. The quantities appearing in the Bid Schedule, Plans, or other contract documents are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of Work performed and accepted, or materials furnished in accordance with the contract.
- K. The County reserves the right to obtain a cost breakdown of specific Unit Bid items having lump sum (LS) units of measure during the review process.

1.5.1 Bid Form

Bidder agrees to perform the work for the prices submitted in the bid form or applicable bidtable submitted through the Procurement Portal:

The TOTAL amounts of the below bid (excluding NMGRT) shall be shown in both words and figures. In case of discrepancies, the amount shown in words will govern.

Base Bid:

The Bidder agrees to perform all of the work described as the Base Bid in the Solicitation Documents for an amount determined as follows:

ROADWAY BASE BID FORM						
BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
1	201000	CLEARING AND GRUBBING	LS	1		
2	203100	BORROW	CY	150		
3	207000	SUBGRADE PREPARATION	SY	1600		
4	303000	BASE COURSE	TON	550		
5	407000	ASPHALT MATERIAL FOR TACK COAT	TON	1		
6	407001	HIGH DENSITY MINERAL REINFORCED ASPHALT EMULSION	TON	14		
7	411100	HOT POURED CRACK SEAL	LBS	600		
8	411101	MASTIC TYPE I	LBS	120		
9	416000	MINOR PAVEMENT	SY	450		
10	417000	MISCELLANEOUS PAVING	SY	1200		
11	502036	DRILLED SHAFT FOUNDATION 36" DIAMETER	LF	16		
12	502042	DRILLED SHAFT FOUNDATION 42" DIAMETER	LF	16		
13	511000	STRUCTURAL CONCRETE, CLASS A	CY	3		
14	511031	CONCRETE STAIRWAY	LS	1		
15	540060	REINFORCING BARS GRADE 60	LBS.	1820		
16	601000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1		
17	606598	TCWB RETAINED BY THE CONTRACTOR	LF	1290		
18	607079	PEDESTRIAN RAILING	LF	410		
19	608004	CONCRETE SIDEWALK 4"	SY	2400		

BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
20	608106	DRIVEPAD 6"	SY	300		
21	608109	DRIVEPAD 9"	SY	125		
22	608404	CONCRETE MEDIAN PAVEMENT 4" (COLORED AND PATTERNED)	SY	450		
23	609200	CONCRETE HEADER CURB	LF	275		
24	609318	CONCRETE SLOPED CURB AND GUTTER 6"X18"	LF	1650		
25	609424	CONCRETE VERTICAL CURB AND GUTTER 6"X24"	LF	2275		
26	609450	CONCRETE VERTICAL CURB AND GUTTER 8"X24"	LF	375		
27	609636	CONCRETE VALLEY GUTTER 9"X36"	LF	200		
28	609666	CONCRETE VALLEY GUTTER 9"X66"	LF	175		
29	617003	VIDEO TAPING	LS	1		
30	618000	TRAFFIC CONTROL MANAGEMENT	LS	1		
31	618011	PUBLIC AWARENESS	LS	1		
32	621000	MOBILIZATION	LS	1		
33	632001	REVEGETATION	SF	2925		
34	662400	MANHOLE ADJUSTMENT	EACH	17		
35	663200	GENERAL – UTILITIES	LS	1		
36	663202	GAS SYSTEM	LS	1		
37	663206	WATER SYSTEM	LS	1		
38	663210	ELECTRICAL SYSTEM	LS	1		
39	663110	REMOVE AND RELOCATE FIRE HYDRANT	EACH	2		
40	663850	WATER VALVE ADJUSTMENT	EACH	4		
41	663855	ADJUST VALVE BOX TO GRADE (GAS VALVE ADJUSTMENT)	EACH	4		
42	663865	ADJUST WATER METER TO GRADE	EACH	3		
43	664101	2" DIAMETER DECIDUOUS TREE	EACH	2		
44	701000	PANEL SIGN	SF	130		
45	701030	REMOVE AND RESET PANEL SIGNS	EACH	1		

BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
46	701100	STEEL POST AND BASE POST FOR ALUMINUM PANEL SIGNS	LF	220		
47	702610	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2		
48	702810	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION	LS	1		
49	704099	TEMPORARY STRIPING	LF	1950		
50	704700	HOT THERMOPLASTIC PAVEMENT MARKING 4"	LF	8050		
51	704701	HOT THERMOPLASTIC PAVEMENT MARKING 6"	LF	5050		
52	704704	HOT THERMOPLASTIC PAVEMENT MARKING 24"	LF	1150		
53	704717	HOT THERMOPLASTIC PAVEMENT MARKING RIGHT ARROW	EACH	2		
54	704718	HOT THERMOPLASTIC PAVEMENT MARKING LEFT ARROW	EACH	14		
55	704720	HOT THERMOPLASTIC PAVEMENT MARKING WORD (ONLY)	EACH	1		
56	704732	HOT THERMOPLASTIC PAVEMENT MARKING BIKE SYMBOL (BIKEWAY)	EACH	20		
57	704734	COLOR LANE MARKINGS	SF	3700		
58	705000	SIGNAL/LIGHTING SYSTEM START-UP COSTS	ALLOW	1		
59	706200	METER PEDESTAL (SIGNAL)	EACH	1		
60	706350	POWER SERVICE INSTALLATION	LS	1		
61	707015	TYPE I STANDARD, 15'	EACH	3		
62	707220	TYPE II STANDARD, 20' ARM	EACH	1		
63	707245	TYPE II STANDARD, 45' ARM	EACH	1		
64	707810	REMOVE & RESET LIGHTING STANDARD AND LUMINAIRE	EACH	4		
65	709020	RIGID ELECTRICAL CONDUIT 2" (DIA.)	LF	600		

BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
66	709030	RIGID ELECTRICAL CONDUIT 3" (DIA.)	LF	500		
67	710000	ELECTRICAL PULLBOX (STANDARD)	EACH	11		
68	710201	REMOVE AND RESET PULLBOX	EACH	7		
69	710400	TRAFFIC SIGNAL MANHOLE	EACH	1		
70	711005	MULTICONDUCTOR CABLE 5	LF	1100		
71	711007	MULTICONDUCTOR CABLE 7	LF	300		
72	711020	MULTICONDUCTOR CABLE 20	LF	50		
73	711102	SINGLE CONDUCTOR 2	LF	150		
74	711106	SINGLE CONDUCTOR 6	LF	500		
75	713025	ACCESSIBLE PEDESTRIAN SIGNAL, PUSH BUTTON STATION	EACH	2		
76	715000	BEACON ASSEMBLY	EACH	6		
76	715003	RECTANGULAR RAPID- FLASHING BEACON	EACH	6		
77	715005	BEACON CONTROLLER	EACH	1		
78	720060	VEHICULAR IMPACT ATTENUATOR UNIT – WORK ZONE	EACH	2		
79	721000	REMOVAL OF PAVEMENT MARKING	LF	10500		
80	801000	CONSTRUCTION STAKING BY THE CONTRACTOR (1%)	LS	1		
81	802000	POST CONSTRUCTION PLANS	LS	1		
82	802000	CONTRACTOR PROCESS QUALITY CONTROL	LS	1		

ROADWAY BASE BID AMOUNT	\$
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Total Bid Amount written in words:

_____ Dollars

Note: Base bid amount is derived from items 1 through 82 above, excluding state gross receipts tax or local option tax, but shall include all other costs of doing business, including but not limited

to bonds, insurance and profit. The Incorporated County of Los Alamos is required to pay the applicable tax including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipts tax or local option tax shall be shown as a separate amount on each billing or request for payment under contract. The Incorporated County of Los Alamos reserves the right to reduce or add quantities.

UTILITIES BASE BID

NO.	DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL BID ITEM
	GENERAL - UTILITIES 663200				
1	MOBILIZATION/DEMObILIZATION	LS	1		
2	TRAFFIC CONTROL	LS	1		
3	CONSTRUCTION STAKING	LS	1		
4	ASPHALT REMOVAL & REPLACEMENT	SQ-YD	1400		
5	SIDEWALK REMOVAL & REPLACEMENT	SQ-YD	30		
6	CURB & GUTTER REMOVAL & REPLACEMENT	FEET	40		
7	MATERIAL TESTING	LS	1		
8	ROCK EXCAVATION	CU-YD	150		
SUB-TOTAL GENERAL – UTILITIES ITEM 663200					

	WATER SYSTEM- BID ITEM 663206				
9	8" C900 WATER PIPE BY TRENCHING	FEET	2200		
10	6" DUCTILE IRON WATER PIPE BY TRENCHING(FIRE HYDRANT LEGS)	FEET	200		
11	8" DUCTILE IRON GATE VALVE WITH BOX	EACH	13		
12	6" DUCTILE IRON GATE VALVE WITH BOX	EACH	11		
13	CONNECTION TO 8" OR 10" EXISTING WATER LINE	EACH	10		
14	CONNECTION TO 6" EXISTING WATER LINE	EACH	5		
15	INSTALL NEW FIRE HYDRANT ASSEMBLY	EACH	11		
16	SINGLE 1" WATER SERVICE	EACH	1		

17	DOUBLE 1" WATER SERVICE	EACH	1		
18	TRANSFER EXISTING WATER SERVICE TO NEW MAIN	EACH	6		
19	ADDITIONAL DEPTH TO CROSS EXISTING UTILITIES @ BACK OF CURB	EACH	9		
20	RETIRE REPLACED WATER LINES	LS	1		
SUB-TOTAL WATER SYSTEM - BID ITEM 663206					

NO.	DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL BID ITEM
	GAS SYSTEM - BID ITEM 663202				
21	1 1/4" MDPE	FEET	50		
22	2" MDPE	FEET	40		
23	3" MDPE	FEET	100		
24	4" MDPE	FEET	180		
25	1-1/4" MDPE VALVE W/VALVE BOX & CONCRETE COLLAR	EACH	5		
26	3" MDPE VALVE W/VALVE BOX & CONCRETE COLLAR	EACH	9		
27	4" MDPE VALVE W/VALVE BOX & CONCRETE COLLAR	EACH	2		
28	CONNECTION TO EXISTING 1-1/4" OR 2" MDPE LINE	EACH	8		
29	CONNECTION TO EXISTING 3" OR 4" MDPE LINE	EACH	9		
30	TRANSFER EXISTING 3/4" OR 1" SERVICE TO NEW MAIN	EACH	2		
31	REMOVE 6" STEEL SLEEVE FROM EXISTING 2" OR 3" MDPE	EACH	8		
32	REMOVE 2" STEEL SLEEVE FROM 1-1/4" MDPE	EACH	6		
33	INSTALL 1" BY-PASS	EACH	3		
34	RETIRE REPLACED GAS LINES	LS	1		
SUB-TOTAL GAS SYSTEM - BID ITEM 663202					

	ELECTRIC SYSTEM - BID ITEM 663210				
35	6" SCH-40 PVC CONDUIT	FEET	260		
36	CORE DRILL CONCRETE VAULT	EACH	4		
37	LONG SWEEP RIGID METAL CONDUIT 90 DEGREE BEND	EACH	4		
38	ADDITIONAL DEPTH TO CROSS EXISTING UTILITIES @ BACK OF CURB	EACH	2		
SUB-TOTAL ELECTRIC SYSTEM - BID ITEM 663210					

UTILITY BASE BID AMOUNT	\$
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Total Bid Amount written in words:

_____ Dollars

Note: The bid amount shall exclude state gross receipts tax or local option tax, but shall include all other costs of doing business, including but not limited to bonds, insurance and profit. The Incorporated County of Los Alamos is required to pay the applicable tax including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipts tax or local option tax shall be shown as a separate amount on each billing or request for payment under contract. The Incorporated County of Los Alamos reserves the right to reduce or add quantities.

1.5.2 Alternates and Allowances

1.5.2.1 Roadway Alternate #1 - Microsurfacing

BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
6	407001	HIGH DENSITY MINERAL REINFORCED ASPHALT EMULSION	TON	-14		-\$
83	407002	MICROSURFACING	SY	53900		

ROADWAY ADDITIVE ALTERNATE #1 AMOUNT	\$
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Total Alternate #1 Amount written in words:

_____ Dollars

Note: Alternate #1 amount is derived from item 83 and subtracting item 6, excluding state gross receipts tax or local option tax, but shall include all other costs of doing business, including but not limited to bonds, insurance and profit. The Incorporated County of Los Alamos is required to pay the applicable tax including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipts tax or local option tax shall be shown as a separate amount on each billing or request for payment under contract. The Incorporated County of Los Alamos reserves the right to reduce or add quantities.

TOTAL ROADWAY BASE BID + ALTERNATE #1 AMOUNT- excluding NMGRT (please use typewriter or print legibly) (use words followed by numeric):

(\$ _____)

1.5.2.2 Roadway Alternate #2 – Mill and Inlay

BID ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	AMOUNT
84	407000	ASPHALT MATERIAL FOR TACK COAT	TON	6		
6	407001	HIGH DENSITY MINERAL REINFORCED ASPHALT EMULSION	TON	-14		-\$
7	411100	HOT POURED CRACK SEAL	LBS	-600		-\$
8	411101	MASTIC TYPE I	LBS	-120		-\$
85	414000	COLD MILLING (ASPHALT)	SY-IN	161700		
86	416000	MINOR PAVEMENT	SY	18000		
87	662400	MANHOLE ADJUSTMENT	EACH	13		
88	663850	WATER VALVE ADJUSTMENT	EACH	8		
89	663655	ADJUST VALVE BOX TO GRADE (GAS VALVE ADJUSTMENT)	EACH	4		

ROADWAY ADDITIVE ALTERNATE #2 AMOUNT	\$
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Total Alternate #2 Amount written in words:

_____ Dollars

Note: Alternate #2 amount is derived from items 84 through 89 above, subtracting items 6, 7, 8 and excluding state gross receipts tax or local option tax, but shall include all other costs of doing business, including but not limited to bonds, insurance and profit. The Incorporated County of Los Alamos is required to pay the applicable tax including any increase in the applicable tax becoming effective after the date the contract is entered into. The applicable gross receipts tax or local option tax shall be shown as a separate amount on each billing or request for payment under contract. The Incorporated County of Los Alamos reserves the right to reduce or add quantities.

TOTAL ROADWAY BASE BID + ALTERNATE #2 AMOUNT- excluding NMGR (please use typewriter or print legibly) (use words followed by numeric):

(\$ _____)

1.5.3 List of Subcontractors

Bidder shall submit a completed form 1.5.3, if applicable, the blank form is included in the solicitation documents found on the Procurement Portal.

Remainder of this page intentionally left blank.

1.5.4 Bid Bond

Bidder shall submit a completed form 1.5.4, the blank form is included in the solicitation documents found on the Procurement Portal.

Remainder of this page intentionally left blank.

1.5.5 Campaign Contribution Form

Bidder shall submit a completed form 1.5.5, the blank form is included in the solicitation documents found on the Procurement Portal.

Remainder of this page intentionally left blank.

1.5.6 Certification – Regarding Debarment, Suspension, and other Responsibility Matters

Bidder shall submit a completed form 1.5.6, the blank form is included in the solicitation documents found on the Procurement Portal.

Remainder of this page intentionally left blank.

1.5.7 Permanent Main Office Address of Company

Bidder shall submit a completed form 1.5.7, the blank form is included in the solicitation documents found on the Procurement Portal.

1.5.8 Authorization for Verification of Information

Bidder shall submit a completed form 1.5.8, the blank form is included in the solicitation documents found on the Procurement Portal.

1.5.9 Certificate of Contractors Registration

Bidder shall submit evidence of registration with the New Mexico Department of Workforce Solutions as described in Section 1.3.3, submission of proof of registration for Certificate of Contractors Registration with New Mexico Department of Workforce Solutions is a requirement for bid submission.

Sample *Certificate of Contractor Registration*



This is to certify that

XYZ Company, Inc.

1234 Main Street

ALBUQUERQUE, NM, 87109-5564

has registered with the Department of Workforce Solutions

Registration Date: 01/01/2017

Registration Number: 123456789

**This certificate does not show the current status of the company.
To see the current status for this company please go to the Public Works
and Apprenticeship Application (PWAA) at
<https://www.dws.state.nm.us/pwaa>**

New Mexico Department of Workforce Solutions, Labor Relations Division, Public Works, 121 Tijeras Ave NE, Suite 3000, Albuquerque, NM 87102, (505) 841-4400

1.5.10 Non-Collusion Affidavit

**Incorporated County of Los Alamos
 Invitation for Bids Number IFB 26-30
 TRINITY/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT**

New Mexico Department of Transportation ("NMDOT")
 Affidavit of Bidder

BIDDER: _____ TELEPHONE: () _____
 ADDRESS: _____

The Bidder shall execute this Certification of Bidder. I _____ hereby affirm per 23 C.F.R. § 635.112(f) (2009) and as a condition to the NMDOT's execution of this Contract that I have not either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the Bid for this Contract.

Further affiant sayeth not.

Title: _____

Bidder (print): _____

Bidder Signature: _____

STATE OF _____)

COUNTY OF _____)

SUBSCRIBED AND SWORN TO BEFORE ME ON THIS:

_____ day of _____ 2023

 Notary Public

My Commission Expires: _____

~~Before Bid Opening, the Bidder shall submit this Affidavit of Bidder in the form of a zip file to the "file attachment upload" tab in the Project Bids EBSX file through Bid Express. Refer to this Project's Advertisement for questions regarding this process.~~

Failure to comply with the completion and timely submission of the Affidavit of Bidder shall result in the Bidder's Bid being rejected as non-responsive.

2.0 AWARD PHASE

2.1 Award Forms

2.1.1 Notice of Award



NOTICE OF AWARD AND IDENTIFICATION OF COUNTY'S DESIGNEE

To: _____

Address: _____

Project Description:

Incorporated County of Los Alamos

Invitation for Bids Number: IFB26-30

TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390

Notice of Award:

The County has considered the Bid submitted by you for the above described Project in response to its Invitation for Bids dated _____, 202X.

You are hereby notified that your Bid has been accepted subject to your executing the Agreement and furnishing the required Contractor's Performance Bond, Labor and Materials Payment Bond and required Certificates of Insurance, within ten (10) calendar days from the date of receipt of the Notice of Award.

You are hereby notified that the schedule required per Section 3, Schedules, Reports, and Records will be required to be submitted and accepted prior to Notice to Proceed being issued.

The following documents are provided with the Notice of Award: Two (2) copies of the Agreement, Performance Bond and Labor and Materials Payment Bond.

Notice of Award continued

If you fail to sign and return to County's Designee said Agreement, and to furnish said Bonds within ten (10) days from the receipt of this notice, the County will be entitled to consider all your rights arising out of the County's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The County will be entitled to such other rights as may be granted by law.

County's Designee:

The Incorporated County of Los Alamos (County) designates _____ as the County's Designee in connection with the performance of the work contemplated in the Contract, dated _____, between the County and _____ (Contractor).

Dated this _____ day of _____ 20 _____.

Incorporated County of Los Alamos

Anne W. Laurent
County Manager

2.1.2 Receipt of Notice of Award

Receipt of the above Notice of Award is hereby acknowledged by:

_____, this _____ day of _____, 20____,

for the following project:

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

CONTRACTOR:

By: _____

Printed Name: _____

Title: _____

2.1.3 Performance Bond



Bond No. _____

We as Principal, hereinafter referred to as Contractor, and _____ a corporation organized and existing under and by the virtue of the laws of the State of _____ and authorized to do business in the State of New Mexico, hereinafter called Surety, are held and firmly bound unto the Incorporated County of Los Alamos, hereinafter referred to as County, in the penal sum of one hundred percent (100%) of the Contract Price of _____ dollars (\$_____), as may be adjusted by Change Order, inclusive of applicable gross receipts taxes in lawful money of the United States of America, for the payment of which sum Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITIONS OF THIS BOND are such that, whereas, Contractor has been awarded and has agreed to enter into a certain Contract with the Incorporated County of Los Alamos, to which this Performance Bond will be attached and incorporated therein, for performance of Work or services on Project specifically described in the Contract document for:

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

and if Contractor shall perform and complete all of the undertakings, covenants, terms, and obligations of said Contract during the original term thereof, and any extensions which may be granted by the County with or without notice to the Surety, and if Contract shall satisfy all claims and demands incurred under such Contract, and shall fully indemnify and save harmless the County from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the County all outlay and expenses which the County may incur in making good any default, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

Performance Bond Continued

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due, except that, with respect to express guarantees of a longer term, a suit thereon must be initiated within six (6) months following the expiration of said express guarantees, if any.

The Surety acknowledges that said Contract may contain express guarantees and agrees that said guarantees, if any, are covered by the Surety's obligation hereunder.

Right of action with respect to any express guarantees, if any, in said Contract shall accrue following completion and formal acceptance of the work under said contract.

The right to sue on this bond accrues only to the contracting agency and the parties to whom New Mexico Statutes Annotated, 1978 Comp. 13-4-18 through 13-4-20, as amended, grant such right; and such right shall be exercised only in accordance with the provisions and limitation of said statutes.

PROVIDED, FURTHER, that Surety, for value received hereby stipulates and agrees that no change, extensions of time, alteration or addition to the terms of Contract. The Agreement, or the work to be performed thereunder, or the Contract Documents accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alternation or addition to the terms of the Contract.

PROVIDED, FURTHER, that no final settlement between the County and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument may be executed in two counter-parts, each one of which shall be deemed as an original, this _____ day of _____, 20____.

The undersigned state that they have the authority to enter into said Contract.

CONTRACTOR AS PRINCIPAL:

By: _____

Print Name: _____

Title: _____

ATTEST: _____

SURETY:

By: _____

Print Name: _____

Title: _____

ATTEST: _____

2.1.4 Payment (Labor and Materials) Bond

Payment (Labor and Materials) Bond for the Protection of all Persons Supplying Labor and Material to the Contractor or its Sub-contractors

Bond No. _____

We _____ as Principal, hereinafter called the Contractor, and _____, a Corporation organized and existing under and by virtue of the laws of the State of _____, and authorized to do business in the State of New Mexico, hereinafter called the Surety, are held and firmly bound unto the Incorporated County of Los Alamos as Obligee, hereinafter the County, in the amount of _____ Dollars (\$ _____), in the penal sum of one hundred percent (100%) of the Contract Price of _____ dollars (\$ _____), as may be adjusted by Change Order, inclusive of applicable gross receipts taxes in lawful money of the United States of America, for the payment of which sum Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

Payment (Labor and Materials) Bond is for the Protection of all Persons Supplying Labor and Material to the Contractor or its Sub-contractors

WHEREAS, Contractor has agreed to enter into the Contract described as follows:

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

Which contract is by reference made part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such that if the Contractor shall pay as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work under said contract, whether said labor be performed and materials and supplies be furnished under the original contract or any contract thereunder, then this obligation shall be null and void; otherwise, it shall remain in full force and effect, subject, however to the following conditions:

The right to sue on this bond accrues only to the Contracting Agency and the parties to whom Section 31-173 Los Alamos County Code of Ordinances grant such right; and any such right shall be exercised only in accordance with the provisions and limitations of said ordinance.

PROVIDE, FURTHER, that the Surety, for value received hereby stipulates and agrees that no change, extensions of time, alteration, or addition to the terms of the Contract, or to the Work to be performed thereunder, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract.

PROVIDE, FURTHER, the County shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have no obligations to make payments to give notices on behalf of or otherwise have obligations to Claimants. The Surety hereby waives notice of any change, including changes of time, to the Contractor or to related subcontracts, purchase orders and other obligations.

SIGNED AND SEALED ON this _____ day of _____, 20 _____

CONTRACTOR AS PRINCIPAL:

Signature: _____

Print Name: _____

Title: _____

Address: _____

SURETY'S AUTHORIZED NEW MEXICO AGENT:

Signature: _____

Print Name: _____

Title: _____

Address: _____

This bond is issued simultaneously with Performance Bond in favor of County for the faithful performance of the contract.

2.1.5 Insurance Requirement



- A. Contractor shall purchase and maintain such liability and other insurance including completed operations insurance for the Work being performed and furnished and will provide protection from claims set forth which may arise out of or result from Contractor's performance and furnishing of the Work being performed and furnished and will provide protection from claims set forth which may arise out of or result from Contractor's performance and furnishing of the Work and Contractor's other obligations under the Solicitation Documents, whether it is to be performed or furnished by Contractor, any Subcontractor or Supplier or by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable. Insurance requirements are as follows:
 - A.1.1. Comprehensive and General Liability Insurance
 - A.1.2. \$1,000,000 per occurrence and a combined single limit of at least Two Million Dollars (\$2,000,000) aggregate Bodily Injury and Property
 - A.2. Motor Vehicle Insurance
 - A.2.1. Same limits as Comprehensive General Liability Insurance whether for:
 - A.2.1.1. Owned or leased motor vehicles; or non-owned or hired vehicles
 - A.3. Worker's Compensation Insurance
 - A.3.1. The Contractor shall also be required to provide proof of full compliance with New Mexico State Worker's Compensation Laws
 - A.4. Property, Fire, and All Risk Insurance
 - A.4.1. Contractor shall purchase and maintain until final payment, property insurance upon the Work at the site to the full insurable value thereof.
 - A.4.2. This insurance shall insure against the perils of "all risk" insurance for physical loss and damage, and shall include damages, losses, and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys, and other professional). If not covered under the "all risk" insurance, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.
- B. The Contractor, prior to signing the Contract, shall provide proof of insurance coverage, which is satisfactory to the County, in the County's sole discretion, and copies of same to the County

which shall remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing or replacing defective Work.

B.1. Insurance Terms and Conditions

- B.1.1. The following statement shall be included on the certificate of insurance: "The Incorporated County of Los Alamos is named as additional insured regarding General Liability, Automobile Liability, and Professional Liability if required, for

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30**

TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390

- B.1.2. The insurance shall provide that the County will be notified as soon as possible in the event of cancellation.

B.2. Renewal of Insurance

- B.2.1. Evidence of renewal of insurance policies shall be provided to the County no less than forty-five (45) days prior to expiration date.

B.3. Subcontractors

- B.3.1. Contractor shall ensure all of its subcontractors meet all insurance requirements.

B.4. Receipt and Application of Insurance Proceeds

- B.4.1. Any insured loss under the policies of insurance required of Contractor will be adjusted with County and made payable to County as fiduciary for the insured's, as their interests may appear, subject to the requirements of any applicable loan clause. County shall deposit into a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no special agreement is reached, the damaged Work shall be repaired or replaced the monies so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Agreement.
- B.4.2. County as fiduciary shall have power to adjust and settle any loss with insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to County's exercise of this power. If such objection be made, County as fiduciary shall make agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, County as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party of interest, County as fiduciary shall give bond for the proper performance of such duties.

2.1.6 Contract

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

THIS CONTRACT, made and entered into by and between the Incorporated County of Los Alamos, New Mexico, hereinafter called the County and _____, a _____ (State and entity status), hereinafter called the CONTRACTOR, is executed on the date set forth opposite the signature of the authorized representatives of the parties.

WHEREAS, the Contractor was awarded the Contract for the Incorporated County of Los Alamos: **Invitation for Bids Number IFB26-30, TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390** and said award was approved by the County on _____, which date shall be deemed to be the date of this Contract.

THE PARTIES AGREE:

ARTICLE 1 – SUBJECT MATTER – The Contractor shall perform the Work, and shall furnish all the materials, equipment, tools, labor and all supplies, appliances, and appurtenances necessary to the full completion of the Work on the Project, and in accordance with the language of the Contract and the Solicitation documents. The term “Contract” means the Solicitation. The Work shall be performed in accordance with the Contract, which shall be interpreted to give full effect to all of the terms and conditions herein. In the event of a conflict in the terms and provisions of the Contract, the terms and provisions of the Contract shall control in the following order:

- A. Change Orders
- B. Addenda
- C. Contract
- D. Notice to Contractors
- E. Special Conditions
- F. General Conditions
- G. Technical Specifications
- H. Contract Drawings

ARTICLE 2 – CONTRACT TIME –

- A. Construction shall start on or after the date specified on the Notice to Proceed. **The Work shall achieve Substantial Completion by _____, 20XX. The Project shall achieve Final Completion by _____, 20XX.** The calendar day period between the substantial completion and final completion dates is for the sole purpose of completing all punch list items.
- B. The Contractor will proceed with the Work at such rate of progress to ensure full completion of the Work by the Final Completion date. It is expressly understood and agreed, by and between the Contractor and the County, that the Contract Time for the completion of Work described herein is a reasonable time, and that in submitting a bid on the Project and executing the Contract, the Contractor has taken into consideration the average climatic and economic conditions and other factors prevailing in the locality where the Work is to be performed.

C. Termination of the Contract-

1. This contract shall terminate upon County's issuance of Notice of Final Completion, provided however, that Contractor's warranty obligations and any warranties listed within the Technical Specifications for materials, equipment, systems and/or labor supplied through the Contractor for the execution of the Work shall survive the termination of this Contract until such time as County determines that Contractor's warranty obligations have been fulfilled and County has specifically released Contractor, in writing or by the individual warranty expirations, from such obligations. The issuance of Notice of Final Completion or the release of surviving Contractor obligations shall not be deemed a waiver of any claim the County may have against Contractor arising from Contractor's performance under this Contract.
2. County may terminate this Agreement with or without cause upon ten (10) days prior written notice to Contractor. Upon such termination, Contractor shall be paid for work actually completed to the satisfaction of County at the rates agreed upon by the parties hereto. Contractor shall render a final report of the work done to the date of termination and shall turn over to County originals of all materials, documents or other deliverables prepared pursuant to this Contract.
3. Funding. This Agreement shall terminate without further action by County on the first day of any County fiscal year for which funds to pay compensation hereunder are not appropriated by the County Council. County shall make reasonable efforts to give Contractor at least ninety (90) days advance notice that funds have not been and are not expected to be appropriated for that purpose.

ARTICLE 3 – LIQUIDATED DAMAGES FOR DELAY OR INCENTIVES FOR EARLY COMPLETION –

- A. Should the Contractor fail to complete the work within the time agreed upon in the Contract, Contractor will be assessed **\$3,000.00** per day for each calendar day beyond the Milestone. Substantial, and/or Final Completion dates, including all executed change orders. In view of the difficulty of estimating the damage, this amount is fixed by parties as the liquidated damages that the County will suffer by reason of such default and not by way of penalty.

B. Delays –

1. If the Contractor is delayed at any time in the progress of the Work by any act or neglect by the County, or by changes in the Work, or by labor disputes, fire, unusual delay in transportation, unusual weather, adverse soil conditions other than was described in a geotechnical survey, unavoidable loss by the Contractor, delays specifically authorized by the County, or by unforeseeable or unavoidable causes beyond the Contractor's control, avoidance, or mitigation, and without the fault or negligence of the Contractor or subcontractor or supplier at any tier, then the Contract Time may be extended by Change Order for such reasonable time as the overall completion of the Work, as the County may in its sole discretion determine that such event has delayed the Critical Path and Completion of the Work, if the Contractor complies with the notice and documentation requirements set forth below.
2. Contractor shall provide a written notice of delay which may result in a request for an extension of time to the County, within ten (10) calendar days from the date the Contractor knew or should have known of the facts giving rise to the delay. The notice shall indicate the cause of the delay, the anticipated length of the delay, and the probable effect of such delay upon the progress of the Work. If the cause of the delay is continuing, the Contractor must give written notice every month at the same time it submits the updated schedule and/or progress report to the County with the Payment Application.
3. Within fifteen (15) calendar days after the elimination of any such delay, the Contractor shall submit a formal Change Order request for an extension of time for such delay. The written request for time extension shall state the cause of the delay, the number of days extension requested, and such analysis and documentation of the schedule of the project and other documentation to demonstrate a delay in the critical path of the Work.
4. If the Contractor does not comply with the notice and documentation requirements set forth above, the Contractor shall have waived its right to a claim for delay.

C. An incentive for early completion if applicable shall apply to each calendar day the work is substantially complete prior to Milestone or Substantial Completion date up to a maximum number days as assigned.

1. The incentive payments for this contract are assigned at \$0.00 per day.

ARTICLE 4 – COMPENSATION – In consideration of the satisfactory performance of the Work by the Contractor and the acceptance of such Work by the County, Contractor shall be paid an amount not to exceed the Contract Price of _____ (\$ 000,000.00), plus any executed Change Order(s), plus applicable New Mexico Gross Receipts Tax

ARTICLE 5 – PROGRESS PAYMENTS –

- A. Contractor shall submit (but not more often than once a month), to the County for review an Application and Certification for Payment as shown herein, filled out and accompanied by such supporting documentation as is required by the Agreement and also as the County may reasonably require. The County has seven (7) calendar days to review the Application

for Progress Payment either to accept or reject. If application is rejected, Contractors shall resubmit a new Application for Progress Payment. Upon any re-submittal of Application for Progress Payment, the twenty-one (21) calendar day time frame is reinstated. These applications for payments shall be based on the performance of the Work in accordance with the Contract Documents. Contractor shall submit Earned Value Curve if required by the Project Manager with each Application for Payment,

- B. Contractor warrants and guarantees that title to all work, material and equipment covered by an Application for Progress Payment, whether incorporated in the Project or not, will pass to County at the time of payment free and clear of all liens, claims, security interests and encumbrances.
- C. Prior to Substantial Completion, the County with the concurrence of the Contractor may use any completed or substantially completed portions of the Work. Such use shall not constitute an acceptance of such portions of the Work.
- D. As provided herein, County may refuse to make payment of the full amount requested by the Contractor. County will provide Contractor with written notice (with copy to Engineer) stating the reasons for such action.
- E. If payment is requested and approved by the Project Manager on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Progress Payment shall also be accompanied by such data, (receipts, invoices, packing lists, delivery tickets, etc.) satisfactory to County and will establish County's title to the material and equipment and project. Contractor is responsible for all loss or damage to stored materials.
- F. In the event that agreement between the County or County's designee and Contractor cannot be reached, the County will pay the portion not in question and attempt to reach agreement on those portions not in agreement in the next billing cycle.
- G. Payment may be made by mutually agreed upon method.
- H. County has full power to withhold payment and release of Contractor's Performance as well as Labor and Materials Bonds until all the work is completed to the County's satisfaction, until the Contractor shall satisfy the County that it has fully settled or paid for all labor performed and materials, supplies, equipment rentals and services used from the respective suppliers and subcontractors involved, and to withhold payment equal to liquidated damages as accepted payment for liquidated damages.
- I. County at its sole discretion may require an Affidavit of Payment and Release of Liens with every Application.
- J. Unless otherwise specified in the Solicitation Documents as a Notice of Extended Payment, permitting the County to make payment within a period not to exceed forty-five (45) days, payments shall be made within twenty-one (21) calendar days from receipt of an undisputed request in accordance with the New Mexico Prompt Payment Act, Sections 57-28-1 et seq. NMSA 1978.
- K. Final Application for Payment
 - K.1. The final Application for Progress Payment shall include a notarized Affidavit of Payment and Release of Liens.
 - K.2. After Contractor has completed all such corrections to the satisfaction of the County and delivered in accordance with the Contract Documents all maintenance and

operating instructions, all materials including but not limited to spare parts, lubricants, etc., as required by Contract documents, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, Notice of Termination for NPDES, marked up record documents showing work as constructed (as-builts), video tapes, Contractor may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied (except as previously delivered) by all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required, consent of surety, if any, to final payment, and complete and legally effective releases or waivers (satisfactory to County) of all liens arising out of or filed in connection with the Work. If any subcontractor or supplier fails to furnish such release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to County to indemnify County against any lien.

L. Final Payment and Acceptance

L.1. On the basis of the Engineer's and County's observation of the Work during construction and final inspection and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer recommends to County that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, County shall process final payment. Otherwise, County will return the Application to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application.

M. The final payment by the County signifies that the Work has been accepted by the County under the conditions of the Contract Documents.

M.1. The acceptance by the Contractor of final payment shall be and shall operate as a release to the County of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically expected by the Contractor for all things done or furnished in connection with this Work and for every act and neglect of the County and others relating to or arising out of this Work. Any payment, however, final or otherwise, shall not release the Contractor or the Contractor's sureties from any obligations under the Solicitation documents or the Performance Bond and Labor and Materials Bond.

N. The making and acceptance of Final Payment shall constitute a waiver of all claims by the Contractor against the County other than those previously made in writing and still unsettled.

ARTICLE 6 – PAYMENT TO MECHANICS AND LABORERS – Contractor agrees to make prompt payment to its subcontractors and suppliers for work performed under the Contract within seven (7) days after receipt of payment from the County and to pay all mechanics and laborers in accordance with Section 57-28-5 NMSA 1978, as applicable. Contractor shall obtain from each supplier of services or materials used in the performance of the Contractor's obligations under this Contract a written release and waiver of all liens against the County and Project. Such releases and waivers of lien shall be submitted to the County with the final Application for Payment and may be required with each Application for Payment at the County's sole discretion.

Additionally, all Sub-contractors shall require that their Sub-contractors and suppliers make prompt payment to their Sub-contractors and suppliers for amounts owed for work performed on the construction project within seven days after receipt of payment from the County, Contractor or Sub-contractors

If the contractor or Sub-contractors fails to pay the contractor's or Sub-contractor's subcontractor and suppliers by first-class mail or hand delivery within seven days of receipt of payment, the contractor or subcontractor shall pay interest to the subcontractors and suppliers beginning on the eighth day after payment was due, computed at one and one-half percent of the disputed amount per month or fraction of a month until payment is issued. These payment provisions apply to all tiers of contractors, subcontractors and suppliers.

ARTICLE 7 – MODIFICATION OF CONTRACT – This Contract may be modified only by mutual written consent of the parties.

ARTICLE 8 – INDEMNITY – Contractor shall indemnify, hold harmless and defend County, its Council members, employees, agents and representatives, from and against all liabilities, damages, claims, demands, actions (legal or equitable), and costs and expenses, (including without limitation fees for attorneys and other professionals, of any kind or nature), arising from Contractor's performance or failure to perform hereunder or breach hereof or the performance or failure to perform of Contractor's employees, agents, representatives and subcontractors.

All representations, indemnifications, warranties, and guarantees made in, required by or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment to the extent permitted by New Mexico or other applicable law, completion and acceptance of the Work and termination or completion of the Agreement.

ARTICLE 9 – NON-ASSIGNMENT – Contractor may not assign this Agreement or any privileges or obligations herein without the prior written consent of the County.

ARTICLE 10 – LAWS, REGULATIONS, JURISDICTION AND VENUE – Contractor shall abide by all applicable federal, state and local laws, regulations, and policies and shall perform the Work in accordance with all applicable laws, regulations, and policies during the term of the Contract. In any lawsuit or legal dispute arising from the operation of this Contract Contractor agrees that the laws of the State of New Mexico shall govern. Venue shall be in the First Judicial District court of New Mexico in Los Alamos County, New Mexico.

IN WITNESS whereof the parties have executed this Contract.

CONTRACTOR

Date: _____

By: _____

Print Name: _____

Title: _____

INCORPORATED COUNTY OF LOS ALAMOS:

Date: _____

By: _____

Anne W. Laurent, County Manager

ATTEST

By: _____

Michael D. Redondo, County Clerk

APPROVED AS TO FORM

J. Alvin Leaphart, County Attorney

3.0 CONSTRUCTION PHASE

3.1 Construction Phase Related Forms

3.1.1 Contractor Personnel Information

The Contractor will provide at the pre-construction meeting and update as necessary the following information to the County:

- A. Contractor's Project Manager: _____
- B. Contractor's Superintendent: _____
 - 1. Address: _____
 - 2. Telephone No.: _____
 - 3. Email Address: _____
- C. Emergency Contact Information:
 - 1. Name: _____
 - 2. Phone No.: _____
 - 3. Name: _____
 - 4. Phone No.: _____
 - 5. Name: _____
 - 6. Phone No.: _____
 - 7. Name: _____
 - 8. Phone No.: _____
- D. List of authorized signatures for: Certified Payroll, Payroll Affidavits, Change Orders, Progress Payment Certifications.
 - 1. Name: _____
 - 2. Title: _____
 - 3. Name: _____
 - 4. Title: _____
- E. Project Safety Officer: _____
- F. Equal Employment Opportunity Officer: _____

The person listed in "B" will become the Contractor's Representative of Record. The Contractor will not be allowed more than one (1) Representative. The Contractor's Representative shall supervise the project and be available at all times when construction is in progress.

3.1.2 Notice to Proceed

Date: _____

To: _____

Address: _____

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

You are notified that the Contract time under the above contract will start on _____, 20____. By that date you are to start performing your obligations under the Contract. You are required to return an acknowledged copy of this Notice to Proceed to the County's Designee before commencing any work and meet all other requirements of the Contract. The date of Substantial Completion of all work is therefore _____, 20____, and Final Completion of all work is therefore _____, 20____.

Incorporated County of Los Alamos

Anne W. Laurent
County Manager

3.1.3 Acceptance of Notice to Proceed

Receipt of the Notice to Proceed is hereby acknowledged this _____ day of _____, 20____
for the following project:

**Incorporated County of Los Alamos
Invitation for Bids Number: IFB26-30
TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**

CONTRACTOR:

By: _____

Print Name: _____

Title: _____

3.1.4 Application and Certification for Payment Part 1



APPLICATION & CERTIFICATION FOR PAYMENT County of Los Alamos

Application Date: _____ Period From: _____ To: _____
 Application Number: _____
 Project: _____ Bid Number: _____
 Contractor: _____
 Contract Date: _____

Change Order Summary		
Change Orders approved in previous months by County	ADDITIONS	DEDUCTIONS
TOTAL		
Approved this Month		
Number Date		
TOTALS		
Net change by Change Orders		

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all Amounts have been paid by the Contractor for Work which previous Certificates for Payment were issued and payments received from the County, and that Current Payment shown herein is now due.

CONTRACTOR:

BY: _____ DATE: _____

State of _____ County of _____

Subscribed and sworn before me this _____ day of _____, 20____

Notary Public: _____

My Commission Expires: _____

This certificate is not negotiable. The Amount Certified is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

1. ORIGINAL CONTRACT SUM \$ _____
2. Net change by Change Orders \$ _____
3. CONTRACT SUM TO DATE \$ _____
(Line 1 plus line 2)
4. TOTAL COMPLETED TO DATE \$ _____
(Column F on Cont. Sheet)
5. BALANCE TO FINISH \$ _____
(Line 3 less Line 4)
6. PREVIOUS TOTAL COMPLETED \$ _____
(Line 4 from prior Application)
7. SUBTOTAL OF CURRENT PAYMENT \$ _____
(Line 4 less Line 6)
8. **N.M. GROSS RECEIPTS TAX** \$ _____
(_____% of Line 7)
9. CURRENT PAYMENT DUE \$ _____
(Line 7 plus Line 8)

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents based on on-site observations and the data comprising the above application, the ENGINEER'S Project Manager certifies to the Owner that to the best of the ENGINEER'S Project Manager's knowledge, information and belief the Work has progressed as indicated, the quantity of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the Amount Certified.

AMOUNT CERTIFIED: \$ _____
 (Attach explanation if amount certified differs from the amount applied for.)

ENGINEER'S PROJECT MANAGER:

BY: _____ DATE: _____

3.1.5 Application and Certification for Payment Part 2

3.1.5 Application and Certification for Payment Part 2

APPLICATION & CERTIFICATION FOR PAYMENT
Incorporated County of Los Alamos

Application Date: _____ Application Number: _____

[illegible]

Affidavit of Payment and Release of Liens

3.1.6 Affidavit of Payment and Release of Liens**Affidavit of Payment and Release of Liens****Page 1 of 2***See page 2 of this form for instructions regarding (A)-(H)***To All Whom It May Concern, To The Following I Do Solemnly Swear And Affirm:**

WHEREAS, the undersigned has been employed by (A)

to furnish labor and materials for (B)

work, under a contract (C)

for improvement of the premises described as (D)

in the (E) _____ County of _____,

State of New Mexico of which _____ is the Owner.

NOW, THEREFORE, this _____ day of _____, 20____, for and in consideration of the sum of (F) \$ _____ Dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above described premises, and the improvements thereon, and on the monies or other considerations due or to become due from the Owner, on account of labor, services, materials, fixtures, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

The undersigned, as Contractor for the above named Contract pursuant to the Conditions of the Contract hereby certifies that, except as listed below, he/she has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or his/her property might in any way be held responsible.

The undersigned hereby certifies that all work required to be done under terms of the above described Contract has been fully performed and completed in conformance with the Contract and that applicable provisions of the New Mexico Public Works Minimum Wage Act (§ 13-4-11 NMSA 1978) have been met.

Affidavit of Payment and Release of Liens

Page 2 of 2

EXCEPTIONS:(G)

INSTRUCTIONS:

1. Person or firm with whom you agreed to furnish either labor, or services, or materials, or both. (A)
2. Fill in the nature and extent of work; strike the word labor or the materials if not in the contract. (B)
3. Identify contract(s) by number, description, and extent of work. (C)
4. Describe improvements and location of the premises to exclude all others. (D)
5. Name community, such as City of _____, Village of _____, or Unincorporated Area known as _____. (E)
6. Amount shown should be the amount actually received and equal to the total adjusted contract. (F)
7. If none, write "None". If required by County, Contractor shall furnish bond satisfactory to County for each exception. (G)
8. If waiver is for a corporation, corporate name should be used, corporate seal affixed and title of officer signing affidavit should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate as partner. (H)

(H) _____
 (Name of sole ownership, corporation or partnership)

 (Signature of Authorized Representative)

TITLE: _____

State of _____ County of _____

Subscribed and sworn before me this ____ day of _____ 20____

Notary Public: _____

My Commission Expires: _____

3.1.7 Field Order

Field Order #	Project:	Date:
IFB #:	Affected Document(s):	
Description of Change(s) (Attach to Design Document Mark-ups):		
Reason For Change(s): ☐ Design Error/Omission ☐ Design Improvement ☐ Facilitate Construction ☐ Criteria Change ☐ As-found Condition/Record ☐ Other (describe): _____		
Priority: Low Medium High (Circle One)		
Complexity: Low Medium High (Circle One)		
Preliminary Approval To Proceed By Engineer:		
Review		
	Signature	Date
Originator		
Engineer		
County		
Contractor		
Request for Quote issued? _____ Date: _____		
Force Account: _____ Date: _____		
ACCEPTED	☐ County	
REJECTED	☐ County	

3.1.8 Change Order**Page 1 of 3**

Change Order No.: _____

Agreement Date: _____

Name of Project: **Incorporated County of Los Alamos****Contractor:****The following changes are hereby made to the Contract Documents:**

JUSTIFICATION:

CHANGE TO CONTRACT PRICE:

Original Price \$ _____

Current Contract Price adjusted by previous Change Order \$ _____

The Contract Price due to this Change Order will be (_____) by: \$ _____

The new Contract Price, including this Change Order will be \$ _____

CHANGE TO CONTRACT TIME:**SUBSTANTIAL COMPLETION:**

Original Contract Time _____ calendar days.

Current Contract time adjusted by previous Change Order(s) _____ calendar days.

The Contract Time will be (_____) by _____ calendar days.

New Contract Time including this Change Order will be _____ calendar days.

The date for completion of substantial work will be _____ (Date)

FINAL COMPLETION**Page 2 of 3**

Original Contract Time _____calendar days.

Current Contract time adjusted by previous Change Order(s) _____calendar days.

The Contract Time will be (_____) by _____calendar days.

New Contract Time including this Change Order will be _____calendar days.

The date for completion of all work will be _____(Date)

Page 3 of 3**APPROVALS REQUIRED:**

To be effective, this order must be approved by the County Manager; or the Los Alamos County Council if the contract modification, change order, or contract price adjustment exceeds the funding budgeted and specifically appropriated for this project, or as may otherwise be required by the General Conditions.

The adjustment in Contract price and/or Contract time stated in this Change Order shall constitute the total price and/or time adjustment due or owed the Contractor for the work or changes ordered by the Change Order. By executing the Change Order, the Contractor acknowledges and agrees that the stipulated price and/or time adjustments represent full compensation for all adjustments in the cost or the time required to perform the Contract as a whole arising directly or indirectly from the Change Order, including costs and delays associated with the interruption of schedules, extended overheads, delay, and cumulative impacts or ripple effect on all other non-affected work under Contract not changed by the Change Order. Signing of the Change Order constitutes full and mutual accord and satisfaction for the adjustment in contract price and/or time, subject to the current scope of the entire work as set forth in the Contract Documents. Acceptance of this Change Order constitutes an agreement between County and Contractor that the Change Order represents an equitable adjustment to the Contract, and that the Contractor will waive all rights to file a claim on this Change Order after it is properly executed.

Requested by Project Manager:

_____, Project Manager

Approved by (Design Professional of Record): _____
_____, Design Professional of Record

Approved by (County Engineer): _____
_____, County Engineer

Approved by (Public Works Director): _____
Eric Martinez, Public Works Director

Approved by (County Manager): _____
Anne W. Laurent, County Manager

If applicable, approved by the County Council on the _____ Day of _____, 20

Attest:

(County Council)

Print Name _____

Title _____

**INCORPORATED COUNTY OF LOS ALAMOS
CERTIFICATE OF SUBSTANTIAL COMPLETION**



LOS ALAMOS

Date of Issuance: _____

Bid Number: _____

Bid Title: _____

Contractor: _____

Engineer: _____

This Certificate of Substantial/ Final Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

TO:

Contractor

The Work to which this Certificate applies has been inspected by authorized representatives of County, Contractor and Engineer and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and failure to include an item in it does not alter the responsibility of Contractor to complete all the Work in accordance with the Contract Documents.

Certificate of Substantial / Final Completion
(Page 2 of 2)

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligations to complete the Work in accordance with the Contract Documents.

Executed by County on _____, 20__

Project Manager

By: _____
(Authorized Signature)

Accepted by the Architect on _____, 20__

Architect/Engineer/Design Professional of Record

By: _____
(Authorized Signature)

Accepted by the Contractor on _____, 20__

Contractor

By: _____
(Authorized Signature)

3.2 Conditions of the Contract - General Conditions

3.2.1 Definitions

Wherever used in any of the Contract documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof unless another meaning is clearly specified:

- A. **The terms “Contract” and “Agreement” are interchangeable when used throughout.**
- B. **Abandoned or Unknown Underground Facilities** – All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which were installed underground and have since been abandoned by Previous Owner. Such utilities will not be located and are not subject to ownership.
- C. **Active Underground Facilities** – All active pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, telephone or other communications, sewage, and drainage removal, or effluent, potable or other pressurized or gravity water. Contractor should exercise due diligence and reasonable care when digging in the event of encountering and working near utilities or facilities that could interfere with the work. Safety for each encounter is primary. These facilities may not be able to be located. Contractor shall be responsible for any costs associated with damage, uncovering, repair, usage, etc.... including delay, and shall include such costs in the proposal.
- D. **Addenda** – Written or graphic documents issued prior to the opening of bid documents which modifies or interprets the Solicitation Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.
- E. **Application for Payment** – The form accepted by the County which is to be used by Contractor in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract documents.
- F. **Architect** – (See Engineer below)
- G. **Bid** – The documents provided by the County and required documents of the Bidder submitted on the prescribed forms setting forth the prices for the Work to be performed.
- H. **Bidder** – Any person, firm, or corporation submitting a response to the Bid.
- I. **Bid Documents** – Includes but not limited to Advertisement, Invitation to the Solicitation, Summary of Work, Conditions for Bidders, Bid Forms, Plans, Specifications, and including all addenda issued prior to receipt of Bids.
- J. **Bonds** – Bid, Performance, and Labor and Materials Payment Bonds and other instruments of security, furnished by a contractor and the contractor's surety in accordance with the Solicitation documents.
- K. **Change Order** – A written Amendment to the Contract authorizing an addition, deletion or revision in the Work within the general scope of the Contract documents, or authorizing an adjustment in the Contract, Contract Price or Contract Time.
- L. **Completion Definitions** –

Substantial Completion - The date when the Contractor and County consider the entire Work ready for its intended use as evidenced by the Certificate of Substantial Completion.

1. **Partial Utilization** – Use by County at County’s sole option of any substantially completed part of the Work which constitutes a separately functioning and usable part of the Work that can be used by County for its intended purpose without significant interference with Contractor’s performance of the remainder of the Work and may be accomplished prior to Final Completion of all the Work.
 2. **Final Completion** – The date when the Contractor and County consider the entire Work to be complete, including all outstanding Punch List items. Contractor shall at the completion of work, remove all debris and other rubbish from the project site and shall remove all its tools and surplus materials and shall leave the project site clean. If the Contractor fails to clean up, the County may do so and subtract the cleanup cost from the Contractor’s final payment. Contractor shall legally dispose of all construction debris at the Contractor’s expense.
- M. **Contract Documents** – The written contract between County and Contractor covering the work to be performed, including but not limited to all associated documents contained in the Solicitation:
1. Addenda to the Solicitation, Summary of Work, Conditions for Bidders, Bid Forms, Award Forms, Contract Application and Certification of Payment, Conditions of the Contract, General Requirements, Notices to Contractor, Technical Specifications and Plans, Contractor’s Bid and Documentation submitted by Contractor prior to Notice of Award, Bonds, Written Amendments to any Contract Document, Change Orders, Field Orders, and County’s written interpretations and clarifications issued on or after the Effective Date of the Agreement, all of which are incorporated by reference and made a part of this Contract as fully as if herein repeated and a copy of which the Contractor acknowledges hereby that he has received. Engineer’s written interpretations and clarifications issued on or after the Effective Date of the Contract as identified and incorporated by reference therein.
 2. Shop drawing submittals approved and the reports and drawings referred to in Section 3, paragraph 3.11 are not Contract documents.
- N. **Compensation** – The total monies payable to the Contractor under the terms and conditions of the Contract documents, and includes all County-approved changes thereafter.
- O. **Contract Time** – The time period stated in the Contract documents for the Contractor’s completion and County’s acceptance of the Work.
- P. **Contractor** – The person, firm or corporation with whom the County has executed the Agreement.
- Q. **County** – Incorporated County of Los Alamos
- R. **Defects and /or Defective Work** – Work that is unsatisfactory, faulty or deficient, in that it does not conform to the contract documents, or does not meet the requirements of any inspection, reference standard, test, or approval, or Work that has been damaged prior to final payment.
- S. **Design Professional of Record** - or the Engineer’s designated representative who has designed the technical aspects of this project for the County of Los Alamos, includes Architect, and Architect/Engineer.
- T. **Emergency** – A sudden, unexpected, or impending situation that poses and immediate risk to health, life, property or environment, including but not limited to the

safety or protection of the Work, or property, real or personal, at the site or on related construction and staging areas and roads, or property adjacent thereto.

- U. **Engineer** – or the Engineer’s designated representative who has designed the technical aspects of this project for the County of Los Alamos, includes Architect, and Architect/Engineer.
- V. **Engineer’s (or Architect’s) Resident Project Representative (RPR)** – Provides construction oversight, administration, inspection, and quality assurance services during construction. Also known as Construction Observer.
- W. **Field Order** – A written order effecting a change in the Work which does not involve an adjustment in the Compensation or an extension of the Contract Time, issued by the County Project Manager or Designee to the Contractor during performance of the Work.
- X. **Hazardous Waste** – The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- Y. **Lump Sum** – The total single price commitment for paying for all of the Work defined in the Solicitation Documents or a specified portion thereof.
- Z. **Notice of Award** – The County’s written notice that the County is issuing award of the Contract to the Contractor.
- AA. **Notice to Proceed** - The County’s written notice to the Contractor authorizing the Contractor to proceed with Work and establishing the date of commencement of the Work.
- BB. **Owner** – The Incorporated County of Los Alamos
- CC. **Plans** – The part of the Solicitation documents which show the characteristics and scope of the Work to be performed by the Contractor and which have been prepared or approved by the Engineer.
- DD. **Project Manager** – County’s designee who provides construction oversight, administration, inspection, and quality assurance services during construction.
- EE. **Samples** – Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be evaluated.
- FF. **Shop Drawings** – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier, or distributor which illustrate how specific portions of the Work shall be fabricated, performed or installed. Shop drawings shall illustrate some portion of the work and confirm dimensions and conformance to Solicitation documents. Shop drawings are not part of the Contract documents.
- GG. **Specifications** – Written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship.
- HH. **Subcontractor** – An individual, firm or corporation having a direct contract with the Contractor (not the County) or with any other Subcontractor for the performance of a part of the Work at the site.
- II. **Punch List Items** – A list of deficiencies to be corrected by Contractor between Substantial and Final Completion.
- JJ. **Successful Bidder** – Lowest responsible and responsive Bidder that the County selects for award.
- KK. **Supplier** – A manufacturer, fabricator, distributor, or vendor etc., having a direct contract with Contractor or any Subcontractor.
- LL. **Unit Price** – Amount to be paid on the basis of individual line item prices.
- MM. **Work** – The entire construction or various separately identifiable parts thereof required to be furnished under the Contract. Work includes and is the result of

performing or furnishing and incorporating materials and equipment into the construction, and performing furnishing services and furnishing documents, all as required by the Contract.

NN. **Written Notice** – Any notice to any party of the Contract relative to any part of the Contract.

3.2.2 Additional Instructions

- A. County may furnish to the Contractor additional instructions and detail drawings, Field Orders or Change Orders as necessary to carry out the Work required by the Contract.
- B. Additional drawings and instructions supplied to the Contractor by the County will become a part of the Contract. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.
- C. The Contractor is responsible for conducting its own, independent quantity take-off for the Work. Following issuance of Notice of Award, but prior to issuance of the Notice to Proceed, the Contractor shall advise the County in writing of any substantive discrepancies between the Contractor's take off, and the itemized line item unit prices.
- D. Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and verify pertinent figures shown thereon and all applicable field measurements.
- E. Contractor shall promptly report in writing to County any conflict, error, ambiguity or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from County before proceeding with any Work affected thereby.
- F. The Contract Documents comprise the entire agreement between County and Contractor concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- G. The Contract Documents will be construed in accordance with the law of the place of the Work.
- H. It is the intent of the Contract Documents to describe a functionally complete Project to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically called for. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials, or equipment, such words or phrases shall be interpreted in accordance with that meaning. Clarifications and interpretations of the Technical Specifications and Contract Drawings shall be issued by the County.
- I. Reference to standards, specifications, manuals, or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code or Laws or Regulations in effect at the time Proposals except as may be otherwise specifically stated in the Contract documents.
- J. If during the performance of the Work, Contractor discovers any conflict, error, or ambiguity, or discrepancy within the Contract documents and any provision of any

such Law or Regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any Supplier, Contactor shall upon discovery provide to the County written notice thereof and Contractor shall not proceed with the Work affected thereby (except in emergencies affecting the safety or protection of the Work or property at the site or adjacent thereto), until the conflict, error, ambiguity or discrepancy has been resolved through a Field Order or a Change Order.

- K. Except as otherwise specifically stated in the Contract documents or as may be provided by Change Order, the provisions of the Contract documents take precedence in resolving any conflict, error, ambiguity or discrepancy between the provisions of the Contract documents and the provisions of any such standard, specification, manual, code or instruction (whether or not specifically incorporated by reference in the Contract Document) or the provisions of any Laws, Regulations, policies or procedures applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract documents would result in violation of such Law or Regulation). No provision of any such standard, specification, manual, code or instruction shall be effective to change the duties and responsibilities of County, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Bid documents, nor shall it be effective to assign to County, Engineer, or any of Engineer's Consultants, agents or employees any duty or authority to supervise or direct the furnishings of performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract documents.
- L. Whenever in the Contract documents the terms "as ordered," "as directed," "as required," "as allowed," or terms similar to "reasonable," "suitable," "acceptable," "proper," or "satisfactory" are used to describe a requirement, direction, review or judgment of County or Engineer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to Engineer any duty or authority to supervise or direct the furnishing or performance (methods and means) of the Work or any duty or authority to undertake responsibility contrary to any provision of the Contract documents.
- M. The Contractor will develop a document control system for the Project which establishes protocol for acceptance and distribution of all construction related documents. Contractor shall also establish processes for certain standardized documents in the Contract documents and in other pertinent documents as required such as Requests for Information, Submittals, Change Orders, Field Orders, Cost Proposals, Design Notices, and Meeting Minutes and others as necessary during the Pre-Construction Conference. The Contractor shall adhere to these processes and require the same of all their subcontractors.

- N. Contractor shall maintain in a safe place known to the County one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Field Orders, and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all approved samples and all approved Shop Drawings will be available to County for reference. Upon completion of the Work, these record documents, Samples and Shop Drawings will be delivered to the County or the County's designee.
- O. Generally, Plans, Specifications and other Contract Documents are provided electronically. If the Contractor requests paper copies, these copies may be furnished upon request at the cost of reproduction.

3.2.3 Schedules, Reports and Records

A. Baseline Schedule -

1. Contractor shall provide a Baseline Schedule for County review and acceptance prior to the Pre-Construction meeting showing the complete sequence of construction by activity with costs loaded by activity as appropriate to depict the value of the activities and the respective rolled-up work packages. This schedule and all updates shall be in Microsoft Project (preferred) or other programs as approved by County.
2. The Contractor shall submit as part of the Baseline Schedule, the proposed number of working days per week; holidays to be observed during duration of Contract by day and month; planned shifts per day and number of hours per shift. Contractor shall notify County at least three (3) working days in advance of any work to be done outside of usual working hours or any change in usual working hours for approval by County.
3. The schedule shall be in sufficient detail to include but not be limited to include significant elements of the work, time frame for each element of work with a beginning and ending point, percentage of progress of work placed or to be placed in a monthly period of time, value of the elements of the work and relationship of elements of work one to the other for the total work under the Contract.
4. The schedule shall show for each activity the durations, early and late start and finish dates, and predecessors. Schedule shall clearly identify one and only one critical path through the whole project.
5. This schedule shall also show timing of all submittals including by not limited to shop drawings, manufacturer's literature, certificates of compliance, materials samples, permits and inspections by outside agencies, operating manuals, and guarantees as required per the Contract documents. The schedule should indicate the type of item and the contract requirement reference. The schedule shall show review time by County, Engineer and sub-consultants for all submittals.
6. Schedule shall also show timing for installation and testing for all equipment and systems.

7. The schedule will be a logically linked schedule and utilize the Critical Path Method (CPM) based on the period of time within which this Contract is to be completed as set forth in the Contract documents. The schedule shall identify the Work in sufficient detail to ensure compliance with Contract dates, schedules, and sequences of construction.
 8. The schedule shall be maintained throughout the life of the Contract. The initial schedule will be the baseline and progress will be compared monthly to this baseline unless a baseline change request is approved in writing by the County. Schedule is Contractor's schedule, prepared by the Contractor, which retains sole responsibility for adherence thereto.
 9. County reserves the right to establish hold points in the schedule before covering work requiring specialty inspections, or work requiring County approval. Such hold points may include but are not limited to inspection of primary electrical feed equipment prior to connecting to the County system, and pressure testing the gas system prior to County installation of gas meter station. Actual hold points will be determined during the progress meetings. Contractor shall give County 48 hour notice in advance of each hold point, and shall schedule a 72 hour hold until it is automatically released.
- B. In the event that the Contractor submits a Baseline Schedule that provides a shorter time for completion of the Project than that provided in the Contract, the Contractor shall not be entitled to any incentive for early completion or damages for delay resulting from any act or omission of County or any other person or entity, occurring between the end of the Baseline Schedule and the Contract Time allowed in Article 2 of the Contract and any change to contract time approved through an executed Change Order.
- C. Schedule Updates with Payment Applications –
1. After submittal and County review and acceptance of the Baseline Schedule, Contractor shall submit all monthly schedule updates to County with each partial payment application.
 2. The updates to the schedule shall show the Work which has been performed and the order in which the Contractor proposes to carry on the remaining Work, including dates at which the Contractor will start and complete the various parts of the Work.
 3. Monthly progress will be assessed at the activity level to determine Earned Value. The percent complete assigned to each task will be determined by mutual agreement between the Contractor and County. Progress payments shall approximate the total Earned Value as calculated for the month. Each month with the submission of the updated schedule with progress, Contractor shall provide a narrative report as needed to define problem areas, anticipated delays, and the impact on the schedule. For any activity which is more than 10% behind approved schedule, contractor shall provide a written corrective action to be taken.
 4. Progress payment applications without an updated project schedule may be rejected by County.

- D. Contractor, at its sole expense shall submit schedules, reports, estimates, records, and other data, as required, in a format approved by the County throughout the duration of the project.
- E. Acceptance of Contractor's schedule by County will not relieve Contractor from compliance with all conditions of the Contract. Errors and omissions in the accepted Contractor's Schedule will not be cause for future claims by Contractor for extra costs or increased Contract Time. Contractor shall adhere to the established progress schedule as may be adjusted from time to time as provided below:
 - 1. Contractor may submit for County acceptance proposed adjustments in the progress schedule that will not change the Contract Times or Milestones.
 - 2. Proposed adjustments in the progress schedule that will change the Contract Times or Milestones shall be submitted as a request for a Change Order. In the event Contractor requests and extension of Contract Time, Contractor shall furnish such justification, CPM data and supporting evidence for a determination.
- F. Contractor shall provide a minimum two (2) week look ahead for all scheduled activities in advance of each regularly scheduled project meeting. County may require this look ahead to be provided in written form.
- G. Work within the County limits after 9:00 p.m. and before 7:00 a.m. requires a Noise Ordinance Relief Permit. Contractor shall adhere to any conditions imposed by the County.
- H. Contractor shall maintain updated as-builts during construction. These shall be made available to the Project Manager for inspection upon request.

3.2.4 Shop Drawings and Submittals

- A. The Contractor shall provide shop drawings, manufacturer's literature, certificates of compliance, material samples, materials colors, guarantees and other materials as may be necessary for the completion of the Work as required by the Contract. The Contractor shall review and designate its approval and deliver all submittals to the Project Manager for review with reasonable promptness and in orderly sequence. The County, at its sole discretion may forward submittal(s) for further review by the County's designee. All submittals shall be properly identified.
- B. Contractor shall comply with the Project Manager and/or Engineer's attached comments. If such qualified review or if re-submission is so directed, Contractor shall make any corrections required or indicated by the Project Manager or Engineer at Contractor's expense.
- C. The approval by the Project Manager or Engineer of any shop drawing shall not release the Contractor from responsibility for deviations from the Contract.
- D. The approval of any shop drawing which substantially deviates from the requirement of the contract shall be evidenced by a Change Order.

3.2.5 Start of Various Types of Work and Management Planning

- A. The County will not allow the Contractor to commence work at the project sites, including mobilization of equipment unless the following submittals/shop drawings/firms as applicable are approved by the Engineer:
 - 1. Traffic Control Plan and Traffic Impedance Plan.
 - 2. Storm water Pollution Prevention Plans (SWPPP) as specified.
 - 3. Copies of NPDES Notice of Intent (NOI) as specified.
 - 4. Name of proposed materials, soil, and concrete testing firm as specified.
 - 5. Name of proposed registered land surveyor or registered Engineer as specified.
 - 6. Safety Management Plan.
 - 7. Any material differences between Contractor's quantity take-off and quantities itemized in the Bid.
 - 8. Contractor shall obtain a Los Alamos County Business License.
- B. The County will not allow the Contractor to begin excavation unless the following submittals/shop drawings are approved by the County:
 - 1. Excavation/Shoring Plan
 - 2. Water, sewer, and gas system components (pipe, valve, fittings, manholes, etc.)
 - 3. Underground electric components
 - 4. Storm drain and sewer system components (pipe, inlets, manholes, etc.)
 - 5. Pipe bedding material
- C. The County will not allow the Contractor to commence installation of concrete structures until the following submittals/shop drawings are approved by the County:
 - 1. Concrete mix design
 - 2. Reinforcing steel
- D. The County will not allow the Contractor to commence installation of road work at the Project Site, unless the following submittals/shop drawings are approved by the County:
 - 1. Structural fill material
 - 2. Gravel base course
 - 3. Prime coat/tack coat material
 - 4. Asphalt Pavement Mix Design
 - 5. Performance Graded Binder
 - 6. Storm drain pipe
 - 7. Hydrated lime
 - 8. Geotextile material.
- E. Contractor shall deliver to County prior to Substantial Completion Inspection:
 - 1. Certificates of inspection and of occupancy as required by authorities having jurisdiction over the work.
 - 2. Contractor shall notify the County in writing when the Work is Substantially Complete and request a Certificate of Substantial Completion.
 - 3. County and/or Engineer shall then inspect the Work and either concur with or decline the request.

4. If accepted, a Certificate of Substantial Completion shall be issued, with a "punch list" of items to be corrected and completed by the Final Completion date and shall include division of responsibilities as applicable between County and Contractor including but not limited to security, operation, safety maintenance, insurance, warranties and guarantees. County shall have the right to exclude Contractor from the Work after the date of Substantial Completion, but County shall allow Contractor reasonable access to complete or correct items on the correction list.
 5. If declined, County shall not issue the Certificate of Substantial Completion
- F. Final Completion –
1. The date when the Contractor and County consider the entire Work is complete, as evidenced by the Certificate of Final Completion.
 2. Contractor shall notify the County in writing when the Work is at Final Completion and request a Certificate of Final Completion.
 3. County and/or Engineer shall then inspect the Work and either concur in or reject the request.
 4. If accepted, a Certificate of Final Completion shall be issued.
 5. If declined, County shall not issue the Certificate of Final Completion. Contractor shall take such measures as are necessary to complete such Work or remedy deficiencies.
 6. Unless otherwise identified in the Bidding Documents, all items below in item G. shall be provided prior to Final Completion.
- G. Prior to County execution of the Certificate of Final Completion, Contractor shall furnish maintenance manuals as called for in Contract documents and Contractor shall provide start up assistance for County as required.
1. Data files of accurately surveyed coordinate points locating all as constructed structures and all buried utilities including depths and inverts of manholes. Use the coordinate system described in the Drawings on the Site Plan General Layout. Data files shall be in a format suitable for importing into AutoCAD drawings. Furnish complete written descriptions of each point and include a brief description of the data (Metadata) describing the data collection process and the names and contract information of the parties responsible for producing the data. Approval documents if the work is constructed in any way at variance to that shown on the Contract documents.
 2. As-built plans in the form of redlined plans with all aspects of the project constructed that deviate from the original plans marked in red on a Full Size (24"x36" or larger if architectural) paper set of plans.
 3. Contractor shall provide vendor training for the County as requested by the Project Manager, covering maintenance and operation of the systems. This may be provided prior to Substantial Completion upon agreement between the County and Contractor.

3.2.6 Materials, Services and Facilities

- A. It is understood that, except as otherwise may be specifically stated in the Contract documents, the Contractor shall provide and pay for the costs and associated taxes for all materials, (except for materials furnished by the County), labor, tools, equipment and machinery, water, light, power, heat, fuel, telephone, sanitary

facilities, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the Contract Time.

- B. Materials and equipment shall be stored to insure the preservation of quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located to facilitate prompt inspection.
- C. Manufactured articles materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- D. Materials, supplies, and equipment furnished by the Contractor shall be in accordance with samples submitted by the Contractor and approved by the County.
- E. Materials, supplies or equipment to be incorporated into the Work shall not be purchased by the Contractor or any Subcontractor, subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.
- F. Materials and equipment shall be new and of good quality.
- G. Contractor shall, if required, furnish evidence of the quality of any materials.
- H. Materials not meeting requirements of the Contract documents shall be removed from project by Contractor without expense to County.
- I. Materials shall be delivered to the site in original packaging with labels and trademarks intact, and such labels and trademarks shall remain intact until used.

3.2.7 Substitutes or “Brand Name” or Equal

- A. Whenever an item of material or equipment is specified or described in the Contract documents by using the name of a proprietary item or the name of a particular supplier, the specification or description is intended to establish the type, function and level of quality required. Unless the specification or description contains or is followed by word reading that no “like,” “equivalent” or “equal” item or no substitution is permitted, other items of material or equipment of other suppliers may be recommended by Contractor for County’s approval under the following circumstances:
 - 1. “Or-Equal”: Contractor will recommend to County if an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required. It may be considered as an “or-equal” item, in which case review and approval of the proposed item may, in County’s discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.
 - 2. Substitute Items: If an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, it will be considered a proposed substitute item.
 - a. Contractor shall first make written request to Project Manager for acceptance, signifying that the proposed substitute will perform the functions as specified and achieve the results called for by the particular design, functional or performance characteristics which are required.

- (1) Contractor shall submit sufficient information to demonstrate that the item proposed is essentially equivalent to that named and is an acceptable substitute.
 - (2) Contractor will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will impact Contractor's achievement of Substantial Completion, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract documents (or in the provisions of any other direct contract with County for work on the project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated.
 - (3) Contractor shall provide an itemized estimate of all costs or credits which will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by County in evaluating the proposed substitute. County may require Contractor to furnish additional data about the proposed substitute.
3. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is shown or indicated in and expressly required by the Solicitation documents, Contractor may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to County upon recommendation from Engineer. Contractor shall submit sufficient information to allow Engineer to make recommendation to County that the substitute proposed is equivalent to that expressly called for by the Solicitation documents.
4. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each bid or submittal made. County upon recommendation of Engineer will be sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. County may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. Engineer will record time required by Engineer and Engineer's Consultants in evaluating substitutes proposed or submitted by Contractor and in making changes in the Solicitation documents (or in the provisions of any other direct contract with the County for work Project) occasioned thereby. Whether or not Engineer accepts a substitute item so proposed or submitted by Contractor, County reserves the right to charge Contractor for review time by Engineer and Engineer's consultants for evaluation of each such proposed substitute item and for making changes in the Solicitation documents as needed.

5. Contractor's Expense: All data to be provided by Contractor in support of any proposed "or-equal" or substitute item will be at Contractor's expense.

3.2.8 Inspection and Testing

- A. All materials and equipment used in performance of the Work shall be subject to adequate inspection and testing in accordance with generally accepted standards and as required and defined in the solicitation documents.
- B. If required by the solicitation documents, the Contractor shall provide at the Contractor's expense the testing and inspection services.
- C. The Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, paying all costs in connection therewith, and furnishing County/Engineer with the required certificates of inspection, or approval within 72 hours of inspection
- D. The Contractor will give the County/Engineer twenty-four (24) hours' notice of readiness and shall cooperate with inspection and testing personnel to facilitate required inspections or tests. Contractor shall also be responsible for arranging obtaining and paying all costs in connection with any inspections, tests or approvals required for County and Engineer's acceptance of materials or equipment to be incorporated in the Work, or materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.
- E. Alternately, in accordance with the solicitation documents, the County may assume all responsibility and costs associated with testing; this will be noted specifically.
 1. In the event that more than two (2) tests fail, County may at its discretion, charge the Contractor for all subsequent tests.
 2. Such charges may be deducted from the payment application.
- F. County may at their discretion perform additional testing and inspections as a means of quality assurance.
- G. Inspections, tests or approvals by the County/Engineer shall not relieve the Contractor's obligations to perform the Work in accordance with the requirements of the solicitation documents.
- H. Notice of Defects- Prompt notice of any defective Work of which County or Engineer have actual knowledge will be given to Contractor. All defective Work shall be rejected, corrected, accepted, or accepted with payment adjustments as determined by County.
- I. If any Work is covered contrary to the direction of the County, or if Work is covered prior to testing, Contractor shall uncover it for testing and/or observation by the County. Re-excavation, inspection, testing and replacement of any and all materials and items shall be at the Contractor's sole expense.
- J. If the County directs the Contractor to uncover work where inspections are not required, then
 1. The Contractor shall bear all costs for the re-excavation, inspection, testing, replacement and re-covering of the items if the work did not meet specifications, or

2. If items do meet specifications, Contractor may solicit a Change Order to cover the additional work costs.
- K. Sub-grade, base-course, and asphalt testing shall be conducted by an AMRL (Aggregate Materials Reference Laboratory) certified technician. Cement and concrete testing shall be performed by an ACI (American Concrete Institute) certified technician for lab and field testing.

3.2.9 Correction of Work

- A. The Contractor shall remove at the County's sole discretion from the premises and replace at the Contractor's sole expense all Work rejected by the Engineer or County for failure to comply with the Contract documents, whether incorporated in the project or not, and the Contractor shall promptly replace and re-execute the Work in accordance with the Contract documents. Contractor shall pay claims, cost, losses, and damages caused by or resulting from such correction or removal including but not limited to all costs or repair or replacement of work by others.
- B. If the Contractor does not take action to remove such rejected Work within time specified after receipt of written notice, the County may remove or correct such Work and store the materials. If at the time the County removes or corrects such Work and stores materials and any amount of the Contract Price is then due and owing to the Contractor, the County may deduct from the amount owed to the Contractor the costs incurred by the County for such removal, correction and storage.
- C. In connection with such corrective and remedial action, County may exclude Contractor from all or part of the site, take possession of all or part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stores at the site or for which County has paid Contractor but which are stored elsewhere. Contractor shall allow County, County's representatives, agents, employees, County's other Contractors and Engineer and Engineer's Consultants access to the site to enable County to exercise the rights and remedies under this paragraph. All claims, costs, losses and damages incurred or sustained by County in exercising such rights and remedies will be charged against Contractor and a Change Order will be issued incorporating the necessary revisions in the Solicitation documents with respect to the Work; and County shall be entitled to an appropriate decrease in the Contract Price. Such claims, costs, losses and damages will include by not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by County of County's rights and remedies hereunder.
- D. In an emergency where delay would cause serious risk of loss or damage, County may have the defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement including but not limited to all costs of repair or replacement of work of others will be paid by Contractor.

- E. If instead of requiring correction or removal and replacement of defective Work, County with Engineer's recommendation prefers to accept it, County may do so. Contractor shall pay all claims, costs, losses and damages attributable to County's evaluation of and determination to accept such defective Work. If such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contractor documents with respect to the Work and County shall be entitled to an appropriate decrease in the Contract Price. If acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to the County.

3.2.10 Patents

- A. The Contractor shall pay on behalf of the County all applicable royalties and license fees. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless County from and against all claims, costs, losses and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device whether it is specified or not in the Solicitation documents. However, if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, trademark or copyright, the Contractor shall be responsible for such loss unless the Contractor notifies the County upon discovery.
- B. Contractor shall indemnify, defend, or at its option, settle any claim or suit against County if such suit or claim is based on a patent, trademark, copyright or trade secret infringement resulting from the Work or use thereof provided that County, upon knowledge of a claim or potential claim of infringement, promptly notifies Contractor and provides Contractor all related information known to County. In the event of a claim of patent, trademark, copyright or trade secret infringement, Contractor agrees to keep County timely informed of material developments with respect to such claim. In the event that a court of competent jurisdiction adjudicates that the Work or any part of it does infringe a third party's patent, trademark, copyright or trade secret, or in the event that County is enjoined from using the Work or any part of it. Contractor shall, at its expense and option, do one of the following: 1) procure for County the right to use the Work or the affected part thereof, or 2) replace the Work or affected part thereof with other suitable work, or 3) modify the Work or affected part hereof to make it non-infringing, or 4) if none of the foregoing remedies are commercially feasible, refund the aggregate payments paid by County for the Work which the County is no longer permitted to use, or the affected part thereof, less reasonable amortization for use.

3.2.11 Surveys, Permits, and Regulations

- A. From the information provided by the County, unless otherwise specified in the Solicitation documents, the Contractor shall develop and make all detailed surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

- B. The Contractor shall carefully preserve benchmarks, property corners, reference points and stakes. When it becomes necessary by reason of construction to remove or obliterate any triangulation station benchmark, property corner, monument, stake, witness mark or other survey reference mark, it shall be the duty of the Contractor to cause, at the Contractor's sole expense, the mark to be re-established by a registered surveyor in accordance with Section 61-23-28, NMSA 1978.
- C. Unless otherwise stated in the Solicitation documents or agreed to in writing by the County all permits and licenses necessary for the prosecution of the Work shall be secured and paid for by the Contractor. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations pertaining to the Work as required. If the Contractor observes that the Solicitation documents are at variance therewith, Contractor shall promptly notify the Engineer in writing, and any necessary changes shall be adjusted as provided herein. Changes in the Work. Contractor shall pay for all governmental changes and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening bids. Contractor shall pay all charges of utility connections and payment for use of said utilities for the Work.
- D. A Penetration Permit from the County is required prior to connecting to any gas, water, or sanitary sewer lines. Allow five (5) working days for the County to process the application after submitting. A copy of the Penetration Permit can be obtained from the Los Alamos County Department of Public Utilities (DPU), (505) 662-8130. DPU staff will perform all switching and valve operations.
- E. The Contractor will also need to prepare the plan and file the necessary documentation, obtain approvals, construct and maintain the Storm Water Pollution Prevention Plan (SWPPP) for all job sites, staging areas or other areas required prior to initiation of any site work.
- F. The Contractor will also need to submit and get approval of a Traffic Impedance Permit from the County of Los Alamos, prior to beginning construction as required. Contractor shall apply to the County of Los Alamos for a Traffic Impedance Permit at least ten (10) working days in advance of setting up traffic control signs or barricades for work efforts which will affect the flow of traffic. Contractor cannot proceed with construction until traffic control plans are approved.
- G. The Contractor shall obtain all New Mexico Environment Department (NMED) Air Quality Permits as required, as well as any other required permits including, but not limited to, asbestos abatement, lead abatement and other hazardous material permits in conjunction with the Work.
- H. County projects do not require an Excavation Permit
- I. Neither County nor Engineer shall be responsible for Contractor's compliance with any Laws or Regulations except where otherwise expressly required.
- J. All County permit fees shall be waived with the exception of Solid Waste fees.
- K. Work within the county limits after 9:00 pm and before 7:00 am require a Noise Ordinance Relief Permit. Contractor shall adhere to any restrictions imposed by the County.

3.2.12 Subsurface and Physical Conditions

- A. Any reports on subsurface and physical conditions are included in Section 3.5 Attachments. The County may not have conducted or contracted for Subsurface and Physical Condition Reports.
- B. Contractor may rely upon the general accuracy of the specific “technical data” contained in such reports and drawings and is provided as the best information at that time for the Contractor’s use. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against County, Engineer or any of Engineer’s Consultants with respect to:
 - 1. The completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto, or
 - 2. Other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings, or
 - 3. Any Contractor interpretation of or conclusion drawn from any “technical data” or any such data, interpretations, opinions or information.
- C. Notice of Differing Subsurface or Physical Conditions – if Contractor believes that any subsurface or physical condition at or contiguous to the site that is uncovered or revealed either:
 - 1. Is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided above is materially inaccurate, or
 - 2. Is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent of the character of Work provided in the Solicitation documents; then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing and Work in connection therewith (except in an emergency), notify County and Engineer in writing immediately about such condition. Contractor shall not further disturb such conditions or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.
 - 3. County will promptly review the pertinent conditions, determine the necessity of obtaining additional exploration or tests with respect thereto and advise Contractor in writing of its findings and conclusions.
- D. Possible Contract Documents Change: If Engineer concludes that a change in the Contract Documents is required as a result of a condition that meets one or more of the categories in paragraph 3.3.16, a Change Order may be issued to reflect and document the consequence of such change.
- E. Possible Price and Times Adjustments: An equitable adjustment in the Contract Price or in the Contract Times, or both may be allowed to the extent that the existence of such uncovered or revealed condition causes and increase or decrease in Contractor’s cost of, or time required for performance of the Work subject to the following:

1. Such condition must meet any one or more of the categories described in paragraphs above;
 2. A change in the Contract Documents pursuant to Section 3, Changes in the Work will not be an automatic authorization of nor a condition precedent to entitlement to any such adjustment;
 3. With respect to Work that is paid for on a Unit price basis, any adjustment in contract price will be subject to provisions relating to unit prices;
 4. Contractor shall not be entitled to any adjustment in the Contract Price or Times if;
 - a. Contractor knew of existence of such conditions at the time Contractor made a final commitment to Owner in respect of Contract Price and Contract Times by the submission of a bid or becoming bound under a negotiated contract; or
 - b. The existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the site and contiguous areas required by the Solicitation Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
 - c. Contractor failed to give the written notice within the time and as required by Section 3, Changes in the Work.
 - d. County, Engineer and Engineer's Consultants shall not be liable to Contractor for any claims, costs, losses or damages sustained by Contractor on or in connection with any other project or anticipated project.
- F. Physical Conditions – Underground Facilities:
1. Shown or Indicated: The information and data shown or indicated in the Solicitation documents or subsequently located by the Active Underground Facilities locating service prior to excavation with respect to existing Active Underground Facilities at or contiguous to the site is based on the information and data furnished by the County of such Active Underground Facilities or by others. County shall not be responsible for the accuracy or completeness of such information or data provided in the Solicitation Documents. The Contractor shall be solely responsible for requesting the marking of the location of Active Underground Facilities by the locating service in accordance with the New Mexico Excavation Law prior to excavation. The cost of all of the following will be included in the Contract Price and Contractor shall have full responsibility for: reviewing and checking all such information and data, locating all Underground Facilities shown, or indicated in the Solicitation documents, or subsequently located by the Active Underground Facilities owner, coordination of the Work with the County of such Underground Facilities during construction, and safety and protection of all such Underground Facilities and repairing any damage resulting from the Work.
 2. Not Shown or Indicated: If any Active Underground Facilities or Abandoned Underground Facilities are uncovered or revealed at or contiguous to the site which was not shown or indicated in the Solicitation documents or was not

subsequently located by the Active Underground Facilities owner in accordance with New Mexico exaction law Contractor shall, promptly after becoming aware of and before further disturbing conditions affected or performing any work in connection therewith (except in an emergency), give written notice to the County, if known, of the Underground Facilities Owner.

3. The Contractor will promptly review the Active or Abandoned Underground Facilities and determine, if possible, the owner of the Underground Facilities. The Contractor shall request that the owner of the Underground Facilities also investigate if the Underground Facilities are Active or Abandoned.
 - a. If the Underground Facilities are Active Underground Facilities the County shall determine the extent, if any, to which a change is required in the Contract documents to reflect and document the consequences of the existence of the Active Underground Facilities. During such time, Contractor shall be responsible for safety and protection of such Active Underground Facilities. Contractor may be allowed and increase in Contract Price or an extension of the Contract Times, or both, to the extent that they are attributable to the existence of any Active Underground Facilities that were not shown, indicated, or not subsequently located by the owner of the Active Underground Facilities prior to excavation, and that the Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated.
 - b. If the Underground Facilities are Abandoned Underground Facilities, and they interfere with the excavation or Work by the Contractor, the Contractor is not eligible for an increase in cost. The Abandoned Underground Facilities can be removed or allowed to remain with steps taken to work around the Abandoned Underground Facilities such as cutting, removing and capping the ends.
 - c. If any Abandoned Underground Facilities are transite asbestos pipe or conduit removal, if required or selected by the Contractor, shall be completed and no additional payment will be granted to the Contractor for the proper removal and disposal per the appropriate local, State, and federal regulations.

3.2.13 Protection of Work, Property and Persons

- A. The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The items below shall be included in the Contractor's Safety Management Plan. Contractor will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees, County staff or agents, and public on the Work, including but not limited to:
 1. Required personal safety equipment for personnel and visitors within the work zone;
 2. Proper operation of equipment and power tools;
 3. Proper maintenance of equipment and power tools;

4. Protection of personnel and public within excavation areas;
5. Protection of personnel occupying confined spaces;
6. Welding;
7. Fall protection;
8. Procedures in the event that suspected hazardous materials are encountered and procedures to be used by Contractor and Subcontractors for handling and coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with applicable Laws and Regulations;
9. Precautions for lifting and maneuvering heavy objects;
10. Emergency procedures in the event of wildfire or other fire;
11. Emergency procedures in the event of injury;
12. Emergency procedures in the event of a line break (water, sewer, gas, power, etc.)
13. Flooding;
14. Excavating, trenching, shoring, sheeting, and bracing protection;
15. Pre-job safety planning
16. Designation by Contractor of a qualified and experienced safety representative whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs;
17. Implementation of safety plan for subcontractors;
18. Safety meetings;
19. Procedures for encounters with wildlife, including snakes.

3.2.14 Changes in the Work

- A. The County may at any time, as the need arises, order changes within the scope of the Work without invalidating the Contract. If such changes increase or decrease the amount due under the Contract documents, or in the time required for performance of the Work, an equitable adjustment shall be authorized by Change Order mutually agreed to by the County and Contractor.
- B. The County may at any time, by issuing a Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the Work so ordered by the County, unless the Contractor believes that such Field Order entitles the Contractor to a change in the Contract Price or Time, or both, in which event the Contractor shall give the County written notice within seven (7) calendar days after the receipt of the Field Order. Thereafter the Contractor shall document the basis for the change in Contract Price or Time within thirty (30) calendar days. The Contractor shall not execute such changes until receipt of an executed Change Order or further instruction from the County followed by the executed Change Order. .
- C. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the

original solicitation documents or as amended or modified except in the case of an emergency.

- D. The value of any Work covered by a Change Order or any claim for an adjustment in the Contract Price will be determined as follows:
1. Where the Work involved is covered by unit prices contained in the Solicitation documents, by application of such unit prices to the quantities of the items involved.
 2. Where the Work involved is not covered by unit prices contained in the Solicitation documents, by a mutually agreed lump sum.
- E. Force Account -In the event that an agreed upon price or time cannot be reached, Contractor, when directed, shall proceed on a Force Account (Time and Materials) basis and document all costs and time incurred by the work. Force Account shall include a not-to-exceed amount. Costs shall include all direct and indirect labor, equipment and materials and shall be based on:
1. Actual costs for labor, direct overhead, materials, supplies, equipment, and other services required to complete the work;
 2. In addition there shall be an amount agreed upon, but not to exceed fifteen percent (15%) of the actual cost of such work to cover the cost of general overhead and profit;
 3. Contractor shall establish and maintain records in accordance with generally accepted accounting practices and submit in a form acceptable to the County an itemized cost breakdown together with supporting data, agreed to at the end of each day by the Project Manager and Contractor.
- F. Cost of Work: The term Cost of Work means the sum of all costs necessarily incurred and paid by Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by County, such costs shall include only the following items and shall not include any of the costs itemized in G below.
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by County and Contractor. Such employees shall include without limitation superintendents, foreman, and other personnel employed full time at the site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work after regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by County.
 2. Cost of materials and equipment furnished and incorporated in the Work, including costs of transportation and storage, and Supplier's field services required in connection. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to County and Contractor shall make provisions so that they can be obtained.

3. Payments made by the Contractors to the Subcontractors for Work performed or furnished by Subcontractors. If required by County, Contractor shall obtain competitive bids from subcontractors acceptable to County and Contractor shall deliver such bids to County who will then determine which bids, if any, will be accepted. All subcontracts shall be subject to other provisions of the Solicitation documents insofar as applicable.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain property of Contractor.
 - c. Rentals of all construction equipment and machinery and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by County with the advice of Engineer, and the costs of transportation, loading, unloading, installation, dismantling and removal; all in accordance with the terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, or similar taxes related to the Work, and for which Contractor is liable, imposed by laws and regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by the County), provided loss has resulted from causes other than the negligence of Contractor, any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of County. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee. If, however any such loss or damage requires reconstruction and Contractor is placed in charge thereof, Contractor shall be paid for service a proportional fee as stated above.

- g. The cost of utilities, fuel and sanitary facilities at the site.
 - h. Cost of premiums for additional bonds and insurance required because of changes in the Work.
- G. The term Cost of Work shall not include any of the following:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor whether at the site or in Contractor's principal or a branch office for general administration of the Work which are to be considered administrative cost covered by the Contractor's fee.
 - 2. Expenses of Contractor's offices other than Contractor's office at the site.
 - 3. Any part of Contractor's capital expenses, including interest and charges for delinquent payments.
 - 4. Original cost of premiums for all Bonds and for all insurance required by the Bid documents to purchase and maintain the same
 - 5. Costs due to the negligence of Contractor, any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
 - 6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included herein.
- H. The Contractor's fee allowed to Contractor for general overhead and profit shall be determined by an amount not to exceed fifteen percent (15%) of the Cost of Work described above.
- I. For work performed by Sub-contractors the Contractor's fee shall not exceed 5%.
- J. No fee will be allowed for cost of special consultants and supplemental costs as described above.

3.2.15 Suspension, Delay or Termination of Work

- A. At any time and without cause, County may suspend the Work or any portion thereof for a period of not more than 90 days per event by notice in writing to Contractor which will fix the date on which Work may be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be allowed an adjustment in the Contract Price or an extension of the Contract time or both, directly attributable to any such suspension of work, if Contractor receives an approved change order as provided herein.
- B. The County, at its sole discretion may terminate the Contract if the Contractor:
 - 1. Is determined to be and adjudged to be bankrupt or insolvent;
 - 2. The Contractor makes a general assignment for the benefit of the Contractor's creditors;
 - 3. A trustee or receiver is appointed for the Contractor for any of the Contractor's property;

4. The Contractor files a petition to take advantage of any debtor's act, to reorganize under the bankruptcy or applicable laws.
5. Contractor fails to perform the Work in accordance with the Contract Documents including but not limited to:
 - a. The Contractor repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment,
 - b. The Contractor repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment.
 - c. The Contractor disregards laws, ordinances, rules, regulation or orders of any public body having jurisdiction over the Work,
 - d. The Contractor disregards the authority of the County,
 - e. The Contractor otherwise violates any provision of the Contract Documents.
- C. The County may, without prejudice to any other right of surety, within a minimum of ten (10) calendar days from delivery of a written notice, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery owned by the Contractor, and finish the Work by whatever method the County may deem expedient or at County's sole discretion may elect to suspend the work or any portion thereof until the cause for such order has been eliminated. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished.
- D. Contractor shall be paid for Work completed in accordance with the Contract Documents.
- E. If an agreement cannot be reached and the County hires a different Contractor to complete the remaining work or the work is completed by a different means:
 1. The resulting costs incurred by the County will be determined by the County
 2. If such costs exceed such unpaid balance, the County will request that Contractor pay the difference to the County.
 3. If the Contractor refused to pay the difference to the County, the County may terminate the contract and request payment directly from the Contractor's bonding company.
 4. Any unpaid balance of the current Contract Price that exceeds the direct and indirect cost of completing the Work, including compensation for additional professional services, shall not be paid to the Contractor.
- F. Where the Contractor's services have been terminated by the County, said termination shall not affect any right or claim of the County against the Contractor existing at that time or which may thereafter accrue. Any payment by the County due the Contractor will not release the Contractor from compliance with the Contract. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.
- G. After ten (10) calendar days from delivery of a written Notice to the Contractor from the County, the County may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Contract. In such case,

the Contractor shall be paid for all Work executed in conformance with the Contract plus reasonable profit.

3.2.16 Subcontracting

- A. The Contractor may utilize the services of specialty subcontractors on those parts of the Work which, under normal contracting practices, are performed by specialty subcontractors. The County must approve the use of any subcontractor.
- B. The Contractor shall not award Work to subcontractor(s), in excess of fifty percent (50%) of the Contract Price, without prior written approval of the County.
- C. The Contractor shall be fully responsible to the County for the acts and omissions of the Contractor's subcontractors, and of persons either directly or indirectly employed by them, as the Contractor is responsible for the acts and omissions of persons directly employed by the Contractor.
- D. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to the Contractor by the terms of the solicitation documents insofar as applicable to the Work of subcontractors and to give the Contractor the same power to terminating any subcontract that the County may exercise over the Contractor under any provision of the Contract.
- E. Nothing contained in this Contract shall create any contractual relation between any subcontractor and the County.

3.2.17 Duties of the Contractor

- A. The Contract contains the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the County or another person shall not affect the risks or obligations assumed by the Contractor or relieve Contractor from fulfilling any of the conditions of the Contract. The Contract requires performance of services entirely at the Contractor's risk and Contractor has agreed to indemnify the County from all claims, demands, and actions, arising from the Contractor's actions, errors, or omissions.
- B. The Contractor will supervise and direct all work to be performed pursuant to this Contract. Contractor will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor will employ and maintain at the project site a qualified Superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site and who shall not be replaced without written notice to County.
- C. The Superintendent shall be considered an agent of the Contractor and shall have full authority to act on behalf of the Contractor and all communications given to the Superintendent shall be as binding as if given to the Contractor. The Superintendent shall be present on the site at all times as required to perform adequate supervision and coordination of the services provided pursuant to this Contract. Superintendent shall not be replaced without written approval of the County.
- D. If at any time Contractor or any subcontractor is suspended or debarred from conducting business with any city, county, state or federal government, Contractor has continuing obligation to promptly notify County. County has the option to

terminate Contract or require a different subcontractor at no additional cost to the County.

- E. Superintendent shall track on a daily basis all labor (including classifications), equipment and materials used on site. Superintendent shall communicate this information to the Project Manager or representative. Superintendent and Project Manager shall agree on this usage.
- F. Contractor shall provide competent, suitably qualified personnel to survey, lay out and construct the Work as required by the Contract. Contractor shall at all times enforce strict discipline and good order among all workers at the sites and shall not employ on the Work any unfit person or anyone not skilled in the work assigned to them.
- G. Contractor shall be responsible to see that the completed Work complies accurately with the Contract.
- H. Contractor shall abide by the Los Alamos County Harassment Policy and Procedures #1120.

3.2.18 Job Site Administration

- A. The Contractor is responsible for orderly use and cleanup of all job sites including staging areas and all areas affected by the project to the satisfaction of the County. Outdoor storage space may be obtained by the Contractor at its sole expense.
- B. The County may authorize by the Staging Area License, Contractor's use of land owned by the County. Contractor shall comply with the terms of written agreements.
- C. Construction materials and equipment such as tools, scaffolds, forms and excess material not in use shall be stored or stacked in neat order at the contractor's storage site. Contractor shall at all times as part of its services, keep the sites free from accumulation of waste materials or rubbish caused by Contractors operations.
- D. Contractor shall provide trash receptacles sufficient in number to accommodate all refuse generated within the property and provide for their regular and routine maintenance and servicing. At the completion of the services to be performed in the Contract, Contractor shall remove Contractor's waste materials and rubbish from and about the project, as well as all Contractor's tools, construction equipment, machinery and surplus materials and shall clean all surfaces.
- E. Contractor may provide lighting as necessary for security and safety of materials and equipment. Such lighting shall be down directed and approved by the Project Manager.
- F. Contractor shall provide portable toilets at all job sites sufficient in number to accommodate all waste generated within the site and provide for their regular and routine maintenance and servicing.
- G. Contractor shall restore to original condition all affected property not designated for alteration by the Contract.
- H. Services performed pursuant to this Contract are not to unduly interfere with the County's normal operation and maintenance.

- I. Contractor shall be responsible for all areas of the project used by the Contractor, subcontractors, suppliers or other involved in performance of the services to be performed in the Contract.
- J. Contractor shall have the right to exclude all who have no purpose or function related to the performance or inspection of the services, except personnel employed by the County or other governmental agencies. Contractor may require all persons on the site of the work to observe all regulations that the Contractor requires of its employees. Contractor will exert full control over the site and personnel with respect to use, safety and preservation of property and the existing facilities, except for controls as reserved to County or others.
- K. Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workers to the site and land and areas identified in and permitted by the Bid documents and other land and areas permitted by Laws and Regulations. Contractor shall assume full responsibility for any damage to any such land or area or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly resolve such claim by negotiation or other proceeding at law.
- L. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless County against all claims, costs, losses and damages arising out of or resulting from any claim or action, legal or equitable, brought by any such owner or occupant against County, Engineer or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.
- M. Contractor shall be responsible for all materials brought to the job sites by the Contractor, its subcontractors or agents.
- N. Hazardous waste shall be properly stored and disposed in accordance with applicable laws and regulations. The Contractor shall promptly remove all spilled or splattered materials from surfaces to prevent marring, staining, or damage. Adequate clean-up will be evaluated prior to all applications for progress payment.
- O. County shall have the right to enter the premises for the purpose of doing work not covered by the Contract. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the Work or the restoration of any damaged Work except such as may be caused by agents or employees of the County.
- P. County may perform other work related or unrelated to the Project on the premises using County's own employees, other utility owners, or let other contracts for the performance of work. If there is such work to be performed that was not noted in the Contract, written notice shall be given to the Contractor prior to the start of such work. As directed by the County, Contractor shall provide proper and safe access to the County, contractors and utility owners to the premises and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work.

- Q. Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of County and the others whose work will be affected.
- R. Gas and Oil Storage, Service Areas, Concrete Batch Plant, Caretaker Dwelling Units- County shall approve the location of equipment areas, gas and oil storage areas, service areas, concrete batch plant and caretaker dwelling units in writing. Contractor shall clear all areas of brush, litter, grass and all other flammable debris for a radius of 50 feet. Caretaker dwelling units subject to approval by County.
- S. Prevention of Oil Spills – If Contractor maintains storage facilities or uses flammable or combustible liquids in the project area, Contractor will provide to the Fire Marshall an operational plan that addresses the use and appropriate measures which will address soil containment and clean-up. Pollutants such as fuels, lubricants and other harmful materials shall not be discharged on the ground.
- T. Contractor, at its sole expense, shall immediately take action to contain and clean up all potentially hazardous spills in the performance of this Contract which are caused by Contractor's employees directly or indirectly as a result of subcontractor operations and shall immediately report to County and all applicable agencies,. Contractor will be held liable for all damages and costs of additional labor, equipment, supplies, and transportation deemed necessary by the County for the containments and cleanup of potentially hazardous spills caused by Contractor's employees or resulting from subcontractor operations.
- U. Control of Sources of Ignition – When Contractor uses any process that requires an ignition source, Contractor must provide a plan outlining the process and prior approval must be granted by the Fire Marshall before any ignition source is used within the project area. Areas where welding cutting, burning, or grinding is occurring are to be shielded to prevent flying sparks and debris. Fires shall not be built on the premises.
- V. Communications – The Contractor's communication system shall provide prompt and reliable communications between Contractor's crews. County shall be able to communicate with Contractor 24/7; Contractor shall be responsive to phone calls and return calls within fifteen (15) minutes.
- W. Contractor shall conduct all activities associated with this project in such a manner that there will not be any adverse impact to archeological sites, trails, identified natural features, fences, gates and private property.
- X. Contractor shall be responsible for all damage to property and to persons, including third parties that occur as a result of its or its agents or employees or subcontractor or subcontractor's employees fault or negligence.
- Y. Contractor shall cooperate with the owner of all utilities in removal and or rearrangement operations in order that these operations may progress in a reasonable manner and services shall not be unnecessarily interrupted.
- Z. In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Contractor shall promptly notify Project Manager and owner of the utility and shall cooperate with owner in the restoration of

services. If utility services are interrupted, cooperation shall be required until service is restored.

- AA. Contractor shall protect all streets, private roads and sidewalks, and shall make all necessary repairs for damage incurred during course of the work at Contractor's own expense.
- BB. Contractor shall provide proper protection of all furnishings and fixtures likely to be damaged. When exterior openings are made, they shall be covered with weather tight protection at the end of the day's work.
- CC. Contractor shall take suitable precautions to protect existing trees, shrubs, and other natural vegetation and fences during construction. The Contractor shall restore the area to permit re-vegetation of the area. This includes restoring the area to pre-existing contours, reducing soil compaction by scarification, and mitigating for the effects of runoff. Any fences that need to be removed must be placed or dealt with as specified in Contract Documents. Contractor shall reseed disturbed areas in accordance with NMDOT Specifications or as specified in the Contract Documents.
- DD. The County will allow Contractor metered usage of water required for construction, to the extent of existing facilities. The Contractor shall obtain a water meter from the Los Alamos County Department of Public Utilities (DPU). Payment to the Utilities Department for the quantity of water used at the prevailing rate will be due before final acceptance of the project. A deposit for the water meter is required by DPU.
- EE. Contractor shall remove all snow and ice as may be required for the proper protection and performance of the Work and access to job site. Snow and ice shall also be removed by the Contractor from active work zones open to the public.
- FF. Contractor shall provide all shoring, bracing, and sheathing as required for safety and for proper execution of the work and have same removed when work is completed.
- GG. Contractor shall provide installation and maintenance of necessary precautions to protect all personnel on the site, including members of the general public from injury or harm, including but not limited to posting of appropriate warning signs in hazardous areas.
- HH. Contractor shall at all times provide protection against weather (rain, wind, storms, frost, floods or heat) so as to maintain all Work, materials, apparatus, private property and fixtures free from injury or damage. At the end of the day's work, all new Work likely to be damaged shall be protected.
- II. During cold weather, Contractor shall protect all work from damage. If low temperatures make it impossible to continue operations safely in spite of cold weather precautions, Contractor shall cease work and so notify County.
- JJ. Contractor may, as part of its work, provide and erect one sign with a minimum size of 2' x 2' with a maximum size of 4' x 8', with the Contractor's name, license number, address and telephone number and locate sign as approved by the County. No other sign or advertisement shall be displayed by the Contractor unless requested or approved by the County.

3.2.19 Engineer's Authority

The Engineer or the Engineer's designated representative may:

- A. Recommend, disapprove, or reject Work which Engineer believes to be defective or will not produce a completed Project that conforms to the Technical Specifications and Contract Drawings or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Technical Specifications and Contract Drawings or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Technical Specifications and Contract Drawings require special inspection or testing of the Work, whether or not the Work is fabricated, installed or completed.
- B. The Engineer or representative may be on site during construction and determine if the Work is proceeding in accordance with Technical Specifications and Contract Drawings. Duties and responsibilities of Engineer may be modified by County as needed.
- C. Inspections may be made at the factory or fabrication plant of the source of material supply.
- D. The Engineer will not be responsible for the construction means, controls, techniques, sequences, procedures or construction safety.
- E. As requested by County or Contractor, Engineer will issue to both County and Contractor with reasonable promptness written clarifications or interpretations of the requirements of the Technical Specification and Contract Drawings (in the form of Drawings or otherwise), which shall be consistent with intent of and reasonably inferable from Technical Specifications and Contract Drawings.
- F. Engineer may authorize minor variations in the Work from the requirements of the Technical Specifications and Contract Drawings which do not involve an adjustment in the Contract Price or the Contract Time and are compatible with the design concept of the completed Project as a functioning whole as indicated by a Field Order and will be binding on the County and also on Contractor who shall perform the Work involved promptly.
- G. Engineer will review and approve Shop Drawings, Samples and submittals in accordance with the schedule of submittals accepted by Engineer. Engineer's review and approval will only be to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Technical Specifications and Contract Drawings and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Technical Specifications and Contract Drawings. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, unless explicitly specified or related to applicable safety precautions or programs. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make corrections required by the Engineer and shall return the required number of corrected copies of the Shop Drawings and submit as required new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

- H. Engineer may assure the quality of work through independent testing. Engineer shall provide test results to the Contractor and copy the Project Manager.

3.2.20 Duties, Responsibilities and Limitations

Duties, responsibilities and limitations of authority of the Resident Project Representative (RPR).

- A. General – RPR is the Engineer's representative at the site, and will act as directed by and under the supervision of Engineer and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with Engineer and Contractor keeping County advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with County with the knowledge of and under the direction of Engineer.
- B. Schedules – Review the progress schedule, schedule of submittals and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
- C. Conferences and Meetings – Attend meetings with Contractor, such as pre-construction conferences, progress meetings, job conferences and other project related meetings and prepare and circulate copies of meeting minutes.
- D. Liaison – Serve as Engineer's liaison with Contractor, working principally through Contractor's Superintendent and assist in understanding the intent of the Technical Specifications and Contract Drawings and assist Engineer in serving as County's liaison with Contractor when Contractor's operations affect County's on-site operations.
- E. Assist in obtaining from County additional details or information when required for proper execution of the Work.
- F. Advise Engineer and Contractor of the commencement of any Work requiring a Shop Drawing or Sample, if the submittal has not been approved by Engineer.

3.2.21 Engineer's Review of Work, Rejection of Work, Inspections, and Tests

- A. Verify that tests, equipment and systems startups, operating and maintenance training are conducted in the presence of appropriate personnel and that Contractor maintains adequate record thereof, record and report to County appropriate details relative to the test procedures and startups.
- B. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project; record the results of these inspections and report to County.
- C. Modifications – Consider and evaluate Contractor's suggestions for modification in Drawings or Specifications and report with RPR's recommendations to County. Transmit to Contractor decisions as issued by County.

3.2.22 Limitations of Authority

Resident Project Representative shall not:

Authorize any deviation from the Technical Specifications and Contract Drawings or substitution of materials or equipment, unless authorized by County and approved by County.

- A. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
- B. Undertake any of the responsibilities of Contractor, subcontractors or Contractor's Superintendent.
- C. Advise on or issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required in the Technical Specifications and Contract Drawings.
- D. Advise on or issue directions regarding, or assume control over safety precautions and programs in connection with the Work.
- E. Accept Shop Drawings or sample submittals from anyone other than Contractor.
- F. Shall not authorize County to occupy the Project in whole or in part.
- G. Participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by County.

3.2.23 Land and Right-of-Way

- A. The County shall provide to the Contractor information which delineates and describes the land owned and rights-of-way acquired.
- B. The Contractor may provide at the Contractor's own expense and without liability to the County any additional land and access thereto that the Contractor may desire for temporary construction facilities or for storage of materials.

3.2.24 Warranty/Guaranty

- A. The Contractor shall guarantee all materials and equipment furnished and Work performed for a period of one (1) year from the date established as Final Completion or as specified in the Technical Specifications. The Contractor warrants and guarantees for a period of one (1) year from the date of Final Completion that the completed Work is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects, including the repairs of any damage to other parts of the system resulting from such defects. The Contractor shall pay for any and all costs associated with correcting these defects, including but not limited to shipping, travel, labor and parts to repair and or replace the Work. The County will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments or other Work that may be made necessary by such defects, the County may do so and charge the Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through this one (1) year warranty/guarantee period.
- B. All materials shall be of good quality and new. All warranties and guarantees specifically called for by the Specifications shall be provided in writing and expressly run to the benefit of County.
- C. Where defective Work (and damage to other Work) has been corrected, removed or replaced, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- D. All representations, indemnifications, warranties, and guarantees made in, required by or given in accordance with the Contract documents, as well as all continuing obligations indicated in the Contract documents, will survive the final payment, completion and acceptance of the Work and termination or completion of the Agreement.
- E. The Contract shall cover defects which shall be in existence during such two-year period but which shall not become apparent until thereafter.
- F. Contractor shall be fully responsible for all direct, indirect and consequential costs to the County approximately caused by such defects in materials or workmanship including defects in materials or workmanship supplied to the Contractor by a subcontractor or supplier. Contractor shall also hold the County harmless from liability of any kind arising from damage due to said defects.
- G. Contractor shall make all repairs and replacements or payments promptly upon receipt of written order from the County. If Contractor fails to make the repairs, replacements or payments promptly, County may do the work and Contractor and the Contractor's Surety shall be liable for cost thereof, including but not limited to, fees and charges for engineers, architects, attorneys and other professionals.
- H. County will schedule an inspection eleven (11) months after the Final Completion date, providing Contractor with a minimum of one (1) week notice unless the County and Contractor mutually agree to other arrangements. County will contact Contractor to report and schedule any further warranty work as provided herein.

3.2.25 Miscellaneous

- A. Taxes – Contractor shall be responsible for the payment of all applicable taxes, including but not limited to the State of New Mexico Gross Receipts Tax.
- B. Independent Contractor – The relationship of the Contractor to the County shall be that of an independent contractor. The Contractor and all employees and subcontractors of the Contractor, shall not be deemed agents or employees of the County. This agreement shall not be construed as a joint venture or partnership between the parties hereto. Nothing in this Agreement burdens the County with the duties of an employer concerning Contractor or any employee or subcontractor of the Contractor, under any state workers' compensation laws, any state or federal occupational health and safety laws or any other state or federal laws.
- C. Contractor's Authority – Contractor shall not enter into any agreement with any person which binds or is intending to bind County to any duty or obligation unless the County has given Contractor prior written consent to represent the County in such matter. Nor shall Contractor make representations to any person which indicate that Contractor is acting on behalf of the County without the County's prior written consent.
- D. Contractor its agents or employees shall make no representation that they are County employees, nor shall they create the appearance of being employees by using a job or position title on a name plate, business cards or in any other manner bearing County's name or logo.

3.2.26 Dispute Resolution, Applicable Law, and Venue

- A. Arbitration – This agreement is not subject to arbitration.
- B. Dispute Resolution Procedure – The Contractor shall submit in writing to the Purchasing Agent, any claim unresolved by the County concerning performance by the parties, in accordance with Los Alamos County Procurement Code, Section 31-232 – Contract Claims. Contractor shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with County. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as County and Contractor may otherwise agree in writing.
- C. Applicable Law, Venue – Contractor and County agree that the laws of New Mexico and County Ordinances shall govern any dispute or claim arising from the Contract or the rights, duties and obligations created therein. Contractor and County further agree that all court actions shall be filed and pursued in New Mexico courts, unless the parties mutually agree to a different forum. Venue shall be in the First Judicial Court of New Mexico, Los Alamos, New Mexico.
- D. If the surety on any Bond furnished by the Contractor is declared as bankrupt or becomes insolvent or its right to do business is terminated in New Mexico or it ceases to meet the requirement in Los Alamos Ordinances, Contractor shall within 10 calendar days thereafter substitute another Bond and surety, both of which must be acceptable to County.
- E. When any period of time is referred to in the Contract documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of such period falls on a Saturday or Sunday or on a day made a legal holiday by Los Alamos County, such day will be omitted from the computation. A calendar day of twenty-four hours measured from midnight to the next midnight will constitute a day.

3.2.27 Examination of Records Provisions

- A. The Contractor agrees that the County, and any authorized representative of the County, shall, until the expiration of six (6) years after acceptance of final payment of the Contract Price, have access to and the right to examine any directly pertinent books, documents, papers and records of the Contractor involving transactions relating to this Contract.

3.2.28 American with Disabilities Act Compliance

- A. The Contractor will comply with all relevant provisions of the Americans with Disabilities Act, as well as with the New Mexico Human Rights Act, and all other applicable local, state, and federal laws governing the rights of the disabled.

3.2.29 A. Bids and Proposals are public Records

Pursuant to the New Mexico Inspection of Public Records Act NMSA- 1978, Chapter 14, Article 2, all materials submitted under this IFB shall be presumed and considered public records. Except to the extent any information may be protected by state or federal law, bids shall be considered public documents and available for review by the public.

3.2.30 Wage Rate Determination

- A. Issuance of the following wage rate determination is done pursuant to Section 13-4-11 N.M.S.A. 1978, as amended, or such successor statute and with duly adopted rules and regulations properly registered with the Supreme Court, as required by law, and other statutes pertaining to public works in New Mexico.
- B. Each certified payroll shall have the correct Wage Rate Decision Number printed clearly on the first page. The Contractor and all Subcontractors shall also submit certified payrolls. Prior to the issuance of a Certificate of Payment, the Contractor shall determine that a certified payroll has been submitted to the State Labor Commission as provided for by State law and that all other provisions applicable to and relating to the payment of wages to artisans, draftsmen, laborers has been abided by and that said payments have been made in accordance with established scales as furnished by the State Labor Commission for this particular contract.

3.3 ATTACHMENTS

3.3.1 License Agreement for Staging Area

THIS LICENSE AGREEMENT (Agreement) is entered into by and between the **Incorporated County of Los Alamos (County)** and **Contractor, a New Mexico Corporation** to be effective for all purposes on _____.

A. PURPOSE

The purpose of this Agreement is to grant to CONTRACTOR the revocable privilege of using County properties (Properties), more specifically described herein, for staging areas to facilitate CONTRACTOR'S work on **Los Alamos County Project No. IFB26-30 TRINITY DRIVE/NM 502 ADA AND SAFETY IMPROVEMENTS PROJECT CN 5101390**. The County's grant of this revocable privilege shall satisfy County's obligation to provide CONTRACTOR with staging areas under the above-identified Project.

B. TERM

This Agreement shall commence on _____ and shall continue until CONTRACTOR'S work under the above-referenced Project is substantially complete, unless sooner terminated as provided herein.

C. USE OF THE PREMISES

County grants to CONTRACTOR the use of the property described herein for staging area to include the placement, unless specifically excluded herein one (1)-caretaker unit, the storage of Project related materials, and the storage of Project related equipment, and for no other purpose. Caretaker units shall not exceed eight (8) feet by forty (40) feet and may be used as a dwelling unit for CONTRACTOR'S personnel with a maximum of two (2) occupants per unit.

D. GENERAL REQUIREMENTS APPLICABLE TO ALL PROPERTIES

The following requirements are applicable to all Properties unless specifically addressed or modified in Section E. Specific Properties herein: CONTRACTOR shall:

1. Provide properly anchored portable toilets sufficient in number to accommodate all waste generated within the Property. Locate portable toilets as far as possible away from residential development and provide for their regular and routine maintenance and servicing;
2. Provide covered trash receptacles sufficient in number to accommodate all refuse generated within the property and provide for their regular and routine maintenance and servicing;
3. May provide sufficient lighting necessary for security and safety of persons, material and equipment as well as for the security and safety of the public. Such lighting shall be down directed and produce no glare and conform to the New Mexico Dark Sky Act;
4. Provide and maintain a protective buffer between staging activities and nearby water courses;
5. Provide Good housekeeping measures as outlined in the Storm Water Pollution Prevention Plan (SWPPP) will be adhered to at all times;
6. Provide any applicable utility hook-ups at contractor's coordination and expense;
7. Provide storm water pollution protection and management at his/her expense;
8. Ensure staging area boundaries do not encroach onto other properties or open space.

E. SPECIFIC PROPERTIES

The following specific Properties, including specific uses or limitations to such use, are designated as staging areas for use by CONTRACTOR in conformity with the contract documents and this License.

STAGING AREA: **An area near the site as coordinated with the Contractor and County Project Manager** (Contractor accepts to use area by initialing: _____)

Site-specific requirements are as follows:

1. Weather resistant Information Board for posting required information such as prevailing wage rates, Need to Know information, Notice of Intent, Safety Info, etc.;
2. Fuel storage tank is **not** permitted;
3. Limited Repair of vehicles and equipment is permitted as per SWPPP;
4. Clearing and grubbing is **not** permitted;
5. Grading of the property is **not** permitted;
6. Fencing exists but Contractor is responsible for providing additional security if deemed necessary by the Contractor. Optional lighting to the extent that surrounding homes are not affected by glare is permitted; to be approved by Project Manager;
7. All materials and equipment must be confined within the defined area;
8. Limited storage space of traffic control devices and storage containers is permitted;
9. Maximum of two (2) portable toilets are permitted;
10. Contractor shall provide adequate dust control at proper frequencies within the staging area;
11. Sweep Staging area *as needed*.

G. ASSIGNMENT

This License is not assignable.

H. RECORDS

CONTRACTOR shall maintain throughout the term of this License records necessary to demonstrate that all of the terms and conditions of the License have been met, including but not limited to records relating to any necessary licenses, permits, and other "authorizations" and compliance with any and rules, regulations, requirements or guidelines applicable to CONTRACTOR'S use of the Properties. CONTRACTOR shall make available for inspection by County all records, books of account, memoranda and other documents pertaining to County immediately upon request of County.

I. STRUCTURES, IMPROVEMENTS, ALTERATIONS OR ADDITIONS

Except as specifically permitted or required herein, no structures, improvements, alterations or additions shall be permitted on the Properties without the prior written authorization of County. CONTRACTOR shall maintain and leave the Properties in a clean condition, free of debris and litter, and restored to their prior condition or as close thereto as is reasonably practicable.

J. LIABILITY

County shall not be liable for any cost of expense or any kind or nature with respect to this License or CONTRACTOR'S use of the Properties, CONTRACTOR shall promptly pay all costs and expenses associated with CONTRACTOR'S use of the Properties including, without limitation, the cost of utility services and fencing. CONTRACTOR shall assure; and provide evidence to County that the insurance maintained by CONTRACTOR under its Contract the performance of work **IFB26-30** is applicable to and will cover losses resulting from the use of the Properties. CONTRACTOR agrees to indemnify, defend, and hold County harmless from any liability, damage, loss, injury, cause of action, and costs and expenses (including attorneys' fees), of any

kind or nature, arising from or in any way related to the use of the Properties, including but not limited to, any liability, damage, loss, injury, cause of action, or costs and expenses (including attorneys' fees) arising from or in any way related to any actual, threatened or alleged disposal, release, or contamination by hazardous substances of the Properties by CONTRACTOR its employees, subcontractors and agents. CONTRACTOR'S obligations under this Section shall survive the expiration or termination of the License.

K. SAFETY

CONTRACTOR shall assure that all of its operations conducted on the Properties are performed in a safe manner.

L. COUNTY ACCESS TO PROPERTIES

County and its designated representatives shall have access to the Properties at all times. CONTRACTOR shall notify County immediately of any situation that may arise on the Properties that may cause damage or harm to the health, welfare or safety of the public or to the environment and property of County and shall fully cooperate with County in addressing any such situation.

M. APPLICABLE LAWS

CONTRACTOR shall comply with all federal, state, and local laws, regulations, ordinances and, other legal requirements applicable to CONTRACTOR'S use of and activities on the Properties. This License shall be construed and enforced according to the Laws of the State of New Mexico.

N. CANCELLATION AND VACATION OF THE PROPERTIES

County may, at its sole discretion immediately cancel this License or any part hereof at any time with or without cause and no further use shall be made of the Properties by CONTRACTOR. Failure of County to fully enforce any and all provisions of this License shall not constitute a waiver of any future breach of any such terms or provisions. Upon expiration or cancellation of this License, the CONTRACTOR shall remove within seven (7) days all equipment, tools, vehicles, and any other property belonging to the CONTRACTOR from the Properties and shall leave the Properties in clean condition, free of debris and litter and restored to its prior condition or as close thereto as reasonably practicable.

ATTEST:

INCORPORATED COUNTY OF LOS ALAMOS

Michael D. Redondo
County Clerk

Anne W. Laurent
County Manager

Approved as to Form

J. Alvin Leaphart
County Attorney

Contractor

Title

Date

3.3.2 Wage Rate Information

3.3.2.1 STATE WAGE DECISION


LABOR RELATIONS DIVISION

401 Broadway NE
Albuquerque, NM 87102
Phone: 505-841-4400
Fax: 505-841-4424

226 South Alameda Blvd
Las Cruces, NM 88005
Phone: 575-524-6195
Fax: 575-524-6194

WWW.DWS.STATE.NM.US

Wage Decision Approval Summary

1) Project Title: Trinity Dr./NM 502 ADA and Safety Improvements Project
Requested Date: 03/06/2026
Approved Date: 03/06/2026
Approved Wage Decision Number: LA-26-0872-A

Wage Decision Expiration Date: 07/04/2026

2) Physical Location of Jobsite for Project:
Job Site Address: Trinity Drive (NM 502)
Job Site City: Los Alamos
Job Site County: Los Alamos

3) Contracting Agency Name (Department or Bureau): Los Alamos County
Contracting Agency Contact's Name: Jennifer Morrow
Contracting Agency Contact's Phone: (575) 640-0133 Ext.

4) Estimated Contract Award Date: 06/01/2026

5) Estimated total project cost: \$6,000,000.00

a. Are any federal funds involved?: Yes - \$6,000,000.00

b. Does this project involve a building?: No

c. Is this part of a larger plan for construction on or appurtenant to the property that is subject to this project?: No

d. Are there any other Public Works Wage Decisions related to this project?: No

e. What is the ultimate purpose or functional use of the construction once it is completed?: This project will increase the safety of Trinity Drive from Knecht to Oppenheimer. It will include a road diet, bike lanes, new medians, wider sidewalks and upgraded ADA ramps.

6) Classifications of Construction:

Classification Type and Cost Total	Description
Highway/Utilities (A) Cost: \$6,000,000.00	Project will include a road diet new bike lanes targeted replacement of curb and gutter wider sidewalks ADA ramps and new medians



**TYPE "A" –
STREET, HIGHWAY, UTILITY & LIGHT ENGINEERING**
Effective January 1, 2026

Trade Classification	Base Rate	Fringe Rate
Cement Mason	21.75	7.43
Drywall Finisher/Taper	31.60	9.58
Drywall Finisher/Taper – Los Alamos County	35.85	12.82
Glazier/Fabricator	22.75	7.70
Glazier/Fabricator – Los Alamos County	22.75	7.70
Painter	21.00	5.75
Painter – Los Alamos County	35.85	12.82
Paper Hanger	21.00	5.75
Paper Hanger – Los Alamos County	36.85	12.82
Plumber/Pipefitter	44.32	18.00
Soft Floor Layers	21.52	9.40
Soft Floor Layers – Los Alamos County	35.87	12.92
Bricklayer/Block Layer/Stonemason		
Bricklayer/Block layer/Stonemason	33.41	12.04
Bricklayer/ Block layer/Stonemason – Curry, DeBaca, Quay and Roosevelt counties	23.10	8.98
Bricklayer/ Block layer/Stonemason – Dona Ana, Otero, Eddie, and Lea counties	29.56	14.10
Carpenter		
Carpenter/Lather	32.12	14.28
Carpenter- Los Alamos County	38.56	14.70
Electricians- Outside Classifications: Zone 1		
Ground man	28.54	13.36
Equipment Operator	40.94	17.73
Lineman	51.71	21.43
Journeyman technician	48.15	20.53
Journeyman substation technician	48.15	20.53
Journeyman transmission technician	47.58	20.40
Cable Splicer	52.98	21.75

Electricians-Outside Classifications: Zone 2

Ground man	58.54	13.36
Equipment Operator	40.94	17.73
Lineman	51.71	21.43
Journeyman technician	48.15	20.53
Journeyman substation technician	48.15	20.53
Journeyman transmission technician	47.58	20.40
Cable Splicer	52.98	21.75

Trade Classification**Base Rate****Fringe Rate****Electricians-Outside Classifications: Los Alamos County**

Ground man	29.35	13.38
Equipment Operator	42.12	17.76
Lineman	53.07	21.77
Journeyman technician	49.55	20.89
Cable Splicer	58.28	23.07

Ironworker

Ironworker Journeyman	29.45	19.51
Probationary Ironworker	23.56	19.51

Laborers

Group I – unskilled	18.41	7.74
Group II – semiskilled	19.41	7.74
Group III – skilled	19.91	7.74
Group IV – specialty	20.41	7.74

Operators

Group I	23.69	6.95
Group II	24.72	6.95
Group III	27.03	6.95
Group IV	28.65	6.95
Group V	28.79	6.95
Group VI	29.05	6.95
Group VII	29.28	6.95
Group VIII	30.27	6.95

Group IX	40.08	6.95
Group X	44.72	6.95
Roofers		
Roofer Journeyman	31.20	9.36
Roofer Helper	18.72	9.36
Truck Drivers		
Group I-IX	21.70	9.65

NOTE: All contractors are required to pay **SUBSISTENCE, ZONE, AND INCENTIVE PAY** according to the particular trade. More information available at <https://www.dws.state.nm.us/public-works>.

For more information about the Subsistence, Zone, and Incentive Pay rates, or to file a wage claim, contact the New Mexico Department of Workforce Solutions Labor Relations Division at (505) 841-4400 or visit us online at www.dws.state.nm.us.

PUBLIC WORKS PROJECT REQUIREMENTS

As a participant in a Public Works project valued at more than \$60,000 in the state of New Mexico, the following list addresses many of the responsibilities that are defined by statute or regulation to each project stakeholder.

Contracting Agency

- Ensure that all contractors wishing to bid on a Public Works project when the project is \$60,000 or more are actively registered with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> (Contractor Registration) prior to bidding.
- Please submit Notice of Award (NOA) and Subcontractor List(s) to the PWAA website promptly after the project is awarded.
- Please update the Subcontractor List(s) on the PWAA website whenever changes occur.
- All sub-contractors and tiers (excluding professional services) regardless of contract amount must be listed on the Subcontractor List and must adhere to the Public Works Minimum Wage Act.
- Ninety days after project completion please go into the PWAA system and close the project. Only contracting agencies are allowed to close the project. Agents or contractors are not allowed to close projects.

General Contractor

- Provide a complete Subcontractor List and Statements of Intent (SOI) to Pay Prevailing Wages for all contractors, regardless of amount of work, to the contracting agency within 3 (three) days of award.
- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> prior to bidding when their bid will exceed \$60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- Confirm the Wage Rate poster, provided in PWAA, is displayed at the job site in an easily accessible place.
- When the project has been completed, make sure the Affidavits of Wages Paid (AWP) are sent to the contracting agency.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

An Equal Opportunity Employer Page 1 of 2

Phone: 505-841-4400
Fax: 505-841-4424



Subcontractor

- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> prior to bidding when their bid will exceed \$60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

Additional Information

Reference material and forms may be found in the New Mexico Department of Workforce Solutions Public Works web pages at: <https://www.dws.state.nm.us/Labor-Relations/Labor-Information/Public-Works>.

CONTACT INFORMATION

Contact the Labor Relations Division for any questions relating to Public Works projects by email at public.works@state.nm.us or call (505) 841-4400.



2026 SUBSISTENCE, ZONE, AND INCENTIVE PAY RATES

All contractors are required to pay subsistence, zone, and incentive pay according to the particular trade

Asbestos workers or heat and frost insulators

- (1) Zone 1 shall consist of the area lying within the city limits of a circle whose radius is 66 miles from the city hall in Albuquerque or the city hall in El Paso - \$0.00 per day.
- (2) Zone 2 shall consist of Los Alamos county - \$40.00 per day if not furnished a company owned vehicle.
- (3) Zone 3 shall consist of the area lying beyond a circle whose radius is over 66 miles from the city hall in Albuquerque or the city hall in El Paso - \$85.00 per day.

Boilermakers/Blacksmiths

- (1) Per diem is calculated from city hall of the dispatch city or the employee's home address, whichever is closer to the job location,
- (2) Per diem is \$55.00 per day for travel between 70 and 120 miles and \$85.00 per day for travel over 120 miles.

Bricklayers

- (1) For Albuquerque area contractors, the starting point shall be at the intersection of I-40 and I-25 and shall continue to the job site. All other areas, the starting point shall be the employer's main office address.
- (2) Between 50 and 75 miles from the starting point, \$35.00 per day.
- (3) 76 or more miles from the starting point, \$55.00 per day.
- (4) All covered refractory work over 75 miles from the intersection of I-40 and I-25, \$80.00 per day.

Cement Masons

- (1) For employees travelling more than 50 miles to a job site in Santa Fe, \$20.00 per day.
- (2) In all other work performed more than 50 miles from the employer's main office, \$50.00 per day.
- (3) Mutually agreed-upon lodging or transportation paid for by the employer will substitute for subsistence pay.



Drywall Finishers and Tapers

- (1) All zones are measured from the Albuquerque City Hall.
- (2) Up to 70 miles is a free zone.
- (3) Between 71 and 100 miles shall be paid a \$30.00 expense allowance per day worked.
- (4) Over 101 miles shall be paid \$80.00 expense allowance per day worked.
- (5) Employees who travel from Santa Fe to Albuquerque will be paid \$30.00 per day or other mutually agreed upon lodging or transportation.
- (6) An area withing a 50-mile radius of the address where an employee permanently resides at the time of hire, outside of Santa Fe or Albuquerque, shall be a free zone.
- (7) When the employer pays for the hotel for out-of-town work, the employee shall receive \$30.00 per day for expenses. Each room shall not house more than two people per room.

Electricians (inside classifications)

- (1) For Albuquerque only:
 - (a) Zone 1 is classified as being within 40 miles from the main post office.
 - (b) Zone 2 shall extend up to 10 miles beyond zone 1. Work performed within zone 2 shall be compensated nine percent above the journeyman rate for zone 1.
 - (c) Zone 3 shall extend up to 20 miles beyond zone 1. Work performed within zone 3 shall be compensated fifteen percent above the journeyman rate for zone 1.
 - (d) Zone 4 shall extend 20 miles or more beyond zone 1. Work performed within zone 4 shall be compensated twenty six percent above the journeyman rate for zone 1.
- (2) For Los Alamos County only: work performed within the county shall be compensated fifteen percent above the zone 1 journeyman rate.
- (3) For all other counties:
 - (a) Zone 1 is:
 - (i) within six miles from the main post office for Raton, Tucumcari, and Farmington.
 - (ii) within eight miles from the main post office for Las Vegas.
 - (iii) within ten miles from the main post office for Santa Fe and Gallup.



- (iv) within twelve miles from the main post office for Belen, Carrizozo, Clovis, Los Lunas, Portales, Roswell, Ruidoso, Artesia, Carlsbad, Hobbs, and Lovington.
- (v) within fourteen miles from the main post office for Espanola.
- (b) Zone 2 shall extend up to 20 miles beyond zone 1. Work performed within zone 2 shall be compensated nine percent above the journeyman rate for zone 1.
- (c) Zone 3 shall extend up to 30 miles from zone 1. Work performed within zone 3 shall be compensated fifteen percent above the journeyman rate for zone 1.
- (d) Zone 4 shall extend beyond 30 miles from zone 1. Work performed within zone 4 shall be compensated twenty six percent above the journeyman rate for zone 1.
- (4) Commuting time to and from a job site at the beginning and end of each workday is not compensable. However, if workers are required to report to the shop at the start of the day or return to the shop at the end of the day, then that time spent traveling is compensable. Similarly, time spent traveling from job to job is compensable. In both cases, workers shall be paid for the time spent traveling and shall be furnished transportation by the employer. Under these conditions the Zone 1 rate and any applicable overtime will be paid.

Electricians (outside classification)

Zone 2: \$50.00 per diem to be paid for work 30 miles outside of Santa Fe and 60 miles outside of Albuquerque. No per diem in Los Alamos County.

Glaziers

- (1) When out-of-town travel is required, the employer shall provide suitable lodging with no more than two people per room and \$30.00 per day for expenses; or
- (2) Pay \$100.00 per day for expenses, plus their regular rate of pay.
- (3) Employees required to use a personal vehicle for travel to a jobsite beyond a 50-mile radius from their residence or the employer's shop, whichever is closer to the job, shall be compensated at the current IRS rate for actual mileage incurred beyond the 50-mile radius, plus their regular rate of pay for travel time.

Ironworkers

- (1) Travel more than 50 miles from the interchange of Interstate 40 and Interstate 25 or from the employee's home should be paid at \$10.00 per hour.



- (2) If travel is within Santa Fe County, travel time shall be paid at \$3.00 per hour.

Laborers

- (1) Type A:
 - (a) Work travel between 50 and 85 miles from the union halls of Albuquerque, Espanola, Farmington or Las Cruces should be compensated at \$3.50 per hour.
 - (b) Work travel 86 miles or greater from the union halls of Albuquerque, Espanola, Farmington or Las Cruces should be compensated at \$5.00 per hour.
- (2) Types B and C:
 - (a) Work travel over 70 miles from the union halls of Albuquerque, Espanola, Farmington, or Las Cruces shall be paid at \$7.00 per hour in travel pay, not to exceed 10 hours per day;
 - (b) If an overnight stay is necessary, the employer shall pay \$40.00 per day for meals, in addition to travel pay.
- (3) Type H – no zone subsistence pay;
- (4) If an employer provides the employee transportation and mutually agreeable, suitable lodging with no more than two people in a room in areas where overnight stays are necessary, subsistence rates do not apply.

Millwrights

- (1) All zone pay shall be calculated from the address of the city hall of the respective dispatch point using the “shortest route” filter on Google Maps.
- (2) Zone 1: Work traveled up to 45 miles from the city hall of the respective dispatch points is a free zone.
- (3) Zone 2: Work traveled between 45 miles and 100 miles shall be compensated at \$4.00 per hour above base wage.
- (4) Zone 3: Work traveled 101 miles or more shall be compensated at \$6.00 per hour above base wage.
- (5) If employer fails to provide suitable lodging, employer shall pay \$110.00 per diem.
- (6) If an employee’s principal place of residence is within 45 road miles from the project, no subsistence or travel time shall be paid.

Operating Engine



- (1) Type A operators should be compensated for zone and subsistence as follows:
 - (a) Work travel between 50 and 85 miles from the interchange of Interstate 25 and Interstate 40 in Albuquerque, or from the Farmington City Hall in Farmington, should be compensated at \$2.50 per hour.
 - (b) Work travel 86 miles or more from the interchange of Interstate 25 and Interstate 40 in Albuquerque or from the Farmington City Hall in Farmington, should be compensated at \$4.00 per hour.
- (2) Type B and C operators:
 - (a) Base points for operators are 30 miles and beyond from the following base points or the employee's home, whichever is closer:
 - (i) Bernalillo county courthouse in Albuquerque;
 - (ii) State capital building in Santa Fe;
 - (iii) City hall in Farmington.
 - (b) Zone and subsistence for Albuquerque, Santa Fe, and Farmington are as follows:
 - (i) work travel between 30 and 50 miles from the base point compensated at \$20.00 per day;
 - (ii) work travel between 51 and 100 miles from the base point compensated at \$50.00 per day;
 - (iii) work travel over 100 miles from the base point that involves an overnight stay compensated at \$100.00 per day.
 - (c) Zone and subsistence for Los Alamos County, \$100.00 per day. This takes precedence over the 50-mile radius for Santa Fe zone and subsistence.
 - (d) If an employer provides the employee transportation and mutually agreeable suitable lodging in area where overnight stays are necessary, subsistence rates do not apply.
- (3) Type H operators are not eligible for zone and subsistence pay.

Painters

- (1) When out-of-town travel is required, the employer shall provide suitable lodging with no more than two people per room and \$30.00 per day for expenses.
- (2) When out-of-town travel is required and employer does not provide lodging, employer shall pay \$100 per day for expenses, plus their regular rate of pay.
- (3) Employees required to use a personal vehicle for travel to a jobsite beyond a 60-mile radius from their residence or the employer's shop, whichever is closest to



the job, shall be compensated at the current IRS rate for actual mileage incurred beyond the 60-mile radius, plus their regular rate of pay for travel time.

Paper hangers

- (1) When out-of-town travel is required, the employer shall provide suitable lodging with no more than two people per room and \$30.00 per day for expenses.
- (2) When out-of-town travel is required and employer does not provide lodging, employer shall pay \$100.00 per day for expenses, plus their regular rate of pay.
- (3) Employees required to use a personal vehicle for travel to a jobsite beyond a 50-mile radius from their residence or the employer's shop, whichever is closer to the job, shall be compensated at the current IRS rate for actual mileage incurred beyond the 50-mile radius, plus their regular rate of pay for travel time.

Plasterers

- (1) Employees who travel from Albuquerque to Santa Fe should be compensated at \$20.00 per day or other mutually agreed suitable lodging.
- (2) Except for employees who travel from Santa Fe to Albuquerque, work travel over 75 miles from the employer's office over the most typically traveled route should be compensated at \$5.00 per hour and capped at \$40.00 per day or mutually agreed suitable lodging.

Plumbers and pipefitters

- (1) Work travel for 90 or more miles from an employee's primary residence, and involving an overnight stay, should be compensated at \$120.00 per day.
- (2) No zone or subsistence pay is required should the employer elect to cover the room cost.

Roofers

- (1) Employees assigned to jobs located more than 60 miles from the employer's place of business shall receive transportation to and from the job.
- (2) Overnight stays required by the employer, \$90 or more per diem per day to cover all room and board expenses.



Sheet metal workers

- (1) Subsistence will be paid in any area outside the employer's home zone unless the jobsite is within 90 miles, by most direct regularly traveled route, of an employee's principal place of residence. In which case the employer will not be required to pay subsistence to that employee while working on the jobsite.
- (2) If an overnight stay is required, \$120.00 subsistence will be paid for each day worked outside of the employer's home zone.
- (3) No subsistence pay is required should employer decide to cover room costs at a suitable location and no more than two workers are in a room.
- (4) Zone 1: any are within an employer's home zone. An employer's home zone shall consist of 90 miles by most direct regularly traveled route from the main post office in the municipality of the employer's primary place of business, and including Los Alamos and Espanola, regardless of mileage.
- (5) Zone 2 (Industrial):
 - (a) Industrial work will be defined as all new construction work performed on the following types of facilities: electrical generation plants, co-generation plants 50 megawatts and over, refineries, natural and LP gas plants, mills, mines, and concentrators. Maintenance and retrofit work are excluded.
 - (b) The minimum rate of pay for all work described in subsection (a) of this section will be as indicated under zone 3 of the public works prevailing wage rates in 11.1.2.20 NMAC.
- (6) Zone 3 (Los Alamos):
 - (a) All work on Los Alamos National Laboratory property, and all prevailing wage work within the county of Los Alamos.
 - (b) The minimum rate of pay for all work described in subsection (a) of this section will be indicated under zone 3 of the public works prevailing wage rates in 11.1.2.20 NMAC.
- (7) Travel:
 - (a) All time spent traveling during the regular workday will be considered time worked and will be paid at the zone 1 rate of pay, provided such travel is directed by the employer. Travel before or after the regular workday will not be considered time worked and will not be paid unless required by federal or state law. If required by law, all time spent traveling outside the regular workday will be paid at the overtime rate of time and a half times two thirds the regular zone 1 rate of pay.



- (b) If an employer send an employee to perform work outside the territorial jurisdiction of the United States or Canada, travel pay and subsistence arrangements shall be negotiated locally.

Soft floor layer

- (1) Zone 1: Base pay for an area within a 30-mile radius from the main post office in the city or town where the employee permanently resides. Albuquerque, Santa Fe, and Belen shall be considered Zone 1.
- (2) Zone 2: Work travel between 30 and 75 miles from the main post office in the town where an employee permanently resides shall be compensated at \$1.00 per hour above base pay.
- (3) Zone 3: Work travel 75 miles or more from the main post office in the town where an employee permanently resides shall be compensated at \$3.13 per hour above base pay.
- (4) Employer will furnish transportation or gasoline for all work performed beyond the 30-mile radius that encompasses the free cities of Albuquerque, Santa Fe, or Belen.
- (5) When the employee is directed to report to a job site and the distance to the job site requires the employee to stay out of town overnight, the employer shall provide housing arrangements for the affected employees.

Sprinkler fitters

- (1) Work travel between 60 and 80 miles from the employee's primary residence should be compensated at \$30.00 per day.
- (2) Work travel between 81 and 100 miles from the employee's primary residence should be compensated at \$39.00 per day.
- (3) Work travel of 101 miles or more from the employee's primary residence should be compensated at \$150.00 per day.
- (4) No zone or subsistence pay shall be paid when the employer provides daily transportation and the employee elects to travel back and forth from home.

3.3.2.2 FEDERAL WAGE DECISION

"General Decision Number: NM20260006 01/02/2026

Superseded General Decision Number: NM20250006

State: New Mexico

Construction Type: Residential

Counties: Los Alamos, Sandoval and Santa Fe Counties in New Mexico.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories)

Modification Number	Publication Date
0	01/02/2026

SUNM1999-005 08/05/1999

	Rates	Fringes
CARPENTER (excluding drywall hanging).....	\$ 12.00	
Laborer, Unskilled.....	\$ 8.18	
PAINTER (excluding drywall finishing).....	\$ 10.00	
PLUMBER.....	\$ 16.30	.93
ROOFER.....	\$ 9.87	
Sheet metal worker (Setting of HVAC unit and installation of duct work and control wiring only).....	\$ 10.80	.45

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this

contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date

for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

----- WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or

by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

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3.3.3 NMDOT Standard Special Provisions

October 3, 2022

SPECIAL PROVISIONS CLARIFYING SECTION 106.12: BUY AMERICA REQUIREMENTS

The following clarifies the 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction, Section 106.12 – “Buy America Requirements” requires the contractor to provide materials that comply with 23 CFR Part 635, including the Build America, Buy America Act or as may be amended by waiver or otherwise.

Contractor shall ensure through certification that all manufacturing processes for construction materials occur in the United States pursuant to the “Buy America,” and “Build America, Buy America” Acts. If these certifications are not provided, the NMDOT may take any remedies available under the Contract.

Buy America Requirements are expanded to apply to construction materials, including articles, materials, or supplies that are or consist primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass;
- Lumber;
- And drywall.

Construction materials exclude cement and cementitious materials, aggregates including stone, sand, or gravel, or aggregate binding agents or additives.

Treat items that consist of two or more construction materials that have been combined together through a manufacturing process, and items that include at least one construction material combined with a material that is not listed through a manufacturing process, as manufactured products. Buy America preference does not apply to manufactured products.

Buy America preference applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to a project. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of the project. Buy America preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project, but are not permanently affixed to the structure.

May 11, 2023

**SPECIAL PROVISIONS
FOR
SECTION 106-A: BUILD AMERICA/BUY AMERICA PRODUCT INFORMATION
SHEET**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

106-A.1 DESCRIPTION

The Contractor shall use the Build America/Buy America Product Information Sheet (BABA/BA Spreadsheet) provided by the Department to certify all construction Materials meeting the requirements as listed in the Special Provisions Clarifying Section 106.12, "Buy America Requirements". The Contractor shall download the BABA/BA Spreadsheet in Microsoft Excel format (.xlsx) from the NMDOT website at [Construction Guidelines, Office Procedures, Materials & Material Testing Information | NMDOT](#), under Construction Project Office Forms.

Use of the BABA/BA Spreadsheet will be discussed during the Pre-Construction Conference. Preparation of the BABA/BA Spreadsheet shall be Incidental to the Project.

106-A.2 MATERIALS

In addition to the requirements of Section 106.4, "Certificates of Compliance", the Contractor shall provide a completed BABA/BA Spreadsheet to the Project Office and receive Acceptance prior to installing any applicable Materials in accordance with Section 106.12, "Buy America Requirements".

The Contractor shall populate information in the BABA/BA Spreadsheet and submit to the Project Manager for Acceptance in conjunction with the Certificates of Compliance. The Contractor shall submit the Certificates of Compliance listed on the BABA/BA Spreadsheet in chronological order beginning with products place of origin through arrival on Project, with the tracing numbers, i.e., shipping invoice, bill of lading, etc. highlighted for easy reference. The use of the BABA/BA Spreadsheet does not eliminate the requirement for the Contractor to bear the burden of proof.

106-A.3 CONSTRUCTION REQUIREMENTS - Reserved

106-A.4 METHOD OF MEASUREMENT - Reserved

106-A.5 BASIS OF PAYMENT - Reserved

February 8, 2021

**SPECIAL PROVISIONS
MODIFYING**

SECTIONS:

511: CONCRETE STRUCTURES
532: PENETRATING WATER REPELLENT TREATMENT
533: CONCRETE STRUCTURE REPAIR
**606: METAL BARRIER, CABLE BARRIER AND CONCRETE
WALL BARRIER**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete reference to **Class 4, Special Surface Treatment**. The Contractor shall meet **Coating of Concrete System** requirements for the following subsections:

**Section 511.3.9.2 Class 1, Ordinary
Surface Finish Section 511.3.9.3
Class 2, Rubbed Surface Finish
Section 511.3.9.5 Class 4, Special
Surface Finish Section 511.3.10.2
Method 2, Curing Compound**

**Section 532.2 Materials
Section 532.3.2.3 Application**

**Section 533.3.4 Furnishing, Placing, Curing and Finishing Concrete
Structure Repair Material Section 533.4 Method of Measurement**

**Section 606.3.3.1 Concrete Wall Barrier and Temporary Concrete Wall Barrier
Fabrication**

March 4, 2020

SPECIAL PROVISIONS MODIFYING

SECTIONS:

- 606: METAL BARRIER, CABLE BARRIER AND CONCRETE WALL BARRIER**
- 701: TRAFFIC SIGNS AND SIGN STRUCTURES**
- 703: TRAFFIC MARKERS**
- 720: VEHICULAR IMPACT ATTENUATOR UNITS and SAND BARREL
IMPACT ATTENUATOR UNITS**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete reference to **NCHRP Report 350**. The Contractor shall meet **AASHTO Manual for Assessing Safety Hardware (MASH)** requirements for the following subsections:

- 606.2.1.3.2 Structural Shape Posts**
- 606.2.2.2 Submittal**
- 606.2.2.4 Materials**
- 606.2.4 End Treatments**
- 701.2.6 Sign Structures and Hardware**

703.1 DESCRIPTION

720.2 MATERIALS

August 8, 2022

**SPECIAL PROVISIONS
MODIFYING
SECTION 303: BASE COURSE**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 303: BASE COURSE** in its entirety and replace with the following:

303.1 DESCRIPTION

This Work consists of providing, hauling, and placing Base Course.

303.1.1 Stockpiling

This Work consists of providing, hauling, and stockpiling Base Course at specified locations.

303.1.2 Removing, Processing, and Placing Base Course

This Work consists of removing, hauling, processing, placing existing Base Course Material.

303.2 MATERIALS

303.2.1 General

Base Course consists of one (1) or more of the following:

1. Crushed stone;
2. Crushed or screened gravel;
3. Caliche;
4. Sand;
5. Recycled Asphalt Pavement (RAP) not to exceed 50%; recycled concrete pavement (RC) not to exceed 75%; and the combined RAP and RC not to exceed 75% by weight; and
6. Processed glass aggregate.

Base Course shall not contain organic matter or other Deleterious Materials, including silt and clay balls.

The Department will allow a maximum of ten percent (10%) (by weight) processed glass aggregate, uniformly distributed, in composite Base Course. Processed glass aggregate shall meet physical properties and deleterious substance requirements in accordance with AASHTO M 318.

303.2.2 Aggregate Acceptance

The Department will accept Base Course based on random samples taken by the Department from the Roadway. Unless the Contract specifies otherwise, the Contractor shall produce Material in proportions that produce a homogeneous composite blend in accordance with Table 303.2.2:1, "Type I Base Course Gradation Band"

Table 303.2.2:1
Type I Base Course Gradation Band

Sieve size	% passing
1.0 inch	100
¾ inch	80-100
No. 4	30-60
No. 10	20-45
No. 200	3.0-10.0

Table 303.2.2:2
Type II Base Course Gradation Band

Sieve size	% passing
1.0 inch	100
¾ inch	85-95
No. 4	40-70
No. 10	30-55
No. 200	6.0-15.0

Table 303.2.2:3
Base Course Physical Properties – Type I and Type II

Property	Specification Limit
Fractured Face ^a	Minimum 50% on Untreated Material
AI ^b	Maximum 35
LL	Maximum 25
PI	Maximum 6

^aMaterials retained on or above the No. 4 sieve shall have at least two (2) Fractured Faces when evaluated in accordance with AASHTO T-335, "Determining the Percentage of Fractured Faces in Coarse Aggregate."

^bMaximum AI of 35 for untreated natural aggregate source when calculated in accordance with Section 910, "Aggregate Index".

303.3 CONSTRUCTION REQUIREMENTS

303.3.1 Subgrade

The Contractor shall place Base Course on subgrade prepared in accordance with Section 207, "Subgrade Preparation".

303.3.2 Mixing and Placing

The Contractor shall:

1. Place maximum six (6) inch (compacted) lifts, unless specified otherwise;
2. Not place Base Course Material on frozen Subgrade; and
3. Compact Base Course to at least 96% of maximum density as determined by

AASHTO T 180 (Modified Proctor), Method D (TTCP Modified).

The Department will use nuclear testing methods to determine in-place densities in accordance with AASHTO T 310 and TTCP procedures for wet density moisture correction.

303.3.3 Surface Tolerance

The surface tolerance shall not exceed ½ inch within ten (10) feet as verified by the Department. All deviations greater than ½ inch shall be corrected by the Contractor and reverified by the Department.

303.3.4 Plan Base Course and Sub-base Depths

The Department will monitor and record Base Course depth during the placement in accordance with Section 906, "Minimum Testing Requirements". If the placed thickness deviates from the requirements by more than minus ½ inch, the Contractor shall add Material and reprocess to correct the deficiency.

303.3.5 Stockpiled Base Course

The Contractor shall stockpile Base Course Material at locations shown on the Plans and prevent segregation of Materials at each stockpile. The Contractor shall maintain each stockpile in accordance with the following requirements:

1. Place stockpiles upon prepared sites;
2. Make stockpiles neat and regular to prevent segregation;
3. Provide enough storage space for each size of aggregate;
4. Prevent contamination (store stockpiles away from vehicular and Equipment traffic);
5. Keep the storage site neat and orderly and keep the stockpiles accessible for sampling; and
6. Acceptance by the Department will be at the final stockpile location.

303.3.6 Removing and Processing Existing Base Course

The Contractor shall:

1. Minimize contamination of Base Course Material when removing it from the Roadway for reuse, and;
2. Meet the requirements as indicated in Section 303.3.2, "Mixing and Placing".

303.3.7 Sampling and Testing

The Contractor and Department shall sample and test the Base Course in accordance with Section 906, "Minimum Testing Requirements". Department personnel may test locations other than the random locations generated for statistical analysis. These tests will not be used for pay factor determination, but may be used to determine Acceptance or rejection of localized Material.

303.3.7.1 Contractor Quality Control

The Contractor shall develop and administer a Quality Control plan that ensures the product meets the requirements in accordance with Section 902, "Quality Control". The Contractor shall ensure that the Quality Control plan addresses the following elements:

1. Contractor management and process control personnel;
2. Testing Equipment and Laboratory facilities;
3. Aggregate production;
4. Aggregate quality;

5. Stockpile management;
6. Proportioning;
7. Mixing and processing;
8. Transporting;
9. Placing and spreading;
10. Compaction;
11. Line and grade control; and
12. Criteria for the correction or rejection of unsatisfactory Materials.

The Contractor shall:

1. Provide copies of TTCP wallet cards or certifications for personnel who are responsible for sampling and testing the Base Course;
2. Update the list as required if personnel substitutions are made; and
3. Use test results, inspections, and other Quality Control practices to assure the quality of each Material source and to control processes for crushing, mixing, proportioning, processing, transporting, placing, spreading, and compacting quality.

303.3.8 Acceptance

The Department will accept Base Course Materials based on samples taken in accordance with the Section 906, "Minimum Testing Requirements" after placement but before compaction. Acceptance will be in accordance with Section 303.2.2, "Aggregate Acceptance" and Section 303.3, "Construction Requirements". If necessary, the Contractor shall re-work the Base Course until all requirements are met at no additional expense to the Department.

303.4 METHOD OF MEASUREMENT

When calculating the square yardage the Department will use the average Base Course width and the station-to-station length along the centerline. The dimensions will show on the typical section of the Plans. When calculating the weight of the Material, the Department will deduct the weight of moisture that exceeds the optimum moisture content plus two percent (2%). No additional payment shall be made for the stockpile pad.

303.5 BASIS OF PAYMENT

The Department will pay for the Accepted quantities of Base Course as determined in Section 303.3.8, "Acceptance".

Pay Item	Pay Unit
Base Course	Cubic Yard or Ton
Base Course _____ inch Depth	Square Yard
Remove, Process and Place Base Course	Square Yard or Ton
Stockpiled Base Course	Cubic Yard or Ton

303.5.1 Work Included in Payment

The Department will consider as included in the payment for the pay item(s) listed in this section and will not measure or pay separately for the following Work:

1. Providing, hauling, placing, and compacting Base Course Material;
2. Stockpiling, if required by Contract;
3. Quality Control in accordance with Section 902, "Quality Control"; and
4. Remove, process, and place Base Course, if required by the Contract.

August 8, 2022

SPECIAL PROVISIONS
MODIFYING
SECTION 402: ASPHALT MATERIALS AND MINERAL ADMIXTURES

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 402.2.1.6 Acceptance** in its entirety and replace with the following:

The Department will Accept asphalt cement in accordance with the Department's Standard Practice for Certifying Suppliers of Performance-Graded Binders and in accordance with Section 402.2.1.1, "Performance-Graded Asphalt Binder (PGAB)".

Table 402.2.1.6:1
Pay Adjustment Factor¹
Based on Binder Test
Results

Binder Property	Measured Value	Pay Factor Applied
DSR on Original Binder $G^*/\sin\delta$ (kPa) Min. 1.00 kPa	<1.00-0.98	0.98
	<0.98-0.96	0.95
	<0.96-0.94	0.92
	<0.94-0.90	0.85
	<0.90	0.75 or Removal ²
DSR on RTFO Aged Material $G^*/\sin\delta$ (kPa) Min. 2.20 kPa	<2.20-2.15	0.98
	<2.15-2.09	0.95
	<2.09-2.02	0.92
	<2.02-2.00	0.85
	<2.00	0.75 or Removal ²
DSR on PAV Aged Material with δ < 42° $G^*\sin\delta$ (kPa) Max. 5000 kPa	>5000-5100	0.98
	>5100-5250	0.95
	>5250-5400	0.92
	>5400-5600	0.85
	>5600	0.75 or Removal ²
DSR on PAV Aged Material with δ ≥ 42° $G^*\sin\delta$ (kPa) Max. 6000 kPa	>6000-6100	0.98
	>6100-6250	0.95
	>6250-6400	0.92
	>6400-6600	0.85
	>6600	0.75 or Removal ²

BBR Slope value (m) of PAV Aged Binder Min 0.300	<0.300-0.298	0.98
	<0.298-0.293	0.95
	<0.293-0.290	0.92
	<0.290-0.285	0.85
	<0.285	0.75 or Removal ²

Binder Property	Measured Value	Pay Factor Applied
BBR Stiffness of PAV Aged Binder S (MPa)	>300-306	0.98
	>306-315	0.95
	>315-324	0.92
	>324-330	0.85
	>330	0.75 or Removal ²
% Elastic Recovery on RTFO Aged Material ³ Min 65%	<65-60	0.95
	<60	0.75 or Removal ²

¹Price Reduction will be applied to Contactor's invoice price of asphalt binder.

²The Assistant District Engineer - Construction will determine if the non-compliant HMA Material will be removed. Removal and replacement will be at no additional cost to the department. If the non-compliant Material is Accepted, a price reduction factor of 0.75 will apply.

³Elastic-Recovery is only applicable to PG+ and PGR+ Binders.

Delete **Section 402.2.3.2: Anhydrite Based Material** in its entirety and replace with the following: The Supplier shall provide anhydrite based Material in accordance with Tables 402.2.3.2:1, "Anhydrite Based Material Chemical Composition" and Table 402.2.3.2:2, "Anhydrite Based Material Physical Properties." The Contractor shall use ASTM C 114 for the chemical analysis.

Table 402.2.3.2:1
Anhydrite Based Material Chemical Composition

Chemical Compound	Percent by Weight
SiO ₂	8.0 to 12.0
Al ₂ O ₃	1.8 to 3.8
Fe ₂ O ₃	1.2 to 1.6
MgO	1.0 to 2.0
CaO	45.0 to 55.0
SO ₃	26.0 to 36.0

Table 402.2.3.2:2
Anhydrite Based Material Physical Properties

Property	Range
LOI, %	4.0 to 6.0
Passing #200 Sieve, %	98.8 to 100.0
Passing #325 Sieve, %	95.0 to 98.2
Specific Gravity	2.970 to 3.050

January 2, 2025

SPECIAL PROVISIONS
MODIFYING SECTION 407: TACK COAT

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 407.2 MATERIALS**:

407.2.1 Tack Coat Additive – For Cationic Emulsion Only

A cationic organosilane additive with a minimum nonvolatile content of 38 percent is to be used in accordance with ASTM D5095.

1. Use a dosage from 0.7 to 1.0 percent by weight of emulsion, according to manufacturer's specification.

January 2, 2025

**SPECIAL PROVISIONS
MODIFYING SECTION 408: PRIME COAT**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 408.2 MATERIALS**:

408.2.1 Prime Coat Additive – For Cationic Emulsion Only

A cationic organosilane additive with a minimum nonvolatile content of 38 percent is to be used in accordance with ASTM D5095.

1. Use a dosage from 0.7 to 1.0 percent by weight of emulsion, according to manufacturer's specification.

January 21, 2021

SPECIAL PROVISIONS

MODIFYING SECTION 416: MINOR PAVING

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 416: MINOR PAVING** in its entirety and replace with the following:

416.1 DESCRIPTION

This Work consists of constructing one (1) or more pavement courses of Hot Mix Asphalt (HMA) or Warm Mix Asphalt (WMA) on a prepared subgrade, aggregate base course or milled surface.

416.2 MATERIALS

The Contractor shall use Materials for Minor Paving in accordance with Section 423.2,

“Materials”. Minor Paving shall be classified as one of the following:

1. Minor Paving Type I. Consists of Minor Paving that can be placed within the Roadway Prism that is of sufficient size or area to reasonably allow the Material to be placed with Equipment in accordance with Sections 423.3.4.3, “Pavers” and 423.3.4.4, “Compaction Equipment”.

Minor Paving Type I includes the following:

- 1.1 Mainline paving;
- 1.2 Auxiliary lanes;
- 1.3 Holding lanes; and
- 1.4 Shoulders.

2. Minor Paving Type II. Consists of Minor Paving placed outside the Roadway Prism or in areas within the Roadway Prism that would not allow for the Material to be placed with Equipment in accordance with Sections 423.3.4.3, “Pavers” and 423.3.4.4, “Compaction Equipment”.

Examples of Minor Paving Type II include the following:

- 2.1 Driveways;
- 2.2 Turnouts;
- 2.3 Official use crossings;
- 2.4 Widening less than ten (10) feet in width;
- 2.5 Utility crossings;
- 2.6 ADA Improvements; and
- 2.7 All other items not listed in Minor Paving Type I.

416.3 CONSTRUCTION REQUIREMENTS

The Contractor shall perform Minor Paving in accordance with the following 423 Sections or the correlating 424 Sections:

1. Section 423.3.1 or Section 424.3.1, "General";
2. Section 423.3.2 or Section 424.3.2, "Mix and Laydown Temperature Requirements" or "Mix Temperature Requirements", respectively;
3. Section 423.3.3 or Section 424.3.3, "Addition of Mineral Admixtures";
4. Section 423.3.4 or Section 424.3.4, "Equipment"; and
5. Section 423.3.5 or Section 424.3.5, "Placement Operations" excluding 423.3.5.7, "Test Strip & Shakedown Period".

No referee testing will be required for Minor Paving, but may be used if both parties agree in writing at the Pre-Pave Conference. If used, referee testing will be done in accordance with Section 423.3.7, "Dispute Resolution" or Section 424.3.7, "Dispute Resolution".

416.3.1 Sampling and Testing

416.3.1.1 Contractor Quality Control

The Contractor shall provide quality control measures in accordance with Section 902, "Quality Control".

The Contractor shall identify the proposed lot size in the Quality Control Plan for approval by the Project Manager.

416.3.1.2 Department Quality Assurance

The Department will provide quality assurance measures in accordance with Section 905, "Quality Assurance for Minor Paving".

416.3.1.2.1 Acceptance

The Department will Accept Materials in accordance with Section 905.1.3., "Acceptance".

416.3.1.3 Independent Assurance Testing

The Department will perform Independent Assurance sampling and testing in accordance with Section 906, "Minimum Testing Requirements (MTR's)".

416.4 METHOD OF MEASUREMENT

If the Department measures by the square yard, the Department will measure Minor Paving using the dimensions shown in the Contract or approved field measurements.

416.5 BASIS OF PAYMENT

The Department will adjust payment for Minor Paving in accordance with Section 905, "Quality Assurance for Minor Paving".

Pay Item**Pay Unit**

Minor Paving Type I, HMA SP

Ton or Square Yard

Minor Paving Type II, HMA SP

Ton or Square Yard

Minor Paving Type I, WMA SP

Ton or Square Yard

Minor Paving Type II, WMA SP

Ton or Square Yard

Price Adjustments

The Department will pay for Accepted quantities of Minor Paving at the Bid Item Unit Price, adjusted in accordance with Section 905.1.4, "Pay Factor Determination".

416.5.1 Work Included in Payment

The Department will consider as included in the payment for the pay item(s) listed in this section and will not measure or pay separately for the following Work:

1. Asphalt binder, anti-strip, aggregate, blending sand, mineral filler, mineral admixture, and WMA additive or process as appropriate;
2. Mixing, hauling, placement, and compaction of HMA or WMA;
3. Providing Mix Design in accordance with Section 423.2.8 or Section 424.2.8, "Mix Design";
4. Quality Control in accordance with Section 902, "Quality Control;"
5. Providing and transporting all cores; and
6. Providing storage container for samples and cores if referee testing is used.

May 28, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 423: HOT MIX ASPHALT (HMA) (MAJOR PAVING)

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 423.2.7: Reclaimed Asphalt Pavement (RAP)** in its entirety and replace with the follow-ing:

Unless otherwise specified in the Contract, the Contractor may use RAP removed under the Contract con-sisting of salvaged, milled, pulverized, broken, or crushed asphalt pavement. The Contractor may use RAP produced from outside sources provided the following is met: after the Contractor obtains sufficient quanti-ties of RAP aggregate samples in accordance with AASHTO T 308; the Department will Accept RAP for which the coarse aggregate has a percent wear of 40.0 or less, at 500 revolutions, when tested in accord-ance with AASHTO T 96. The Contractor shall provide plus No. 4 RAP Material with a minimum of 75% Fractured Faces content (one (1) face). The Department will make no additional payment for the asphalt binder in the RAP or asphalt binder due to asphalt binder grade adjustment.

In the event the Contractor elects to use up to 15% RAP (by weight) or is specified as a maximum of 15% RAP by the Contract (by weight) in the production of HMA mixtures, the Contractor shall use the PG grade asphalt binder specified in the Contract.

For quantities greater than 15% and up to 25% RAP, the Contractor shall:

1. Either lower the asphalt binder's high and low temperature grades by one (1) grade (e.g. lower a PG 76-22 to a PG 70-28); or
2. Extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M 323, Appendix A, ensuring the resultant binder meets the entire AASHTO M 320 (excluding di-rect tension) required Project PG asphalt binder properties indicated on the approved mix design.

For quantities greater than 25% and up to 35% RAP, the Contractor shall:

1. Extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASH-TO M 323, Appendix A; and
2. Ensure the resultant binder meets the entire AASHTO M 320 (excluding direct tension) required Project PG asphalt binder properties indicated on the approved mix design.

The Department will not allow the Contractor to use more than 35% RAP in the production of HMA mix-tures.

For Projects of entirely new construction, the Contractor shall:

1. Limit the RAP to 15% in the top mat or extract, recover and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M323, Appendix A; and
2. Ensure the resultant binder meets the entire AASHTO M320 (excluding direct tension) required Project PG asphalt binder properties indicated on the approved mix design.

If Plus Grades of PG asphalt binder is specified on the project, for quantities greater than 15% RAP, the Contractor shall extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M 323, Appendix A. The Contractor shall ensure the resultant binder meets the entire AASHTO M 320 required Project PG asphalt binder properties indicated on the approved mix design including the additional Plus Grade requirements for Elastic Recovery and Solubility.

The Contractor shall:

1. Process RAP so that 100% passes a 1-1/2-inch sieve;
2. Maintain adequate stockpile management (i.e. sufficient quantities and shaping of the stockpiles);
3. Address in the Quality Control Plan how RAP will be controlled, such as which screen will be used to split into two (2) stockpiles, or by what method the RAP will be controlled to keep the resultant mix within Acceptable limits;
4. Account for the weight of the binder in the RAP when batching aggregates;
5. Provide RAP that is free of Deleterious Materials; and
6. Perform process control testing in accordance with Section 902, "Quality Control" requirements as RAP is produced and prepared for inclusion in the HMA.

If problems with HMA consistency or compliance with Project Specifications occur, additional efforts taken to achieve Acceptable levels of consistency and compliance with Contract Specifications, at the Contractor's discretion (at no additional cost to the Department), include, but are not limited to:

1. Reduce the top size of the RAP from 1-1/2 inch to one (1) inch;
2. Fractionate the aggregates on a second screen, such as the 3/8 inch or 1/4 inch Screen so that the RAP is maintained in three (3) stockpiles, one being RAP larger than 1-1/2 inch to two (2) inches, Coarse RAP and the third being Fine RAP;
3. Ensure that the RAP used in the HMA mix design is representative of the RAP available on the Project;
4. Cover the RAP pile(s) so that ambient moisture is not absorbed; and
5. Process and maintain the stockpiles so that the RAP Material is equally and uniformly distributed throughout the entire stockpile(s) and is withdrawn such that uniform, non-segregated RAP is delivered to the hoppers.

June 13, 2022

SPECIAL PROVISIONS
MODIFYING
SECTION 509: PORTLAND CEMENT CONCRETE MIX DESIGNS

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 509.2.2.1 Portland and Blended Cements** in its entirety and replace with the following: Portland cement shall comply with ASTM C150 Types I, II, III, and V. Portland cement shall have an alkali content less than 0.80% by mass of alkalis as $\text{Na}_2\text{O} + 0.658 \text{ K}_2\text{O}$ when determined under AASHTO T 105 unless approved otherwise by the State Concrete Engineer. Types III and V Portland cements shall only be used if specified.

Blended cements shall comply with Type IS (S) - Portland blast-furnace slag cement, Type IP (MS) (HS) - Portland-pozzolan cement, Type IL - Portland-Limestone cement or Type IT - (MS) (HS) Ternary blended cement as specified in ASTM C595 unless approved otherwise by the State Concrete Engineer. Class C fly ash shall not be used in blended cements, unless otherwise approved by the State Concrete Engineer. Type IP (MS) (HS) & Type IT (MS) (HS) blended cements shall not consist of more than 40 percent (40%) SCM. Type IL (MS) (HS) shall not consist of more than 15 percent (15%) limestone.

Delete **Section 509.2.2.2 Supplementary Cementitious Materials** in its entirety and replace with the following:

Each Supplementary Cementitious Materials (SCM) shall be in accordance with the following standards and as modified in Table 509.2.2.2:1, "Supplementary Cementitious Material Requirements" unless approved otherwise by the State Concrete Engineer.

1. Class N, C and F SCM shall comply with the requirements of ASTM C618:
 - 1.1. Class C shall not be used in concrete exposed to sulfate environments or with "potentially reactive," or "reactive" aggregate;
2. Ultrafine fly ash (UFFA) shall comply with ASTM C618, Class N;
3. Ground granulated blast furnace slag (GGBFS) shall comply with ASTM C989, Grade 100 or 120; and
4. Silica fume shall comply with ASTM C1240.

Table 509.2.2.2:1
Supplementary Cementitious Material Requirements

SCM Type	Material Standar	Properties	Limits		
			N	F	C
Coal Fly Ash, and Raw or Calcined Natural Pozzolans	ASTM C618	Class	N	F	C
		Sum of Al_2O_3 , SiO_2 , and	75%	65%	50%
		Loss on ignition,	10.0%	4.0%	4.0%
		Magnesium Oxide (MgO),	5.0%	5.0%	5.0%
		Sulfur Trioxide (SO_3),	3.0%	4.0%	4.0%
		Available alkalis as $\text{Na}_2\text{O}+0.658$	Report	Report	Report
		Calcium Oxide	Report	18.0% max	18.0% min
Ultra Fine Ash in addition to the requirement for Class F Fly Ash	AASHT M 321	Accelerate d Pozzolanic Activity Index,		85% 100%	
		Particle size distributio n • less than 2.25 μm		50% 90%	
		Fineness, retained on 45 μm wet sieve, max		5.0%	
		Moisture content,		1.0%	

Table 509.2.2.2:1
Supplementary Cementitious Material Requirements

SCM Type	Material Standard	Properties	Limits		
Metakaolin	ASTM C618	Silicon dioxide (SiO ₂) + aluminum oxide (Al ₂ O ₃), min		85%	
		Calcium oxide (CaO), max		1.0%	
		Sulfur trioxide (SO ₃) max		1.0%	
		Loss on ignition, max		1.2%	
		Available alkalis as Na ₂ O + 0.658 K ₂ O, max)		1.5%	
		Accelerated Pozzolanic Activity Index, • 7 Day • 28 Day		85% 95%	
		Fineness , retained on 45 μm wet sieve, max		5.0%	

Silica Fume	AST M C124 0	Reduction in mortar bar expansion when used with cement in the proposed mix design, min		80%	
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Delete **Section 509.2.3.4 Aggregate Alkali-Silica Reactivity** in its entirety and replace with the following: The Supplier shall test the aggregates accordance with ASTM C1260 once every two (2) years and C1293 once every four (4) years. Aggregates with an expansion of 0.10% or greater at 14 Days, or 0.04% or greater at one (1) when tested in accordance with C1260 and C1293 will be considered reactive. Aggregates with an expansion of less than 0.04% at one (1) year will be considered nonreactive regardless of C1260 testing. Reactive aggregates shall not be used unless mitigative measures are included in the mix design.

The Supplier shall test alkali-silica reactivity mitigative measures in accordance with ASTM C1567 once every two (2) years and C1293 once every four (4) years. The Department will consider mitigative measures to be effective if the expansion at 14 Days is less than 0.10%, or less than 0.04% at two (2) years when tested in accordance with C1567 and C1293, respectively. Mitigative measures with an expansion of 0.04% or greater at two (2) years will not be considered effective regardless of C1567 testing. Each source and size of aggregates shall be tested using the cement and mitigative measures used in the mix design. The individual aggregate requiring the highest level of mitigative measures or 15 percent (15%) SCM content by total cementitious content shall be the minimum used for the mix design, whichever is greater.

Delete **Section 509.2.7.1 Concrete Classifications** in its entirety.

Delete **Section 509.2.7.2 Concrete Class Requirements** in its entirety and replace with the following:

Concrete Class	Minimum Compressive Strength at 28 Days, psi	Cementitious Material Content, lbs/CY, Minimum or Range	Air Content ¹ Range, %	Water/Cementitious Content Ratio, Maximum or Range	Slump Inches
A	3,000	525	4.0 - 8.0	0.50	1.5 - 4.5
AA	4,000	525 - 700	5.0 - 8.0	0.45	2.5 - 4.5
F	3,000	525	4.0 - 8.0	0.50	0.5 - 2.5
HPD	4,000	500 - 650	5.0 - 8.0	0.42 - 0.45	2.5 - 4.5
HPR	4,000	500 - 650	5.0 - 8.0	0.42 - 0.45	2.5 - 4.5
P	4,000	525	4.5 - 8.0	0.45	0.5 - 2.5

G	3,000	611	0.0 - 4.0	0.44	Note 2
S55	5,500	600 - 850	5.0 - 8.0	0.40	
S95	9,500	700 - 1,100	5.0 - 8.0	0.32	
Special	The Contract for the Project will address special mix requirements.				
Notes					
1. Design air content shall be 6.5 percent (6.5%), except for Class G concrete which shall be 1.5 percent (1.5%).					
2. See concrete classification description for slump and flow requirements.					

1. **Class A** is general purpose, air entrained concrete with a maximum aggregate size less than 1 ½ inches allowed to be used for cast-in-place sidewalks, curb/gutter, concrete wall barrier, and Bridge Substructures;
2. **Class AA** is a medium strength structural cast-in-place concrete required for Bridge superstructures (excluding precast girders and Bridge decks), approach slabs, and abutments. Additional requirements include the following:
 - 2.1 An approved water reducing admixture shall be used; and
 - 2.2 Shall have a maximum aggregate size less than 1 ½ inches;
3. **Class HPD** is a medium strength concrete required for new and widened concrete Bridge decks, Bridge deck concrete paving, and concrete paving repair and used for concrete Bridge deck resurfacing, concrete Bridge deck and partial depth of concrete structures/members repairs. May be substituted for Class P. Additional requirements include the following:
 - 3.1 An approved water reducing admixture shall be used;
 - 3.2 Set accelerating admixtures shall not be used;
 - 3.3 Set retarding admixtures may only be used when approved;
 - 3.4 Shall consist of a minimum of 55 percent (55%) of one (1) inch or ¾ inch coarse aggregate in accordance with Section 509.2.3.2.1, Coarse Aggregate Gradation Requirements;
 - 3.5 Shall use a combined gradation protocol;
 - 3.6 Maximum shrinkage when tested in accordance with ASTM C157 less than 0.03 at 28 Days or 0.05 at 56 Days;
 - 3.7 Shall contain a minimum 20 percent (20%) supplementary cementitious content (SCM) content; Maximum permeability when tested in accordance with ASTM C1202 shall be 2,500 coulombs at 28 Days or 2,000 coulombs at 56 Days;
 - 3.8 When examined in accordance with the ASTM C457, shall have hardened air void system with a minimum air content of five percent (5.0%), specific surface greater than 600 inches-1; and
 - 3.9 Spacing factor less than 0.008 inch;
4. **Class HPR** is a medium strength concrete used for concrete Bridge deck resurfacing, concrete Bridge deck and partial depth of concrete structures/members repairs. Additional requirements include the following:
 - 4.1 An approved water reducing admixture shall be used;
 - 4.2 Set accelerating admixtures shall not be used;
 - 4.3 Shall consist of a minimum of 50 percent (50%) of ½ inch coarse aggregate in accordance with Section 509.2.3.2.1, "Coarse Aggregate Gradation Requirements";
 - 4.4 Maximum shrinkage when tested in accordance with ASTM C157 less than 0.035 at 28 Days or 0.05 at 56 Days;
 - 4.5 Shall contain a minimum 20 percent (20%) supplementary cementitious material

- (SCM) or the minimum SCM needed to mitigate alkali-silica-reactivity, whichever is greater;
- 4.6 Maximum permeability when tested in accordance with ASTM C1202 shall be 2,500 coulombs at 28 Days or 2,000 coulombs at 56 Days;
 - 4.7 When examined in accordance with the ASTM C457 linear traverse method, hardened air void system characteristics shall have a minimum air content of five percent (5.0%), a specific surface greater than 600 inches²/lb; and
 - 4.8 Spacing factor less than 0.008 inch;
 5. **Class F** is a general purpose, air entrained concrete allowed for slip formed concrete wall barriers, curb/gutter; with a maximum aggregate size less than 1 ½ inches;
 6. **Class G** concrete is required for below grade applications, drilled shafts and caissons. Additional requirements include the following:
 - 6.1 Air content shall be less than four percent (4.0%) unless specified by the Contract;
 - 6.2 When specified, the air content shall be five to eight percent (5% to 8%);
 - 6.3 Maximum coarse aggregate shall be ½ inch in accordance with Section 509.2.3.2.1, "Coarse Aggregate Gradation Requirements" unless approved otherwise;
 - 6.4 Set retarders and water reducing admixtures are allowed to extend the concrete mixing time and extend the concrete's slump life;
 - 6.5 A viscosity modifying admixture may be used;
 - 6.6 Shall have a slump range of 7.0 inches +/- 1.0 inch except when placed under a drilling fluid;
 - 6.7 When placed under a drill fluid, shall have a slump of 8.0 inches +/- 1.0 inch; and
 - 6.8 Admixtures shall be adjusted for the job site conditions so that the concrete remains workable and plastic for the two (2) hours placement limit;
 7. **Class P** concrete is required for concrete paving. Additional requirements include the following:
 - 7.1 When tested in accordance with ASTM C157, shall have a maximum shrinkage less than 0.035 at 28 Days; and
 - 7.2 Shall consist of a minimum of 55 percent (55%) of one (1) inch or 1 ½ inch coarse aggregate in accordance with Section 509.2.3.2.1, "Coarse Aggregate Gradation Requirements";
 8. **S55** is a dense, high strength structural concrete allowed for precast concrete. Additional requirements include the following:
 - 8.1 An approved water reducing admixture shall be used;
 - 8.2 A viscosity modifying admixture may be used;
 - 8.3 Target slump shall be determined by the mix designer, but no greater than 10.0 inches +/- 1.0-inch; and
 - 8.4 Shall have a slump flow of 22 to 26 inches if designed or modified to be a self-consolidating concrete (SCC);
 9. **S95** is a dense, high strength structural concrete allowed for precast and prestressed concrete applications. Additional requirements include the following:
 - 9.1 An approved water reducing admixture shall be used;
 - 9.2 A viscosity modifying admixture may be used;
 - 9.3 Target slump shall be determined by the mix designer but no greater than 10.0 inches +/- 1.0 inch; and
 - 9.4 Shall have a slump flow of 22 to 26 inches if design or modified to be a SCC; and
 10. **Special** is a classification for concrete mix designs which have been developed to meet Contract specific requirements.

Delete **Section 509.2.7.4 Freeze-Thaw Risk Zones** in its entirety.

Delete **Section 509.2.7.5.2 Concrete Mix Design Requirements** in its entirety.

Delete **Section 509.2.7.6 Mixture Design Submittals** in its entirety and replace with the following:

For standard concrete mix designs, the Supplier shall submit a completed electronic copy of the NMDOT Concrete Mix Design Submittal Form to the Concrete Unit of the State Materials Bureau for review and approval. The Contractor shall submit Special mix designs to the Project Manager for review and approval by the State Concrete Engineer.

The following information shall be included in the mix design submittal:

1. Supplier name;
2. Production facility physical address, telephone number and e-mail address;
3. PTL's name;
4. The New Mexico registration number of the professional Engineer who is responsible for the concrete mixture design Work;
5. Aggregates:
 - 5.1 Source name and location;
 - 5.2 ASTM C295 "Petrographic Examination of Aggregates for Concrete" and an ASTM C294, Constituents of Natural Mineral Aggregates for both the coarse and fine aggregates after completing processing and manufacturing procedures and the aggregate is ready for use shall be submitted. Include the geologic origin of the Material; perform and certify the analysis using a petrographer previously approved by the Department;
 - 5.3 AASHTO M 6 - Fineness modulus;
 - 5.4 AASHTO T 11 - Material finer than No. 200 sieve;
 - 5.5 AASHTO T 21 - Organic impurity content, including soft fragments, coal and lignite, flat or elongated pieces, and other Deleterious substances;
 - 5.6 AASHTO T 27 - Sieve analysis;
 - 5.7 AASHTO T 84 - Aggregate absorption;
 - 5.8 AASHTO T 85 - Specific gravity of coarse aggregates; AASHTO T 96 - Los Angeles wear;
 - 5.9 AASHTO T 104 - Soundness loss;
 - 5.10 AASHTO T 112 - Clay lumps content;
 - 5.11 AASHTO T 152 - Aggregate correction factor;
 - 5.12 AASHTO T 176 - Sand equivalent of fine aggregate; and
 - 5.13 AASHTO T 335 - Percent of Fractured Faces for aggregate greater than 3/8 inch;
6. Alkali-Silica-Reactivity
 - 6.1 ASTM C1260 - Potential Alkali Reactivity of Aggregates;
 - 6.2 If need, ASTM C1567 - Potential ASR of Combinations of Cementitious Materials and Aggregate; and
 - 6.3 ASTM C1293 - Length Change of Concrete Due to ASR;
7. Portland and Blended Cements
 - 7.1 Supplier name;
 - 7.2 Specific source name;
 - 7.3 Specific cement type;

- 7.4 Specific SCM type; and
- 7.5 Percent SCM;
- 8. SCM:
 - 8.1 Supplier name;
 - 8.2 Specific source name; and
 - 8.3 Specific SCM type;
- 9. Concrete mixture proportions; state clearly if submitting request under the combined gradation provisions;
- 10. Water/cementitious ratios;
- 11. Type and amount of admixtures; use admixtures on the Department's Approved Products List;
- 12. Water source and location;
- 13. Plastic Concrete Properties:
 - 13.1 Air temperature;
 - 13.2 Concrete temperature;
 - 13.3 Slump: ASTM C143, when using super-plasticizer, document the slump before and after addition of the super-plasticizer;
 - 13.4 Unit weight: ASTM C138; and
 - 13.5 ASTM C231 or C173;
- 14. Hardened Concrete Properties:
 - 14.1 Compressive strength tests (the average of three (3) cylinders tested at three (3) Days, seven (7) Days, 14 Days and 28 Days);
 - 14.2 Type of fracture of each cylinder;
 - 14.3 Flexural strength if required;
 - 14.4 Hardened air void analysis, if required;
 - 14.5 Rapid chloride permeability, if required; and
 - 14.6 Shrinkage data, if required.

February 1, 2021

**SPECIAL PROVISIONS
MODIFYING
SECTION 511: CONCRETE STRUCTURES**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 511.1 Description**:

Reference Section 512 for additional information related to Superstructure

Concrete. Delete the following Pay Item from **Section 511.5: Basis of**

Payment:

Pay Item	Pay Unit
Substructure Concrete, Class	Cubic Yard

Add the following to **Section 511.5.1 Work Included in Payment**:

8. All provisions of Specification Sections 509, 510, 511, and 512. In the event of a conflict, the more stringent shall apply; and
9. Welded wire fabric.

June 17, 2024

SPECIAL PROVISIONS MODIFYING

SECTION 603: TEMPORARY EROSION AND SEDIMENT CONTROL

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 603: TEMPORARY EROSION AND SEDIMENT CONTROL** in its entirety and replace with the following:

603.1 DESCRIPTION

This Work consists of preparing a Storm Water Pollution Prevention Plan (SWPPP), constructing, inspecting, and maintaining erosion, sediment control, and storm water pollution prevention facilities for the discharge of storm water associated with construction activity. This Work includes construction phase activities through final stabilization.

The Contractor shall follow requirements in this section regardless of a watercourse's jurisdictional status when Projects are over one (1) acre or contain disturbed slopes with bare ground steeper than 3:1 regardless of acreage. Projects less than one (1) acre that do not have slopes steeper than 3:1 are not required to have SWPPP measures. The Contractor shall prevent erosion, sediment, and construction related pollutants from leaving the Project and protect channels, conveyances and waterbodies within or adjacent to the Project. Channels shall include any ephemeral, intermittent, and perennial watercourse including arroyos, acequias, ditches, drains and conveyances.

603.1.1 Storm Water Pollution Prevention Plan

The Contractor's SWPPP shall satisfy the requirements in accordance with Section 632.3, "Construction Requirements", the current Construction General Permit (CGP), applicable Environmental Protection Agency (EPA) Municipal Separate Storm Sewer System (MS4) Permit and shall contain the following sections, forms, and information sheet(s):

1. Identification of other site operators;
2. Storm water team, including at least two (2) EPA-certified inspectors consisting of one (1) from the Contractor and one (1) from the Department;
3. Nature of construction activities;
4. Site map with a maximum disturbed area approved by the Project Manager that the Contractor shall not exceed;
5. Table of Materials including revegetation and initial soil stabilant that the Contractor expects to use for SWPPP based on the maximum disturbed area;
6. Non-storm water discharges;
7. Sequence and estimated dates of construction activities;
8. Temporary Erosion and Sediment Control Plan (TESCP) and description of storm water control measures (construction phase and final stabilization);
9. Natural buffer documentation;
10. Perimeter controls for a "linear construction site";

11. Stabilization measures;
12. Procedures for inspection, maintenance, and corrective action;
13. Procedures for turbidity benchmark monitoring from dewatering discharges (if applicable);
14. Documentation of compliance, including documentation of inspections, emergency related measures, and applicable State, local, and federal requirements;
15. Staff training;
16. Pollution prevention procedures;
17. List of SWPPP certified personnel and documentation of their certifications; and
18. Post-authorization additions to the SWPPP.

The Contractor shall use the most current version of the forms required for the SWPPP:

1. CGP Site Inspection Report template EPA form (for meeting the requirements in Part 4.7 of the 2022 CGP);
2. CGP Dewatering Inspection Report template EPA form (preparing inspection reports related to dewatering activities required by Part 4.6.3 of the 2022 CGP);
3. CGP Corrective Action Log template EPA form (recording the required corrective action documentation that meet the requirements in Part 5.4 of the 2022 CGP);
4. Notice of Intent (NOI);
5. Contractor certification for NPDES “General Permit for Storm Water Discharges” from construction sites EPA form;
6. Notice of Termination (NOT); and
7. Other forms as authorized by the Department or EPA.

A SWPPP Information Sheet provided by the Department will include the following:

1. NOI inputs;
2. General notes;
3. Soil loss model (if applicable); and
4. MS4 retention (if applicable).

The Department will include the SWPPP information sheet on the Plans.

603.1.1.1 Temporary and Final Erosion and Sediment Control Plan

The Contractor’s construction phase TESCO, as part of the SWPPP, shall depict the location, type, and length of temporary erosion control measures, off-site flows, discharge locations, and flow paths within the Work area of the Right of Way on construction phasing Plan sheets.

The Department will prepare the final stabilization Erosion and Sediment Control Plan (ESCO) sheets depicting the location, type, and length of temporary erosion control measures, off-site flows, discharge locations, and flow paths within the Right of Way on Plan sheets at the final placement after all construction activities haven been Accepted.

603.1.1.2 Department Responsibilities

The Project Manager will assign an EPA-certified (or equivalent) Department representative (with qualification form per CGP section 9.6.1.c) experienced and trained in implementing Best

Management Practices (BMPs). The Department will include a SWPPP Information and the final stabilization ESCP on the Plans. The SWPPP Information Sheet will include an NOI Inputs table that provides information needed to complete the NOI.

The Department's final stabilization ESCP Plan sheets will include the following:

1. Site map(s);
2. Existing and new Structures;
3. Drainage flow patterns and discharge locations;
4. Existing and proposed Roadway grades;
5. Approximate slopes;
6. Areas of soil disturbance;
7. Major controls locations;
8. Structural practices;
9. Surface waters (including wetlands);
10. Conditions before and after construction;
11. Right of Way lines including easements; and
12. Detours outside of the Right of Way.

603.1.1.3 Contractor Responsibilities

Before disturbing any soil, the Contractor shall prepare and submit to the Project Manager and the Department's Roadside Environment Design Manager or representative, a SWPPP based on the planned construction phasing and schedule. The Contractor shall prepare amendments to the SWPPP as Work progresses or as phasing or scheduling changes are made. The Contractor's TESCOP shall be developed by the Contractor's SWPPP certified inspector for each construction phase, complying with provisions of the NPDES CGP and shall include the following activities:

1. Develop the SWPPP using a combination of structural, non-structural, and vegetative BMPs appropriate for the identified location to control erosion and sedimentation and manage storm water during construction activities. Refer to the recommendations in the current version of the Department's National Pollutant Discharge Elimination System Manual: Storm Water Management Guidelines for Construction and Industrial Activities;
2. Include proposed methods for minimizing or eliminating pollution of streams, lakes, reservoirs, canals, and other water impoundments from storm water discharge associated with construction activities;
3. Do not start earth-disturbing activities until the Contractor developed SWPPP has been submitted and the NOI is active; and
4. Maintain the SWPPP in accordance with the NPDES CGP and this Section until final grading, erosion control and seeding operations have been completed.

603.1.2 Retention of Records

The Contractor shall retain and maintain SWPPP changes as required by the NPDES CGP and this Section. The Contractor shall include copies of the permit language and inspection and maintenance reports in the SWPPP. The Contractor shall prepare inspection and maintenance reports from commencement of earthwork activities to Project completion. The Contractor shall deliver the SWPPP to the Project Manager at Project completion. The Contractor shall ensure that these records are available to the public at all times and shall retain records for a minimum of three (3) years after the Contractor's NOT is Accepted.

603.1.3 Notice of Intent (NOI)

The Contractor shall prepare and submit an electronic NOI. The Contractor shall provide a copy of the NOI that meets the NPDES CGP requirements for discharge of storm water associated with construction activities to the Project Manager. The Contractor shall provide the NOI and attachments to the Project Manager at least three (3) weeks before the start of construction.

The Department and the Contractor shall each prepare and submit separate NOIs to the EPA, designating the status of owner/operator. The Contractor shall not begin earth-disturbing activities until both NOIs are listed on the EPA website as "active." The EPA will post NOI approvals on their website.

603.1.4 Off-Site Storm Water Pollution Prevention Plan

The Contractor shall prepare and submit a SWPPP, NOI, and NOT, if required, to appropriate agencies for Work performed outside the Project Right of Way. The Contractor shall be responsible for all associated NPDES CGP requirements for the offsite locations. If the offsite location is on private land, the Contractor shall notify the landowner of NPDES CGP compliance requirements and requirements in accordance with Section 632.3.6, "Revegetation of Areas Outside the Project Limits". The Contractor shall provide a copy of each off-site submittal to the Project Manager.

603.2 MATERIALS**603.2.1 General**

The Contractor shall provide Materials for erosion, sediment control, and storm water pollution prevention measures that consist of siltation fences, Erosion Control Socks, rock, riprap, or other Acceptable measures approved by the Project Manager.

603.2.2 Pipe

The Contractor shall provide pipes in accordance with Section 570, "Pipe Culverts".

603.2.3 Riprap

The Contractor shall provide riprap and rock plating in accordance with Section 602, "Slope and Erosion Protection Structures."

603.2.4 Temporary Soil Stabilant

The Contractor shall provide a Temporary Soil Stabilant in accordance with Section 632, "Revegetation". The Contractor shall ensure that the Temporary Soil Stabilant contains an anti-foaming agent and color additive to assist in its uniform application and that the color disappears from the surface within 36 hours after application of a product on the Approved Products List (APL).

603.2.5 Composted Mulch Socks

The Contractor shall furnish composted mulch Material in accordance with Section 632, "Revegetation". The screened compost mulch and wood chips shall be premixed by a provider on the APL.

603.2.5.1 Containment Mesh

The Contractor shall furnish containment mesh found on the APL that is made of 100 percent (100%) biodegradable plant-based fiber Material such as cotton, jute, sisal, burlap, wood-based yarn, coir or other Acceptable Material as directed by the Roadside Environment Design Manager or representative.

The Contractor shall furnish containment mesh that does not exceed 3/8 inch in diameter and is not greater than nine (9) inches in height after being packed.

CONSTRUCTION REQUIREMENTS**603.2.6 General**

The Contractor shall apply appropriate erosion, sediment, and dewatering control measures for construction activities as per the Accepted Contractor developed SWPPP.

The Contractor shall install temporary erosion and sediment control features and maintain them until final grading, erosion control, and seeding operations are completed.

The Contractor shall incorporate permanent erosion and sediment control measures, such as riprap pads or other forms of energy dissipaters at the outlets of Structures, into the Project at the earliest practical time, as directed by the Project Manager.

603.2.6.1 Non-Conformance

The Department will issue a corrective action/non-conformance when the Contractor fails to comply with the Contractor developed SWPPP; or fails to maintain CGP compliance, including, but not limited to the following:

1. Fails to maintain temporary erosion and control measures in accordance with Section 603.3.6, "SWPPP Inspection and Maintenance";
2. Fails to document inspection and maintenance activities; and
3. Fails to document in the SWPPP Corrective Action Report field changes to Erosion Control measures as directed in writing by the Project Manager.

If the Contractor fails to comply with the CGP or this Section, the Department may issue a corrective action/non-conformance in accordance with Sections 107.13, "Contractor's Responsibility for Damage to Environmental and Cultural Resources" and 107.14.3, "Clean Water Act".

603.2.7 Contractor's Operations

The Contractor shall keep construction activity to a minimum within the Project Right of Way, adjacent to the Project, to prevent damage to vegetation. The Contractor shall repair damage or disturbance to areas not necessary for construction of the Project at no additional cost to the Department, including revegetation and Temporary Soil Stabilant exceeding what was approved in documents submitted in accordance with Section 603.1.1, "Storm Water Pollution Prevention Plan."

The Contractor shall keep construction areas in an orderly condition and promptly dispose of refuse and discarded Materials.

As directed by the Project Manager, the Contractor shall provide erosion and sediment control measures necessary to correct negligent or improper installation, at no additional cost to the Department.

603.2.7.1 Sequence of Operations

Before Work begins, the Project Manager, the Contractor and the storm water team in accordance with Section 603.1.1, "Storm Water Pollution Prevention Plan", will conduct a site review for the implementation of the proposed SWPPP. The Roadside Section manager or representative shall be invited to the site review.

The Contractor shall coordinate the placement and maintenance of BMPs required for CGP compliance before earth-disturbing Work begins.

Watercourse Protection

The Contractor shall provide filtration or settling basins to treat water used to wash aggregate or water used for similar operations.

The Contractor shall locate and construct waste disposal areas and haul roads to prevent sediment from entering streams and water impoundment areas or leaving the Project.

The Contractor shall not operate mechanized Equipment in perennial streams, unless construction in a channel is unavoidable.

The Contractor shall use temporary Bridges or other crossing Structures constructed of non-erodible Material, where frequent stream crossings are necessary.

The Contractor shall clear falsework, piling, debris, and other obstructions placed during construction from streambeds, arroyos, and watercourses when no longer required. The Contractor shall not allow waste from haul truck cleaning to drain into watercourses.

The Contractor shall provide the necessary buffer protection for adjacent surface waters as required by the NPDES CGP.

603.2.8 Temporary Soil Stabilant Application

The Contractor shall apply Temporary Soil Stabilant to disturbed non-road-bed bare ground not being worked. The Contractor shall apply Temporary Soil Stabilant within one (1) Working Day after Work ceases, unless construction will resume within 14 Days after Work ceases. The Contractor shall reapply Temporary Soil Stabilant to areas of continued erosion or areas that remain bare within four (4) weeks after the initial application and at least once every 4 (four) weeks throughout the life of the Project or as directed by the Project Manager. The Contractor shall

maintain stabilization of disturbed areas created by Contractor activity not necessary for the completion of the Work in accordance with Section 603.3.2, "Contractor's Operations" at no additional cost to the Department including parking areas, clearing beyond what is required for the Work, Contractor-travel on non-roadbed areas, and other areas created by the Contractor for their own convenience.

The Contractor shall follow the manufacturer's recommendations for storage and application of the Temporary Soil Stabilant. The Contractor shall maintain the rate of application recommended by the manufacturer. If the Temporary Soil Stabilant does not produce the required results, the Project Manager and the Roadside Section Manager or representative may modify the manufacturer's application rate at no additional cost to the Department.

603.2.9 Composted Mulch Socks

The Contractor shall install the Composted Mulch Socks near the downstream perimeter of the disturbed area as shown on the SWPPP to intercept sediment from sheet flow or as inlet protection as directed by the Project Manager. The Contractor shall maintain close contact between the earth and Composted Mulch Socks by removing remaining vegetation, rocks, debris, and dirt clods. The Contractor shall interlock and overlap Composted Mulch Socks at the ends.

The Contractor shall anchor the Composted Mulch Socks to prevent displacement during rain events and to prevent flow under the Composted Mulch Socks. The Contractor shall use two (2) inch by two (2) inch wooden stakes, APL product, or as approved by the Project Manager. The Contractor shall place wooden stakes at ten (10) foot maximum spacing on all flat areas and four (4) foot maximum spacing on slopes to prevent the Composted Mulch Socks from sagging. The Contractor shall drive stakes in the ground 12 inches with three

(3) inches extending above the Composted Mulch Socks.

To prevent stormwater from circumventing the edge of the perimeter control, the Contractor shall install the perimeter control on the contour of the slope and extend both ends of the control up slope (e.g., at 45 degrees) for a minimum of two (2) feet vertically, forming a crescent rather than a straight line.

603.2.10 Earthwork Operations

The Contractor shall protect slopes as earthwork operations progress.

The Contractor shall maintain and protect the earthwork in Roadway sections through all construction stages to prevent sediment from leaving the construction limits.

The Contractor shall provide temporary slope drain facilities that can collect runoff and carry it to the slope bottoms. The Contractor shall use drain Materials capable of length change as earthwork operations progress.

603.2.11 SWPPP Inspection and Maintenance

The Contractor shall inspect and maintain the Project site for NPDES CGP compliance during the Project. The Contractor shall inspect and maintain installations at the following frequencies:

1. At least once every seven (7) Days;

2. Once every 14 Days and within 24 hours of a 0.25 inch or greater rainfall event; and
3. For arid, semi-arid, or drought-stricken areas, as defined in Appendix A of the NPDES CGP, the frequency of inspections may be reduced to once per month and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. This applies only during the seasonally dry period or a period in which drought is occurring. The Contractor shall document that they are using this reduced schedule and the beginning and ending dates of the seasonally dry period in the SWPPP.

The Contractor's maintenance Work shall include, but is not limited to, repair of damaged installations, removal of trapped sediment, and cleaning of any silt fence. The Contractor shall remove accumulated silt when the control installation becomes 50 percent (50%) filled. The Contractor shall inspect disturbed areas, Material storage areas, discharge locations, and structural control measures. The Contractor shall inspect vehicle entrances and exits for Material being tracked off-site. The Contractor shall document each inspection on the EPA CGP Site Inspection Report. The Contractor shall submit the Site Inspection Report form signed by EPA-certified (or equivalent) personnel to the Project Manager within 24 hours after the inspection. The Contractor shall include copies in the SWPPP. The Site Inspection Report form should be the same form listed on the EPA website.

The Contractor shall install a rain gauge at the Project site to track rainfall amounts for the inspection schedule and install the required SWPPP sign in accordance with the CGP section 1.5.

The Contractor shall designate the person responsible for the SWPPP on the qualification form provided by the Department. The Contractor shall ensure that the person is an EPA-certified SWPPP inspector and document the responsible person's experience and training on the qualification form (per CPG section 9.6.1.c). The Contractor shall include the signed qualification form with the SWPPP. The Contractor shall install missing sediment erosion control measures and/or repair damaged erosion and sediment control installations by the close of the next Working Day following an inspection or following notification by the Project Manager that repairs are required. The Roadside Environment Design Manager or representative may conduct sight inspections for SWPPP compliance and notify the Project Manager in writing when corrective actions are needed.

If a damaged erosion control installation could result in sediment discharge into a live stream, water impoundment, or other body of water, the Contractor shall initiate repairs within 24 hours or sooner, as necessary, or as directed by the Project Manager.

The Contractor shall maintain erosion and sediment control installations specified to remain following completion of the Work until the Project is completed.

603.2.12 Removal of Control Installations

The Contractor shall remove and dispose of temporary erosion and sediment control installations and features from the Project in accordance with Section 603.1.1.3 "Contractor Responsibilities", unless otherwise specified in the Contract or directed by the Project Manager. After removing temporary erosion control installations, the Contractor shall restore ground lines, cover, and features as closely as possible to original condition.

The Contractor may deposit removed sediment at locations within the Right of Way, if approved by the Project Manager. Where removed sediment is deposited in previously undisturbed areas, the Contractor shall reseed those areas at no additional cost to the Department.

603.2.13 Notice of Termination (NOT)

The Contractor shall prepare and submit a NOT to the EPA within 30 Days after Project completion, indicating that the operator of the Project has changed to the Department. The Contractor shall provide a copy of the submittal to the Project Manager.

603.3 METHOD OF MEASUREMENT

The Department will measure Rock Check Dam along the crest of the dam.

603.4 BASIS OF PAYMENT

Pay Item	Pay Unit
SWPPP Plan Preparation and Maintenance	Lump Sum
Temporary Soil Stabilant	Acre
Rock Check Dam	Linear Foot
Composted Mulch Socks	Linear Foot

603.4.1 Work Included in Payment

The following Work and items will be considered as included in the payment for the above item(s) and will not be measured or paid for separately:

1. Cleaning and maintenance of the temporary erosion and sediment control measures;
2. Posts, hardware, and appurtenances of the temporary erosion and sediment control measures;
3. Riprap for pipe slope drains and sediment traps;
4. Excavation and disposal of sediment deposits; Removal and disposal of temporary erosion and sediment control measures;
5. Subsequent applications of Temporary Soil Stabilant due to unsatisfactory results as determined by the Project Manager;
6. Removal and replacement of the BMP at the same location due to construction;
7. Relocation of BMPs during phasing and final placement; and
8. CMS stakes and overlaps.

603.4.2 Partial Payments

The Department will make monthly partial payments for SWPPP Plan Preparation and Maintenance upon receipt and Acceptance of the Contractor SWPPP. Monthly partial payments will be based on the rate of progress of the Project, less previous partial payments for this item. The Department will calculate partial payments in accordance with the following equation:

$$P = [(A \times L)/B] - C$$

Where,

P is the partial payment during the progress of the Project;

A is the total number of Days charged the Contractor toward completion of the Project; L is the Total Bid Amount for SWPPP Plan Preparation and Maintenance;

B is the Contract Time; and

C is the total amount of previous partial payments for this item.

September 22, 2020

**SPECIAL PROVISIONS
MODIFYING
SECTION 618: TRAFFIC CONTROL MANAGEMENT**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete 10. from **Section 618.2.2: Duties.**

April 8, 2022

SPECIAL PROVISIONS MODIFYING SECTION 621: MOBILIZATION

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 621.5.1: Work Included in Payment** in its entirety and replace with the following: The Department will pay the Contractor partial payments using the following procedure:

1. When one percent (1%) or more of the Total Original Contract Amount less Mobilization is earned, up to 25 percent (25%) of the amount Bid for Mobilization or three percent (3%) of the Total Original Contract Amount, whichever is less, will be paid;
2. When five percent (5%) or more of the Total Original Contract Amount less Mobilization is earned, up to 50 percent (50%), less previous amounts paid, of the amount Bid for Mobilization will be paid;
3. When 10 percent (10%) or more of the Total Original Contract Amount less Mobilization is earned, up to 75 percent (75%), less previous amounts paid, of the amount Bid for Mobilization will be paid;
4. When 25 percent (25%) or more of the Total Original Contract Amount less Mobilization is earned, up to 90 percent (90%), less previous amounts paid, of the amount Bid for Mobilization will be paid; and
5. When 50 percent (50%) or more of the Total Original Contract Amount less Mobilization is earned, up to 100 percent (100%), less previous amounts paid, of the amount Bid for Mobilization will be paid.

The total sum of all Mobilization payments shall not exceed the Total Original Contract Amount Bid for the item.

The Department will not make additional payments for demobilization and remobilization due to shutdowns, whole or partial suspensions of the Work or for other Mobilization activities required for satisfactory completion of the Contract.

October 8, 2024

SPECIAL PROVISIONS MODIFYING SECTION 632: REVEGETATION

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 632: REVEGETATION** in its entirety and replace with the following:

632.1 DESCRIPTION

This Work consists of preparing the soil, seeding, mulching, crimping and the application of Temporary Soil Stabilant to areas stripped of vegetation during construction operations and are required to be revegetated. Construction staking and digital submittals are included in the scope of the revegetation Work. The Contractor shall have at least one (1) certified seeding Inspector during seeding operations.

632.2 MATERIALS

The Contractor shall provide seeding submittals to the Project Manager in accordance with Table 632.3:1, "Construction Requirements for Classes of Seeding," for each class of seeding on the Project a minimum of ten (10) Working Days before any revegetation Work commences. The Contractor shall digitally provide for approval a to-scale printable revegetation Plan as part of the seeding submittals before the mandatory pre-Seeding meeting. The Contractor shall provide submittals that conform to the Specifications and the revegetation Plan and shall be on the Approved Products List (APL). After the Roadside Environment Design manager or representative approves submittals in accordance with Section 632.3.2, "Pre-seeding conference," the Contractor may substitute products on APL with prior approval from the Roadside's Section Manager or its representatives.

632.2.1 Materials and Sampling

The Department's certified seeding Inspector will be present when Materials are loaded into Equipment or distributed on the areas to be seeded.

The Contractor shall provide all containers and bags to the Department's certified seeding Inspector for verification upon request. The Contractor shall provide a certified weigh master ticket for all bulk Materials in accordance with Section 109.1, "Measurement of Quantity," with the exception of compost mulch. Split loads of fertilizer, seed, straw, Temporary Soil Stabilant and bonded fiber matrix may be allowed with proper weigh master ticket and a notarized Contractor statement indicating a breakdown of the shipment total as indicated on the weigh master ticket. Split loads shall not be allowed for compost mulch and rock mulch.

The Contractor shall deliver all packaged Materials wrapped or otherwise securely protected from the weather which might affect their integrity. The Department will reject Materials in weather-damaged packaging.

The Contractor shall provide rock mulch Material in accordance with Section 632.2.10, "Rock Mulch for Class C Seeding." Rock mulch Materials do not need to be on the APL. The submittal shall be a full five (5) gallon bucket sample provided to the Project Manager for sieve analysis. The Contractor shall provide two (2) cups of seed in a sealed bag labeled with the Material identification and the CN to the Roadside's Section Manager or its representatives for examination and testing. The Department will reject Materials not in accordance with Section 632, "Revegetation".

The Contractor shall ensure all fertilizers, compost mulch, and biotic soil amendments comply with the most current EPA standards for per- and poly-fluoroalkyl substances (PFAS).

632.2.2 Material Certifications

The Contractor shall provide Certificates of Compliance, in accordance with Section 106.4, "Certificates of Compliance." The Contractor shall notify the Department's certified seeding Inspector when bulk Materials are delivered so loads may be inspected and verified.

632.2.3 Seed

The Contractor shall use the Department's Revegetation Zones and Seed Lists map (Map) to establish a seed list. The Contractor shall use the current seed list. The Contractor shall substitute unavailable seeds adding the quantity of the unavailable seed to the quantity of the next seed species listed within that subcategory of the seed list. If the last seed species is unavailable the Contractor shall replace it with the first available species listed in the subcategory. Before substitutions can be made the Contractor shall provide proof of unavailability in letter form from three (3) seed Suppliers listed on the APL that the seed is not available. The Map can be found at the following link:

<https://nmdot.maps.arcgis.com/apps/Viewer/index.html?appid=57543133e0d34c3688df5dfd37d738fe>

The Contract shall specify varieties of noxious weed-free seed in accordance with New Mexico Seed Law (NMSA 1978, § 76-10-11 et seq.).

The Contractor shall submit a seed list from a seed Supplier showing the common name, botanical name, pure live seed, total poundage, source locality (County and State), and CN in accordance with the Plans to the Project Manager.

The Contractor shall ensure seed Suppliers are on the current APL and provide documentation that their regulating state agency belongs to the Association of Official Seed Certifying Agencies (AOSCA).

The Contractor shall bag pre-mix seed mixtures certifying the mixture quantity and percentage as noted in the seeding submittal.

The Contractor shall store all seed delivered bags in a container protected from rodents and moisture and not subject to temperatures higher than 90°F.

632.2.3.1 Seed Labeling

The seed Supplier shall seal and label each bag in accordance with the Federal Seed Act (7U.S.C. § 1551 et seq.) and New Mexico Department of Agriculture (NMDA) seed labeling requirements (NMSA 1978, § 76-10-13). The Supplier shall ensure each seed tag is affixed to the bag and has the CN clearly identified. The seed Supplier shall maintain records of seed tag CN's for a period of three (3) years. The seed Suppliers shall provide one (1)-acre seed bags in original, sealed bags and the Contractor shall provide all tags and certifications to the Project Manager. The seed Supplier shall provide seed analysis results that are not older than 15 months prior to use.

The seed Supplier shall provide the following information on each bag tag for each species:

1. Variety (specify if certified);
2. Kind of seed;
3. Lot number;
4. Purity;
5. Germination;
6. Percentage crop seed, percentage inert, percentage noxious weeds;
7. Origin;
8. Test date; and
9. Weight (in pounds) of this species or percentage of total lot.

632.2.4 Fertilizer

The Contractor shall provide organic slow-release fertilizer with an N-P-K (nitrogen, phosphorous, potassium) analysis of either 3-6-3 or 3-7-2 and blended with arbuscular endo-mycorrhiza with a minimum propagule of

1.33 propagules per gram and a minimum of 15 percent humates by weight. The Contractor shall apply 1,000 lbs. per acre. Endo-mycorrhiza shall be arbuscular with a minimum propagule of 1.33 propagules per gram. The Contractor shall provide fertilizer (specified type and formulation) and Supplier's certification in accordance with the Contract. Each bag or tote of fertilizer shall have a visible, sealed, and un-altered analysis tag from the manufacturer that shall be approved by the Department's certified seeding Inspector prior to application of the Material. The tag shall include the manufacturer's information, the N-P-K analysis of the product, and the weight of the bag or tote. The Department reserves the right to inspect any bill of lading or packing slips from the Supplier to verify quantity of Material on site.

632.2.5 Composted Mulch

The Contractor shall furnish and place composted mulch as shown on the revegetation Plan. Composted mulch Supplier shall be registered with or permitted by the New Mexico Environment Department Solid Waste Bureau and the composted mulch shall be in compliance with 20 NMAC 9.1, "Environmental Protection Solid Waste Management."

Composted mulch is defined as the product of a controlled aerobic thermophilic biological decomposition process that meets the quality requirements in Table 632.2.5:1, "Requirements of

Compost Mulch." Raw Materials used in producing composted mulch may include green waste, animal manure, animal bedding, paper waste, food waste, biosolids or other non-toxic organic matter, but shall not include animal mortalities.

Table 632.2.5:1
Requirements of Composted Mulch

Material	Measure	Method	Criterion
Composted Mulches	Moisture Content*	Evaporative loss at 105°C	Between 35% and 60% during composting process. Compost mulch shall be shipped with moisture content not to exceed 40%.
	Carbon/Nitrogen Ratio*	Nitrogen by AOAC 993.13, Carbon by ASTM D5373	Between 15:1 and 60:1
	Particle Size	Sieve	40% minimum to 100% maximum of Material may pass $\frac{3}{4}$ inch screen; 100% of pieces smaller than 4 inches in length and 2 inches in diameter
	Electrical Conductivity*	1:5 slurry (mass basis)	<10 mmho/cm
	pH*	1:5 slurry (mass basis)	pH 5.0 - pH 8.0
	Organic Matter*	Loss on ignition at 550°C	25% - 100% of dry weight
	Maturity	Germination test in 50:50 (volume basis) mixture of $\frac{3}{4}$ inch screened composted mulch and twice-rinsed nursery sand.	Minimum 50% germination to second set of leaves for marigold seeds
	Stability	By temperature and moisture content	Maximum core temperature of 110°F after 48 hours in 5-foot-tall conical pile, with moisture adjusted to between 40% and 60%.

Table 632.2.5:1
Requirements of Composted Mulch

Material	Measure	Method	Criterion
Composted Mulches	Debris	By volume	Less than one percent (1%) inorganic debris, including but not limited to, glass, plastic, stones and metal.
Composted Mulches with Wastewater Biosolids	Trace Metals*	HNO ₃ digestion	Complies with Table 3 of 40CFR503.13
	Fecal Coliforms*	MPN with A-1 broth	<1000 MPN/dry gram
*Tests marked with asterisks shall be performed by a suitable analytical Laboratory; other tests may be performed by the composted mulch producer.			

632.2.5.1 Acceptance of Composted Mulch

The Contractor shall ensure composted mulch Suppliers are on the APL.

Before delivering composted mulch, the Supplier shall furnish documentation that includes the following upon request:

1. The raw Materials, by percentage of volume, used in the production of the delivered composted mulch;
2. Daily temperature records for at least 20 percent of the piles or batches used to produce the composted mulch, illustrating attainment of at least 130°F for at least seven (7) consecutive Days;
3. A Laboratory analysis for criteria shown in Table 632.2.5:1, "Requirements of Composted Mulch" performed on composted mulch no more than 180 Days prior to delivery; and
4. A notarized statement signed by a corporate officer, confirming that the composted mulch meets each requirement shown in Table 632.2.5:1, "Requirements of Composted Mulch."

When Class A Seeding is established in the revegetation Plan but composted mulch is unavailable within 300 paved road miles of the Project, in accordance with Table 632.2.5:1, "Requirements of Composted Mulch", the Contractor shall replace Class A Seeding with Class B Seeding. The Contractor shall provide documentation of compost mulch unavailability to the Project Manager.

632.2.6 Hydraulic Biotic Soil Amendment

The Contractor shall supply hydraulic biotic soil amendment (HBSA) in accordance with Table 632.2.6:1, "Hydraulic Biotic Soil Amendment Properties".

Table 632.2.6:1**Hydraulic Biotic Soil Amendment Properties**

Biotic Soil Amendment Property	Test Method	Desired Results
Physical		
Color	Observation	Colored to contrast application area. Shall not stain concrete or painted surfaces.
Organic Matter	ASTM D586	85% minimum
Acute Toxicity	ASTM 7101 & EPA Method 2021.0	Non-toxic
pH	ASTM D1293	5.0-8.5
C:N Ratio	ASTM E1580	10:1 minimum 100:1 maximum
Water Holding Capacity		400% minimum
Moisture Content	ASTM 2974	10% minimum, 50% maximum
Endurance		
Functional Longevity	Observation	Grass established in 6 months
Performance		
Vegetation Establishment	ASTM 7322	400% minimum

632.2.7 Straw Mulch

The Contractor shall not use rotten or moldy straw and shall ensure that straw bales stored on the Project shall not exceed 20 percent moisture content. All straw mulch shall be barley, wheat, or grama straw and is to be free of noxious weeds as certified by an industry-recognized forage certification authority. Certification twine shall appear on all certified straw bales. The color of the certified twine for straw bales shall be listed on the certification submittal for identification purposes. The Department's certified seeding Inspector or Roadside's Section Manager or its representatives may reject bales if the twine appears to be tampered with. The date on the straw certification provided to the Department may not be older than 18 months from the date of purchase. Before Acceptance, the Contractor shall provide weight tickets signed by a certified weigh master in accordance with Section 109.1, "Measurement of Quantity."

632.2.8 Temporary Soil Stabilant

The Contractor shall provide Temporary Soil Stabilants that have a blue or green dye lasting a minimum of 36 hours to aid in application, inspection and be biodegradable. When used as part of Class A seeding operations, the Contractor shall apply Temporary Soil Stabilant at a rate of 200 pounds per acre.

The Contractor shall use Temporary Soil Stabilants that are plant-derived and bio-degradable and shall be composed of either guar, psyllium (*Plantago ovata*), or starch.

Guar. Guar is a plant-based product derived from the ground endosperm of the guar plant, related with dispersant agents for easy mixing.

Psyllium. Psyllium is composed of the finely ground muciloid coating of *Plantago ovata* seeds that is applied as a dry powder or in a wet slurry to the surface of the soil. It dries to form a firm but re-wettable membrane that binds soil particles together but permits germination and growth of seed. Psyllium requires 12 to 18 hours drying time.

Starch. Starch is non-ionic, cold-water soluble (pre-gelatinized) granular cornstarch. The Material is mixed with water. Approximate drying time is nine (9) to 12 hours.

632.2.9 Hydro-Mulch - Bonded Fiber Matrix (BFM)

The Contractor shall use BFM hydro-mulch. BFM is a hydraulically-applied blanket that controls soil erosion and accelerates seed germination. BFM is a three (3)-dimensional composite of wood or paper fibers bonded by polymer Temporary Soil Stabilant that provides high performance erosion prevention on slopes. Dye and Temporary Soil Stabilant shall be included in the BFM formulation. The Contractor shall apply BFM at a rate of at least 2,000 lbs. per acre. The Contractor shall ensure all BFM products have a functional longevity of at least three (3) months on slopes that are 3:1 or steeper, are at least 50 feet, and have a C Factor of not more than 0.1 as tested using ASTM D 6459 and a minimum vegetative establishment of 200 percent (200%) as tested using ASTM D 7322.

632.2.10 Rock Mulch for Class C Seeding

The Contractor shall provide rock mulch that is a minimum of one (1) inch and no greater than 1½ inches in size. Rock shall have a minimum of two (2) Fractured Faces. Pumice rock is not Acceptable.

632.3 CONSTRUCTION REQUIREMENTS**632.3.1 General**

The Contractor shall coordinate with the Project Manager prior to starting seeding operations to ensure that the Contractor's and the Department's certified seeding Inspector will be present during seeding operations. The Contractor shall not perform revegetation Work without the presence of the Department's certified seeding Inspector.

The Contractor shall not apply fertilizer, compost mulch, or HBSA within 50 feet of waterways as directed by the Project Manager and Roadside Environment Design Manager or Representative.

The Contractor shall provide seeding in accordance with Table 632.3:1, "Construction Requirements for Classes of Seeding."

Table 632.3:1**Construction Requirements for Classes of Seeding**

Material	Class A	Class B	Class C	Class D
Description	Slopes up to and including 3:1	Inaccessible, narrow, or rocky areas	Slopes steeper than 3:1 up to and including 2:1, and 55' in length or less. Refer to plans for slopes greater than 55' in length.	Utility Projects under 0.25 acres
Seed Mix	According to seed zone	2x seed zone weight	2x seed zone weight	2x seed zone weight
Fertilizer	1,000 lbs./acre	1,000 lbs./acre	1,000 lbs./acre	1,000 lbs./acre
Composted Mulch	134 cu.yd./acre	NA	NA	NA
Hydraulic Biotic Soil Amendment (HBSA)	NA	3,000 lbs./acre for zones 2, 4, 6; 3,500 lbs./acre for zones 1, 3, 5	NA	NA
Straw	4,000 lbs./acre	NA	NA	NA
Temporary Soil Stabilant	200 lbs./acre	NA	NA	NA
Hydromulch - Bonded Fiber Matirx (BFM)	NA	2,000 lbs./acre	2,000 lbs./acre	NA
Class C Rock Mulch	NA	NA	300 tons/acre	NA

632.3.2 Pre-seeding conference

The Project Manager shall schedule an on-site mandatory pre-seeding conference before revegetation Work begins. The Project Manager, Roadside's Section Manager or its representatives, the Contractor, the Department's certified seeding Inspectors, and the revegetation Subcontractor shall attend.

The Contractor shall provide seeding submittals to the Project Manager and Roadside's Section Manager or its representatives between ten (10) and 20 Working Days prior to the pre-seeding conference. Any revegetation Work done prior to the pre-seeding conference will be rejected.

The Project Manager will have documentation of all pits, Contractor yards, etc. approved by the Roadside's Section Manager or its representatives. The Contractor shall complete construction staking, and quantities approved by the Project Manager prior to the pre-seeding conference. All areas to be revegetated shall be measured and confirmed for each class of seeding in accordance with Section 801, "Construction Staking by the Contractor." This Work shall be Incidental to Bid Item 801000-"Construction Staking by the Contractor." The Contractor shall complete construction staking for revegetation no more than 20 Working Days prior to the start of revegetation activities. The Project Manager shall notify the Roadside's Section Manager or its representatives at least ten (10) Days prior to when construction staking takes place. The Project Manager and Roadside's Section Manager or its representatives will establish the areas for each Class of seeding before any Materials are ordered or delivered. The Contractor shall identify areas that have less than four (4) inches of soil cover prior to the seeding submittal.

There will be no change in Materials or the scope of revegetation Work after the seeding submittal is approved unless agreed upon by the Roadside's Section Manager or its representatives, and the Project Manager.

The Contractor shall ensure that revegetation Work areas are accessible, free of Equipment, and no further construction processes are occurring which would interfere with seeding operations. No Equipment access shall occur on areas which have been revegetated.

The Contractor shall maintain a minimum 15-foot-wide Equipment access to all revegetated areas until revegetation Work is complete.

632.3.3 Weather Limitations

The Contractor shall not perform revegetation Work when the ground is frozen or when temperatures are below 32°F and/or when sustained wind speed exceeds 12 mph as measured by anemometer and as determined by the Project Manager. Sustained wind speed is to be determined by averaging the high and low wind speeds that occur over a two (2)-minute period. The Contractor may perform disking with sustained winds exceeding 12 mph.

632.3.4 Equipment

The Contractor shall inspect the Equipment to confirm it is in good working order prior to commencing Work. The Department's certified seeding inspector shall witness the inspection and calibration.

The Contractor shall pressure-wash all revegetation Equipment (including but not limited to trucks, trailers, tractors, hydro-seeders, drill seeders, straw blasters, and disks) to remove all visible mud, soil, and debris prior to entering the Project limits within the Department's Right of Way (ROW) to avoid the spread of noxious weeds. If Equipment leaves the Project for any reason, the Department's certified seeding Inspector will re-inspect Equipment when it is returned to the Project site.

632.3.4.1 Drill Seeder

The Department's certified seeding Inspector will inspect the drill seeding Equipment so that drill seed drop tubes are not torn or clogged. The Department's certified seeding Inspector will verify that all seed loaded into the Equipment is for the correct application rates. The Department's certified seeding Inspector will verify that the auger in the seed bin is rotating, and that seed is dropping through drop tubes.

The Department's certified seeding Inspector will inspect the drill seeder daily to prevent loss of seed or to prevent over-seeding. Drill seeder shall be capable of calibration. Calibration is not necessary on revegetation areas that are less than one (1) acre. Seeds shall be drilled to a depth of one half ($\frac{1}{2}$) inch to one (1) inch. The Contractor shall perform drill seeder calibration upon request of the Department's certified seeding Inspector in accordance with the manufacturer's recommendations. The Contractor shall calibrate the drill seeder once per Project unless it is replaced on the Project. Drill seeders shall only be modified by the manufacturer's recommendations and documentation of the modifications shall be available.

The Department's certified seeding Inspector will ensure that the Equipment has the following:

1. Double disk openers with 'A' frames;
2. Depth bands;
3. Drop tubes;
4. Packer wheels or drag chains;
5. Rate control attachments;
6. Seed boxers with covers and agitators for trashy seed; and
7. Keyway holding auger to shaft.

632.3.4.2 Hydro-Seeder

The hydro-seeder cannons, hoses and agitators shall be in good working condition.

632.3.4.3 Miscellaneous Equipment Requirements

The Contractor shall provide Equipment that meets the following:

1. Disking attachments with a minimum six (6) foot carriage with front and rear discs;
2. Crimping Equipment with a minimum eight (8) foot wide carriage;
3. Skid steer attachments may only be used on confined areas for seeding operations; and
4. Skid steers shall not be used for spreading compost unless in a confined area.

632.3.5 Class A Seeding

The Contractor shall use Class A Seeding for any Project areas with slopes 3:1 or flatter requiring revegetation that are more than eight (8) feet wide, are accessible to drill seeding Equipment, and can be disked to a four (4) inch depth.

632.3.5.1 Class A Seeding Order of Operations

The Contractor's Class A Seeding order of operations shall be as follows:

1. Disk ground to four (4) inches;
2. Apply fertilizer;
3. Apply compost mulch;
4. Disk ground to four (4) inches;
6. Drill seed;
7. Apply straw;
8. Crimp straw; and
9. Apply Temporary Soil Stabilant and dye. BFM is not to be used as dye.

632.3.5.2 Seedbed Preparation for Class A Seeding

The Contractor shall till the seedbed across the slope and along the contour with a disk, harrow, or chiseling tools to at least four (4) inches deep. The Contractor shall uproot competitive vegetation during seedbed preparation, and provide a surface free of clods, large stones, or other Deleterious Material that would interfere with seeding Equipment. The Department's certified seeding Inspector will approve the area that was disked before compost is added to the soil. Disking may be performed with wind speeds exceeding 12 mph. Composted Mulch Application for Class A Seeding. The Contractor shall ensure the compost mulch has a moisture content between 20 percent and 40 percent while at the Project location. At the time of delivery, the Contractor shall wet down compost mulch so that wind loss is kept to a minimum. Stockpiles shall be less than six (6) ft tall. The Project Manager may require additional wetting of composted mulch at no additional cost to the Department.

The Contractor shall add one (1) inch of composted mulch as specified by disc, harrow, or chisel to a depth of four (4) inches. The Contractor shall not spread composted mulch if sustained wind velocity exceeds 12 mph as determined by the Project Manager but may still perform disking.

The Contractor shall incorporate composted mulch into the seedbed before adding fertilizer and commencing drill seeding.

When Class A Seeding is established in the Contract but composted mulch, is unavailable, the Contractor shall replace Class A Seeding with Class B Seeding.

632.3.5.3 Fertilizer Application for Class A Seeding

The Contractor shall apply the fertilizer uniformly to the prepared seedbed. Fertilizer may be broadcast or hydro-applied. If hydro-applied, the Contractor shall mix fertilizer in the hydro-seeder for a minimum of ten

(10) minutes before applying.

632.3.5.4 Drill Seeding for Class A Seeding

After seed bed preparation and before drill seeding commences, the Contractor shall remove all rocks larger than four (4) inches in diameter from the seed bed and no payment shall be made thereof.

The Contractor shall provide a test strip of Class A Seeding before commencing the seeding operation. Each test strip shall measure no less than one (1) acre in a configuration appropriate for the Equipment and the site, shall be at a location of the Contractor's choosing within the Project, with the Department's certified seeding Inspector and Roadside's Section Manager or its representatives in attendance. A test strip is not required for Projects less than one (1) acre but all seed shall be applied evenly on revegetation area. Equipment calibration will be conducted upon request of the Department's certified seeding Inspector, Roadside's Section Manager or its representatives, on revegetation areas greater than one (1) acre. The test strip is to verify Equipment functionality, proper adjustment, application rate, and the Contractor's ability to perform the Work.

Upon Acceptance of the test strip, the Contractor may proceed with seeding operations. If the test strip is not Accepted, the Contractor shall establish a new one (1) acre strip location. The Contractor shall not proceed to full seeding operation until an Acceptable test strip has been produced. Payment will only be made for Accepted test strips, which is included as part of the revegetation area established in the revegetation Plan.

The Contractor shall coordinate with the Project Manager prior to starting seeding operations to ensure that the Department's certified seeding Inspector is present at all times. No revegetation Work shall be performed without the presence of the Department's certified seeding Inspector. The Contractor shall uniformly plant seed 1/2 inch deep. The Contractor shall ensure that the distance between the drilled furrows is no more than eight (8) inches. If the furrow openers on the drill exceed eight

(8) inches, the Contractor shall re- drill the area at no additional cost to the Department.

Once drill seeding is completed on all areas with bare ground, the Contractor shall complete all remaining Class A operations within 24 hours.

If rainfall or some other factor prevents the Contractor from seeding to the specified depth on prepared surfaces, the Contractor shall prepare the seedbed and apply seed again, at no additional cost to the Department.

The Contractor shall not drive vehicles or other Equipment on seeded areas. The Contractor is responsible for protecting revegetation Work until Acceptance.

If erosion or crusting of seed bed occurs and seed or fertilizer is lost to erosion prior to completion of seeding operations, Project Manager or Roadside's Section Manager or its representatives may instruct the Contractor to perform seedbed preparation at eroded locations again at no additional cost to the Department.

632.3.5.5 Straw Mulching for Class A Seeding

When the revegetation Work is being done the Contractor shall test straw bale moisture content with a straw bale moisture meter with an eight (8) inch minimum length probe for the duration of the Project. The Department's certified seeding Inspector shall be present and record this test. The Contractor shall test each bale to confirm that the bale interior moisture content is not greater than 20 percent. Any bales with moisture above this level will be rejected and removed from the Project. Higher levels of moisture may indicate the presence of mold and the risk of spontaneous combustion.

The Contractor shall anchor straw mulch using a crimper with flat serrated discs at least one (1) inch thick with dull edges, spaced no more than nine (9) inches apart. The Contractor shall ensure that the disk diameter is large enough to prevent the frame of the Equipment from dragging in mulch.

The Contractor shall ensure that the rate of application of straw mulch is at least two (2) tons of air-dry straw per acre. The Department's certified seeding Inspector will verify the total tons per acre of straw required per acre.

The Contractor shall ensure that straw mulch has at least 50 percent of fibers exceeding ten (10) inches long on the ground after application.

The Contractor shall spread straw mulch following drill seeding with a mechanical spreader or by hand. If spreading by hand, the Contractor shall break apart the bales of mulch and fluff it before spreading.

The Contractor shall ensure that straw mulch crimping is at least two (2) inches deep and not covered with excessive amounts of soil. The Contractor shall perform straw mulch anchoring across the slope where practical, with no more than two (2) passes of the anchoring Equipment. The Contractor shall apply the straw mulch evenly over the entire bedding area with no bare areas showing or areas with straw mulch deeper than four (4) inches in depth before crimping.

632.3.5.6 Application of Dye and Temporary Soil Stabilant for Class A Seeding.

The Contractor shall anchor straw following crimping with an approved Temporary Soil Stabilant with green dye at a rate of 200 lbs. per acre.

632.3.6 Class B Seeding

The Contractor shall use Class B Seeding, for any Project areas that are either less than eight (8) feet wide, and/or are inaccessible to drill seeding Equipment or Class C rock mulch application Equipment, and/or cannot be disked to a four (4) inch depth.

632.3.6.1 Order of Operations for Class B Seeding

The Contractor's Class B Seeding order of operations shall be as follows:

1. Hydro-apply fertilizer;
2. Disk ground to four (4) inches when practicable;
3. Add water, HBSA and seed to hydroseeder and agitate for ten (10) minutes to create slurry;
4. Apply slurry in two (2) coats from opposing directions within one hour after slurry is created; and
5. Apply BFM with Temporary Soil Stabilant and dye in two coats from opposing directions.

632.3.6.2 Seed Bed Preparation for Class B Seeding

Unless soil is determined by the Project Manager and Roadside Section Manager or its representatives to be too rocky, the Contractor shall till the seedbed across the slope and along the contour with a disk, harrow or chiseling tools to at least four (4) inches deep. The Contractor shall uproot competitive vegetation during seedbed preparation, and uniformly prepare the soil to a surface free of clods, large stones, or other Deleterious Material that would interfere with seeding Equipment. The Contractor shall ensure the Department's certified seeding Inspector approves areas that were disked. The Contractor may perform disking with winds exceeding 12 mph.

632.3.6.3 Application of HBSA, Fertilizer, Humates, Mycorrhizae and Seed

The Contractor shall add water and HBSA to the hydro-seeder at a consistent rate. The ratio of water to HBSA shall be in accordance with the manufacturer's recommendations. The Contractor shall then add fertilizer, humates and mycorrhizae. The Contractor shall add the seed last and then agitate or mix to a uniform slurry for a minimum of ten (10) minutes after all water and Materials are in the tank.

The Contractor shall apply HBSA and seed to the soil surface in two (2) coats in opposing directions. Seed shall be applied at twice the normal rate. The Contractor shall apply HBSA in accordance with Table 632.3:1, "Construction Requirements for Classes of Seeding."

Once slurry is hydro-applied, the Contractor shall apply BFM within 24 hours.

632.3.6.4 Application of Bonded Fiber Matrix for Class B Seeding

The Contractor shall apply approved bonded fiber mulch with Temporary Soil Stabilant and dye in two (2) coats from opposing directions at a rate of 2,000 lbs. per acre. If traffic control issues prevent vehicle travel in both directions during the application process, the Contractor may use a sweeping motion to apply the coats.

632.3.7 Class C Seeding

The Contractor shall apply Class C Seeding in areas steeper than 3:1 up to and including 2:1 slopes. Order of Operations for Class C Seeding

The Contractor's Class C Seeding order of operations shall be as follows:

1. Install composted mulch socks at top of slopes;
2. Track slopes;
3. Apply seed and fertilizer mix in two (2) coats from opposing directions;
4. Apply BFM; and
5. Apply rock mulch to seeded area without damaging the BFM.

632.3.7.2 Composted Mulch Socks for Class C Seeding

The Contractor shall place Composted Mulch Socks at the top of the slope on contour in areas to be revegetated where water flow or sheet flow moves from undisturbed soil or Roadway pavement onto disturbed soil or bare ground.

632.3.7.3 Tracking and Scarification for Class C Seeding

The Contractor shall track-walk areas designated as Class C Seeding treatment with tracks parallel to the toe of slope to compact and score the slopes within seven (7) Working Days prior to the commencement of Class C Seeding operations. The Contractor shall hand rake or chain harrow areas with Class C Seeding that cannot be tracked to incorporate seed into the soil.

The Contractor shall re-track slopes which have eroded or otherwise degraded in the seven (7) Working Day period before seeding as determined by Roadside's Section Manager or its representatives at no additional cost to the Department.

The Contractor shall uproot competitive vegetation before hydro-seeding so that seed has good adherence to the surface and soil cover at no additional cost to the Department.

632.3.7.4 Hydro-Seeding for Class C Seeding

The Contractor shall apply Class C Seeding in a slurry with fertilizer and dye. All Materials loaded into the Equipment will be verified by the Department's certified seeding Inspector to confirm correct application rates. The Contractor shall apply Class C Seeding at twice the Class A Seeding rate. The Contractor shall mix all Materials for a minimum of ten (10) minutes before application. The Contractor shall apply slurry in two (2) coats from opposing directions. Once seed is installed on a Class C Seeding area, the Contractor shall complete all Class C Seeding operations for that area within 24 hours.

632.3.7.5 Hydro-Mulching for Class C Seeding

The Contractor shall apply BFM in two (2) sweeps from opposing directions to ensure coverage is complete. The BFM shall contain a Temporary Soil Stabilant when applied. The slurry shall include a dye capable of lasting 36 hours so that the Department's certified seeding Inspector can confirm coverage. The Contractor shall apply BFM and rock mulch to seeded areas within 24 hours after application to protect seed. The Department's certified seeding Inspector shall verify that all Materials loaded into the Equipment are for the correct application rates. The Contractor shall mix all Materials for a minimum of ten (10) minutes before application.

632.3.7.6 Rock Mulch for Class C Seeding

The Contractor shall cover the entire Class C Seeding area with rock mulch surface that is smooth and of uniform thickness while maintaining the original flow lines, slope gradients, and contours of the Work. The Contractor shall apply rock mulch so as not to damage the hydro-mulch when being placed. The Department does not specify methods and means of rock mulch installation and they may vary as per access. The Contractor shall replace damaged hydro-mulch at no additional cost to the Department.

632.3.8 Class D Seeding

The Contractor shall apply Class D Seeding in accordance with Table 632.3:1, "Construction Requirements for Classes of Seeding."

632.3.8.1 Order of Operations for Class D Seeding

The Contractor's Class D Seeding order of operations shall be as follows:

1. Grade disturbed surfaces to match adjacent grades;
2. Apply seed and fertilizer to disturbed areas; and
3. Work seed and fertilizer into the top 1/2 inch of soil.

632.3.8.2 Grading Disturbed Areas for Class D Seeding

The Contractor shall regrade soils to match existing grades on adjacent slopes after trenches are backfilled and compacted, or other earth-disturbing activity is complete.

632.3.8.3 Applying Seed and Fertilizer for Class D Areas

The Contractor shall apply seed mix for the region evenly at twice the normal rate of Class A Seeding along with fertilizer.

632.3.8.4 Integrating Seed and Fertilizer for Class D Areas

The Contractor shall work seed and fertilizer into the top 1/2 inch of disturbed area so that no seed is exposed when complete.

632.3.9 Revegetation of Exposed Soil within the Project Limits

The Contractor shall vegetate areas of exposed soil within the Project Limits (as defined by the 2022 Construction General Permit, 2.2.14.c.i., Final Stabilization Criteria) that existed before construction commenced in accordance with Section 107.14.2 "Parking and Cleaning of Equipment". The Contractor shall include these areas in the revegetation Plan at no additional cost to the Department.

632.3.10 Revegetation of Areas Outside the Project Limits

The Contractor shall revegetate all areas of bare ground on off-site locations in accordance with Section 104.7, "Final Cleanup," and shall use the appropriate class of seeding for the terrain. The Contractor shall follow these Specifications for all public and private lands requiring revegetation unless other seed lists and procedures are required in a resource agency permit. The Contractor shall perform all revegetation Work done for Contractor located activities at the Contractor's expense.

In accordance with the 2022 Construction General Permit Part 1.1.1 and Part 1.1.2, a private landowner outside of the Project Limits is considered an operator in accordance with the Construction General Permit and will need to file a Notice of Intent (NOI). As part of the submittal, the Contractor shall also provide a notarized letter of intent from landowners to the Department for off-site locations in accordance with Section 104.7, "Final Cleanup." The letter of intent shall acknowledge that the private landowner is an Operator, and the landowner is obligated to have revegetation performed in accordance with Department Specifications. If the landowner waives the revegetation obligation contrary to the Environmental Protection Act, 2022 Construction General Permit regulations Part 2.2.14, the landowner shall acknowledge that neither the Contractor nor the Department are responsible for any claims related to the owner's decision to forgo revegetation including but not limited to fugitive dust, noxious weeds, siltation of waterways,

or Non-Conformance with the Construction General Permit. The Contractor shall provide a right of access permit for inspection of the revegetation Work when revegetation Work is being performed on private land and shall be considered Incidental to the Work.

632.4 METHOD OF MEASUREMENT

The Contractor's revegetation Plan shall identify each area by station, numerical order, Project left, Project right, and is to indicate the class of seeding. Quantities shall match those produced by construction staking and shall include all off-site areas with bare ground.

The Contractor shall submit an accompanying table to the Plan showing the amount of each Material apportioned for each area on the Project and the acreage of that sub-area. The Contractor shall include all off-Project areas requiring revegetation as enumerated in Section 632.5, "Basis of Payment."

632.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Class A Seeding	Acre
Class B Seeding	Acre
Class C Seeding	Acre
Class D Seeding	Acre

632.5.1 Work Included in Payment

The following Work items will be considered as included in payment for the main items and will not be measured or paid for separately:

1. Revegetation plan;
2. Moisture probe for straw bales;
3. Moisture probe for compost mulch; and
4. Scale for drill seeder calibration.

February 29, 2024

SPECIAL PROVISIONS MODIFYING SECTION 664: LANDSCAPE PLANTING

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 664: LANDSCAPE PLANTING** in its entirety and replace with the following:

664.1 DESCRIPTION

This Work consists of providing trees, shrubs, and other Materials necessary to complete the landscape. This Work includes labor, Equipment, and the performance of operations including planting, fertilizing, watering, cleanup of planting areas, and replacement of unsatisfactory, damaged, and unacceptable planting Materials.

664.2 MATERIALS

664.2.1 Plant Materials

The Contractor shall provide healthy, vigorous plants of the type (species and variety), size. The Contractor shall provide plants with normal, well-developed branch and root systems. The Contractor shall ensure plants are free of the following:

1. Damage from machines;
2. Sun or frost damage;
3. Insects and insect eggs; and
4. Disfiguring knots or other objectionable defects.

The Contractor shall provide plants that equal or exceed the minimum specified measurements. The Contractor shall select plant Materials for shape and branching habit that will produce the strong, full foliage of a typical, mature specimen.

664.2.2 Inspection of Plant Materials

The Contractor shall provide plant Materials in accordance with State and federal laws, including the New Mexico Plant Protection Act (NMSA 1978, § 76-5-11 et seq.), for disease infestation inspection.

The Contractor shall ensure inspection certificates required by law accompany each shipment, invoice, or order of stock. On delivery, the Contractor shall provide the certificate to the Project Manager. The Contractor shall provide for Department inspection at the place of origin or in a local nursery, and upon delivery to the planting location at the Project.

664.2.2.1 Notification and Inspection

The Contractor shall submit an itemized list of the plants to the Project Manager, along with a time and location for the inspection, at least seven (7) Days in advance. The Roadside Design section manager or representative and the Project Manager will make plant inspections jointly. The Project Manager will tag the Accepted plants before plants are removed from the nursery for delivery to the Project.

The Project Manager and the Roadside Design section manager or representative will inspect for size, vigor, representation of the species and variety, damage, condition of ball and roots, and latent defects.

664.2.3 Container Plants

The Contractor shall provide plants specified on the plant list as “container grown” at a reasonable stage of development for the specified container size. The Contractor shall provide plants that are grown in their containers long enough to develop good, round, root systems capable of holding the soil intact after removal from the container, but not enough to become root bound.

664.2.4 Pole and Whip Plantings

The Contractor shall provide poles and whips that are members of the salicaceae family unless otherwise specified by the Roadside Design section manager or representative. The diameter of cottonwood poles shall not exceed three (3) inches. The Contractor shall not prune the leading stem (also known as the terminal bud). The Contractor shall tie the poles and whips in secure bundles that weigh between 50 and 60 lbs.

664.2.5 Substitutions

The Department will permit substitutions of equivalent varieties of plant Materials or other Materials only after the Contractor makes every reasonable effort to secure Materials of the species, varieties, and kinds listed on the Bid Forms or in the Contract. The Contractor shall submit requests for substitutions in writing to the Project Manager for approval by the Roadside Design section manager or representative. The Contractor shall obtain written approval from the Project Manager before substituting the Materials.

664.2.6 Delivery of Shipments to Site

The Contractor shall protect plant Materials before shipment to prevent damage (over- drying or wind). The Contractor shall ensure the safe digging, wrapping, binding, loading, shipment, and handling of heavy balled plants.

The Contractor shall notify the Project Manager of the time and manner of delivery at least seven (7) Days in advance. The Contractor shall provide two (2) copies of an itemized list of the quantities of plant Materials in each delivery with the notice.

The Project Manager will inspect the plants upon delivery. The Department will reject cracked or mushroomed balls and damaged plants that are unacceptable for planting. The Contractor shall immediately remove rejected plants from the Project.

664.2.7 Tagging and Labeling of Plant Materials

The Contractor shall securely tag plants with legible, durable labels using weather-resistant ink and identifying the following for each plant:

1. Origin;
2. Species;
3. Variety;
4. Name; and
5. Size.

The Contractor shall keep tags on through final inspection.

664.2.8 Fertilizer

The Contractor shall supply fertilizer in accordance with the Contract.

664.2.9 Water

The Contractor shall use clean water that is free from pollutants harmful to plant growth or that could contaminate the environment.

664.3 CONSTRUCTION REQUIREMENTS

664.3.1 Planting

The Contractor shall use the planting backfill mixture and provide watering basins in accordance with the contract. The Contractor shall not plant deeper than the original ground line.

664.3.2 Care and Replacement

During any period of suspension of Work, the Contractor shall properly and continuously maintain in a growing condition all plant Material in newly installed plantings furnished under the Contract. The Contractor shall water the plants upon installation and at appropriate intervals as specified by the contract until Acceptance by Roadside Design section manager or representative, or until any required irrigation system is in place and operational.

The Contractor shall take adequate precautions to protect new plant growth against any injury.

664.3.3 Harvesting and Care of Cottonwoods or Gooding's Willow Poles (poles) and Willow Whips

The Contractor shall harvest and plant all cuttings between October 1st and April 15th in revegetation zones one (1), two (2) and four (4), and between Oct 15th and April 1st in zones three (3), five (5) and six (6). The Contractor shall harvest poles and whips to lengths necessary to be placed in the groundwater at the planting site. The Contractor shall harvest plants within 120 miles of the Project site. The Contractor shall prune poles so that fewer than ten (10) branches are attached to the main stem and shall not prune the leading stem (also known as the terminal bud). The Contractor shall place poles and whips within 12 hours of

harvesting in soaking tubs for a minimum of seven (7) days prior to planting.

664.3.4 Planting of Pole and Willow Whips

Following the required soaking period, the Contractor shall transport the poles and whips to the Project. The Contractor shall dig, trench, or auger the soil (or access the water table by other means) to at least one foot (1') beyond the depth of ground water. The Contractor shall place the plantings at least ten feet (10') apart ensuring that the bottom of the poles and whips are submerged at least six inches (6")-eight inches (8") below the water table. The Contractor shall trim the willow whips and poles to ensure that 50-80 percent of the cuttings are below ground. The Contractor shall ensure that each pole is planted at least 20 feet from another pole. The Contractor shall plant a bundle of willow whips with a ten foot (10') radius of poles. A bundle of willow whips may be planted in the same hole as poles or may be planted in a separate hole within a ten foot (10') radius of the poles. After planting, the Contractor shall backfill and compact the soil around the cuttings to ensure good soil to stem contact. Final Inspection and Acceptance

After the completion of the landscape planting Work, the Project Manager and Roadside Design section manager or representative will make final inspection and Acceptance.

664.4 METHOD OF MEASUREMENT

Payment shall be made on a Lump Sum basis in accordance with the itemized list of unit prices submitted for Bid Item 664000-Landscape, Complete.

664.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Landscape, Complete	Lump Sum

664.5.1 Work Included in Payment

The following Work items will be considered as included in payment for the main items and will not be measured or paid for separately:

1. Furnishing, transporting, and planting of plants; and
2. Excavation, furnishing prepared backfill mixture, wrapping, staking, watering, care, weeding and maintenance of plants.

February 8, 2024

**SPECIAL PROVISIONS
MODIFYING
SECTION 701: TRAFFIC SIGNS AND SIGN STRUCTURES**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete the first paragraph of **Section 701.2.4.6: Inspection** and replace with the following:

Prior to fabrication, the Contractor shall provide the Project Manager all signing information, including text, for review and approval. The Department will inspect Material and finished signs before and after installation at the Project site.

Delete **Section 701.3.5 Removing and Resetting Traffic Signs** and replace with the following:

701.3.5 Removing and Resetting Panel Signs

The Contractor shall remove existing panel signs, posts, and associated appurtenances from specified locations and reset on new posts with new hardware as shown in the Contract.

Before removing existing panel signs, the Contractor shall submit a sign removal and resetting schedule to the Project Manager for approval.

Add the following to **Section 701.3.5 Removing and Resetting Panel Signs**:

701.3.5.2 Removing and Resetting Overhead Sign Structures

The Contractor shall remove existing overhead sign structures, I-beam posts and footings. The Contractor shall stockpile removed overhead sign structures and I-beam posts at locations specified in the Contract. The Contractor shall reset removed overhead sign structures on new I-beam posts with new hardware and drilled shaft foundations. The Contractor shall design new hardware for existing conditions in accordance with the manufacturer's recommendations and as specified in the Contract. The Contractor shall dispose of footing Material in an environmentally Acceptable manner.

The Contractor shall backfill holes left by the removal of overhead sign structure foundations and compact in accordance with Section 203, "Excavation, Borrow and Embankment".

Polyurethane Material shall be injected into the soils beneath the roadway structure through drilled holes at locations and depths as directed by the Project Manager.

Add the following Pay Item to **Section 701.5 Basis of Payment**:

Pay Item	Pay Unit
Remove and Reset Overhead Sign Structure	Each

Delete the following Pay Item to **Section 701.5 Basis of Payment:**

Pay Item	Pay Unit
Remove and Reset Traffic	Each

Add the following to **Section 701.5.1 Work Included in Payment:**

8. Polyurethane Material as displayed by the certified flow meters and dynamic cone penetration (DCP) testing.

May 14, 2024

SPECIAL PROVISIONS MODIFYING SECTION 702: CONSTRUCTION TRAFFIC CONTROL DEVICES

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 702.2: MATERIALS:**

702.2.1.3 Multi-Directional Slip Base Posts for Construction Signing

The Contractor shall provide multi-directional slip base post Material in accordance with Section 701.2.6: "Sign Structures and Hardware."

Delete the first paragraph of **Section 702.2.1.2: Portable Sign Supports** in its entirety and replace with the following:

The Contractor shall provide portable sign supports in accordance with the MUTCD, current edition.

Delete the first and second paragraphs of **Section 702.2.2: Barricades and Channelization Devices** in their entirety.

Delete the third paragraph of **Section 702.2.2: Barricades and Channelization Devices** in its entirety and replace with the following:

Unless stated otherwise, the Contractor shall submit to the Project Manager, certification from the manufacturer stating that the traffic control devices proposed for use are in accordance with NCHRP Report 350 and/or MASH.

702.2.6 Temporary Portable Rumble Strips

Temporary Portable Rumble Strips (TPRS) shall be composed of three (3) segments that when interlocked provide an 11-foot width. The Contractor shall provide TPRS that meet the following:

1. The entire TPRS shall be black, white, or orange in color, but shall not be used in combination within an array. An array consists of three (3) TPRS;
2. Constructed from a polymer or other similar, durable Material;
3. Requires no adhesives or anchors for installation;
4. Each TPRS shall weigh at least 100 lbs;
5. The height of each TPRS will be no greater than $\frac{3}{4}$ inch;
6. The TPRS shall be a minimum of ten (10) inches wide;
7. No assembly shall be required prior to or during deployment;
8. Performance will be rated to withstand surface temperatures of 0 – 180°F and shall maintain integrity while being deployed, used and removed;

9. Integrated, ergonomic handles on both ends of the TPRS;
10. Grooved designs on the bottom to prevent hydroplaning;
11. Raised designs on the top, with leading and trailing beveled edges to facilitate the safe traversing of motorcycles;
12. Durable orientation indicators to prevent improper deployment;
13. Flexible along the length of the TPRS to conform to the road surface;
14. Hinged at the midpoint of the TPRS for ease of installation;
15. Withstand vehicles with a maximum weight of 80,000 pounds and retain original placement with minimal movement such that performance is not compromised;
16. Function on roads with posted speed limits up to 80 mph; and resist movement such that performance is not compromised; and
17. Manufacturer's warranty of at least three (3) years.

Add the following to **Section 702.3.1: General**

702.3.1.3 Temporary Portable Rumble Strips

The Contractor shall install TPRS in accordance with the manufacturer's recommendations.

The Contractor shall clean the roadway to ensure that there is no dust, sand or any other materials that may cause slippage prior to placement of the TPRS.

The Contractor shall install the TPRS arranged in an array, as indicated on the Plans or as directed by the Project Manager. The TPRS array shall consist of three (3) TPRS placed perpendicular to the centerline and parallel to one another. The spacing of TPRS in each array shall be in accordance with Table 702.3.1.3:1, "TPRS Array Spacing". The Contractor shall regularly monitor and maintain TPRS to ensure proper placement under traffic.

**Table 702.3.1.3:1
TPRS Array Spacing**

Posted Speed	Spacing
Up to 40 mph	10 feet
41-55 mph	15 feet
56-64 mph	20 feet
65+ mph	35 feet+

The Contractor shall install the TPRS array using the manufacturer designed TPRS Deployment and Transport Device (DTD) or TPRS Rapid Deployment and Transport Device (RDTD).

702.3.1.3.1 Deployment Transport Device and Rapid Deployment and Transport Device

The Contractor shall use a TPRS DTD that meets the following requirements:

1. Carry and support at least six (6) folded TPRS or 600 lbs;
2. Weigh no more than 150 lbs. when empty;

3. Designed with roller bearings to facilitate ease of deployment and retrieval;
4. Designed with capability of being attached/detached from the vehicle using a forklift; and
5. Designed with collapsible guide markers for visual conspicuity.

The Contractor shall use a TPRS RDTD that meets the following requirements:

1. Allow deployment, realignment, and retrieval of strips without workers leaving the vehicle. The TPRS DTD and RDTD shall be designed to transport TPRS in alignment with deployment orientation and to facilitate deployment of TPRS directly onto the road surface.

The Contractor shall install the TPRS using methods that maximize the efficiency of installation, relocation, or removal without impacting the safety of the traveling public or the workers.

The Contractor shall install the TPRS at the beginning of operations in accordance with the following guidelines:

1. The TPRS shall be installed perpendicular to the longitudinal pavement markings;
2. The TPRS shall be positioned across the entire travel lane but not intrude into the opposing travel lane. It may be necessary to extend the TPRS onto the shoulder;
3. TPRS shall be installed in accordance with the permanent orientation indicators on the TPRS, to ensure proper deployment;
4. Unless otherwise indicated on the plans, TPRS shall remain for Work duration; and
5. Removal of TPRS shall coincide with the removal of the Rumble Strips advanced warning sign(s) using the TPRS DTD or RDTD.

The Contractor shall install TPRS as follows:

1. On intermediate and long-term stationary operations when crews are present; and
2. In advance of horizontal curves.

The Contractor may use TPRS in accordance with the following conditions:

1. Short-term stationary, intermediate-term stationary, and long-term stationary Work consisting of the following:
 - 1.1 Lane closures, lane shifts, shoulder Work;
 - 1.2 Shoulder Work with minor encroachments, flagging operations, or one-lane two-way applications;
2. Work duration occupies a location for one (1) or more hours; and
3. Posted speed limit is 25 mph or greater.

Temporary Portable Rumble Strips will be measured by each 11-foot

width. Add the following to **Section 702.5: BASIS OF PAYMENT**

Pay Item	Pay Unit
Multi-Directional Slip Base Posts for Construction Signing	Each
Temporary Portable Rumble Strips	Each

August 7, 2020

SPECIAL PROVISIONS MODIFYING SECTION 704: PAVEMENT MARKINGS

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete the first paragraph of **Section 704.3.5: Rates and Tolerances for Painted Markings** and replace with the following:

The Contractor shall apply paint at a rate of 22 to 25 wet mills, (25.15 gal per mile of paint for a solid four (4) inch line and 6.31 gal per mile for a broken four (4) inch line) for permanent markings. The Contractor shall apply other permanent striping widths at appropriate multiples of these gal per mile rates, achieving 22 to 25 wet mills for solid and broken stripes.

Add the following to **Section 704.3.6: Dimension Tolerances**:

The Contractor shall contrast striping and symbols on concrete pavement with a black outline a minimum of two (2) inches in all directions.

Delete the second paragraph of **Section 704.4: Method of Measurement** and replace with the following:

The Department will measure permanent and temporary Retroreflectorized Painted Markings for four (4) inch, six (6) inch, eight (8) inch, 12 inch, and 24 inch widths using inch width to calculate a total length. Legends, symbols and specialty markings will be paid by each.

Delete the Pay Items from **Section 704.5: Basis of Payment** and replace with the following:

Pay Item	Unit
Retroreflectorized Painted Markings ___inch	Foot
Temporary Retroreflectorized Painted Markings ___inch	Foot
Retroreflectorized Painted Arrow, Type___	Each
Retroreflectorized Painted Word (___)	Each
Retroreflectorized Painted Symbol, Type___	Each
Retroreflectorized Painted Railroad Crossing	Each

December 23, 2019

SPECIAL PROVISIONS MODIFYING SECTION 704-A: TEMPORARY MARKING TAPE

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 704-A.4 Method of Measurement** and replace with the following:

The Department will measure temporary Removable and Non-Removable Marking Tape by four (4) inch, six

(6) inch, eight (8) inch, 12 inch, and 24 inch widths using inch widths to calculate a total length. Temporary words or symbols will be paid by each.

Delete **Section 704-A.5: Basis of Payment** in its entirety and replace with the following:

Pay Item	Unit
Removable Marking Tape _____ inch	Linear Foot
Temporary Word or Symbol	Each

Section 704-A.5.1 Work Included in Payment

The following Work and items will be considered as included in the payment for the main items and will not be measured or paid for separately:

1. Repair or replacement of damaged striping due to Contractor's negligence or operations;
2. Furnishing, mixing, and applying adhesive or primers;
3. Standard surface preparation;
4. Mobile traffic control operations for traffic marking operations;
5. Removal of Removable Marking Tape and/or Temporary Word(s) or Symbol (s);
6. Repair or replacement of damaged Removable Marking Tape and Temporary Word(s) or Symbols(s).

December 23, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 704-B: RETROREFLECTIVE PREFORMED PLASTIC MARKINGS
(TAPE)**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 704-B.3.1: Placing Retroreflective Preformed Plastic Markings (Tape)**:

The Contractor shall contrast striping and symbols on concrete pavement with a black outline a minimum of two (2) inches in all directions.

December 23, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 704-C: HOT THERMOPLASTIC MARKINGS**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 704-C.3: Construction Requirements**:

The Contractor shall contrast striping and symbols on concrete pavement with a black outline a minimum of two (2) inches in all directions.

December 23, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 704-D: PREFORMED THERMOPLASTIC PAVEMENT
MARKINGS**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Add the following to **Section 704-D.3.1: Application:**

The Contractor shall contrast striping and symbols on concrete pavement with a black outline a minimum of two (2) inches in all directions.

March 7, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 706: SIGNAL AND LIGHTING SERVICE SYSTEMS**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

The following is added to the paragraph below the Pay Items from **Section 706.5: Basis of Payment**:

For the purpose of bidding, the Department will enter into the Bid Schedule a fixed amount for Power Service Installation.

May 1, 2019

SPECIAL PROVISIONS MODIFYING SECTION 716: LUMINAIRES

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete the second and fourth paragraph of **Section 716.2.1.5.3: Photometric Requirements** and replace with the following, respectively:

The Contractor shall provide a nominal corrected color temperature (CCT) range of 2,700K to 4,500K in accordance with NEMA C78.377. The color rendering index (CRI) shall be 70 or greater.

The Contractor shall provide Luminaire with a minimum efficacy of 100 lumens per watt. The Luminaire shall provide a rated life of 70,000 hours when operated at 77°F (25°C) for 12 hours per Day. The Luminaire shall deliver a minimum of 70% of initial delivered lumens after 70,000 hours of operation. The Contractor shall provide a TM-21 calculation and lumen depreciation factor calculated at 25°C at 70,000 hours upon request.

Delete the fourth to the last paragraph and the third to the last paragraph of **Section 716.2.3: LED High Mast Luminaire** and replace with the following, respectively:

The Contractor shall provide High Mast Luminaire with a minimum efficacy of 100 lumens per watt.

The Contractor shall provide a nominal corrected color temperature (CCT) range of 2,700K to 4,500K in accordance with NEMA C78.377. The color rendering index (CRI) shall be 70 or greater.

Delete the fourth to the paragraph and the third to the last paragraph of **Section 716.2.4: Area Luminaire and Ornamental Luminaires** and replace with the following, respectively:

The Contractor shall provide Area and Ornamental Luminaire with a minimum efficacy of 100 lumens per watt.

The Contractor shall provide a nominal corrected color temperature (CCT) range of 2,700K to 4,500K in accordance with NEMA C78.377. The color rendering index (CRI) shall be 70 or greater.

Delete the second to the last paragraph of **Requirements Section 716.2.5: Underpass Luminaire** and replace with the following:

The Contractor shall provide a nominal corrected color temperature (CCT) range of 2,700K to 4,500K in accordance with NEMA C78.377. The color rendering index (CRI) shall be 70 or greater.

February 11, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 902: QUALITY CONTROL**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 902.10: Basis of Payment** in its entirety.

January 1, 2019

**SPECIAL PROVISIONS
MODIFYING
SECTION 904: QUALITY LEVEL ANALYSIS (QLA)**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

904.1 Description Quality Level Analysis

Delete reference to Table 901.7:1, "Quality Level Analysis by the Standard Deviation Method Upper Quality Index QU or Lower Quality Index QL" from Equation(s) 6 and 7 and replace with the following:

Table 904.1:3 "Quality Level Analysis by the Standard Deviation Method Upper Quality Index QU or Lower Quality Index QL".

June 17, 2024

**SPECIAL PROVISIONS
MODIFYING
SECTION 905: QUALITY ASSURANCE FOR MINOR PAVING**

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 905: QUALITY ASSURANCE FOR MINOR PAVING** in its entirety and replace with the following:

905.1 DESCRIPTION

The Department will sample and test Materials for Acceptance unless otherwise specified in the Contract. Department testing is not for Quality Control.

905.1.1 Department Sampling and Testing for Acceptance

Acceptance sampling and testing will be performed by Department representatives, certified by the Department through TTCP in the applicable test procedures. The testing procedures utilized will be in accordance with test methods and modifications as found in the current TTCP Manual(s), AASHTO or Department methods.

The Department will sample and test in accordance with Section 906, "Minimum Testing Requirements (MTR'S)" or at a lesser subplot size for Assurance purposes as determined by the Project Manager before production of Material begins. If Material appears defective, or if the Project Manager determines that a change in the process or product has occurred, additional sampling and testing may occur.

If the Department performs additional informational sampling and testing, the results will be used only to determine if corrective action needs to be taken by the Contractor and will not be used for Pay Factor Determination.

The Department will provide test results to the Contractor within two (2) Working Days after sampling. Any additional testing by the Department will be provided to the Contractor upon written request.

905.1.2 Independent Assurance Testing

TTCP certified independent personnel will perform Independent Assurance testing on split samples from Quality Control and Assurance programs to ensure that the Contractor and Department field personnel are using correct and accurate procedures and the proper Equipment. These personnel will not have direct responsibility for Quality Control or Assurance testing. Independent Assurance Test results will not be used for Acceptance.

905.1.3 Acceptance

The Department will Accept the constructed product based on inspection and Laboratory testing.

The Department will test samples of Minor Paving Type I HMA/WMA before compaction and on cut pavement samples (cores) The Department will Accept Minor Paving Type I, the constructed product based on the following criteria:

Minor Paving Type I:

1. Laboratory air voids as determined in accordance with AASHTO T312, AASHTO T166 and AASHTO T209;
2. Asphalt content as determined by the tank strap method or plant asphalt metering system defined in the Contractor's Quality Control Plan (binder ignition oven calibration samples will not be required);
3. Final thickness of the compacted Material as measured from cores in accordance with ASTM D 3549, or other method as approved by the Project Manager; and
4. Density of the compacted HMA/WMA as determined in accordance with AASHTO T355 Standard Method of Test for In-Place Density of Asphalt Mixtures by Nuclear Methods. Percent compaction will be calculated using the current average Gmm representing that Day.

The Department will test samples of Minor Paving Type II HMA/WMA before compaction and on cut pavement samples (cores).

The Department will Accept Minor Paving Type II, the constructed product based on the

following criteria: Minor Paving Type II:

1. Final thickness of the compacted Material as measured from cores in accordance with ASTM D 3549, or other method as approved by the Project Manager; and
2. Density of the compacted HMA/WMA as determined in accordance with AASHTO T355 Standard Method of Test for In-Place Density of Asphalt Mixtures by Nuclear Methods. Percent compaction will be calculated using the current average Gmm representing that Day.

For Minor Paving Type I and Type II, in order to establish a densometer correlation factor, the Contractor shall provide cores from three (3) locations designated by the Project Manager. A new correlation factor can be requested if a change in Materials, conditions, or densometer has occurred or if the accuracy of the established correlation factor is in question.

For Minor Paving Type I and Type II, the Project Manager may reject Material that appears to be defective based on visual inspection.

905.1.4 Pay Factor Determination

The Department will determine component pay factors in accordance with:

1. Table 905.1.4:1, "Single Test Pay Factor for Correlated In-Place Density";
2. Table 905.1.4:2, "Single Test Pay Factor for Laboratory Air Voids";
3. Table 905.1.4:3, "Single Test Pay Factor for Asphalt Content";
4. Table 905.1.4:4 "Single Test Pay Factor for Thickness"; and
5. Table 905.1.4:5 "HMA/WMA Lift Thickness Requirements."

Table 905.1.4:1

Single Test Pay Factor for Correlated In-Place Density ^a	
Percent Compaction	Pay factor (%)
> 97.99	Reject
97.0 – 97.99	90
96.01 – 96.99	95
92.00 – 96.00	105
91.50 – 91.99	95
90.50 – 91.49	90
90.00 – 90.49	80
< 90.00	Reject

^a Minimum of ten (10) density tests per lot is required

For Projects consisting of single lift overlays or mill and inlay with a single lift of two and a half inches or less, the Project Manager may grant an exception to the mean density target requirement of at least 94.5% of the theoretical maximum density if the Contractor can demonstrate that a minimum of 92.0% cannot be reasonably obtained because of the existing conditions of the Pavement Structure or Subgrade Materials. The Contractor shall demonstrate this by providing non-destructive density results obtained during paving operations witnessed by a State Inspector at the location in question. If the Project Manager grants this exemption, the Contractor shall construct a Roadway test strip and develop an HMA/WMA compaction process to get the highest possible density based on an approved roller's density gain per pass, in accordance with Section 423.3.4.4, "Compaction Equipment". The Project Manager will approve the process, establish a new target value for density and establish a new Acceptance lot only for the portion of the Project addressed herein before paving begins or continues. Regardless of the number of lifts, a minimum density of 91.0% shall be achieved on all NHS routes.

Table 905.1.4:2

Single Test Pay Factor for Laboratory Air Voids ^{a, b}	
Deviation from TV shown on approved JMF	Pay factor (%)
< ±1.4	105
±1.5 to ±1.6	95
±1.7 to ±1.8	85
±1.9 to ±2.0	75
≥ ±2.0	Reject

^a Minimum of three (3) laboratory air void tests per lot is required

^b Laboratory air voids obtained on Minor Paving Type II shall not be used for pay determination.

Table 905.1.4:3

Single Test Pay Factor for Asphalt Content ^a	
Deviation from TV shown on approved JMF	Pay factor (%)
< ±0.35	100
±0.36 to ±0.55	90

Table 905.1.4:3

Single Test Pay Factor for Asphalt Content ^a	
Deviation from TV shown on approved JMF	Pay factor (%)
≥±0.56	Reject

^a Minimum of three (3) asphalt contents per lot is required

Table 905.1.4:4
Single Test Pay Factor for

Thickness Negative	Deviation	from Minimum
Plan		
Thickness		Pay factor (%)
Plan Minimum Thickness or Thicker		100
≤1/4 inch		100
> 1/4 inch to 1/2 inch		90
> 1/2 inch to 3/4 inch		75
> 3/4 inch to 1.0 inch		50
> 1.0 inch		Corrective Action ¹

¹ Corrective action includes removal and replacement, overlay, or other corrective actions approved by the Project Manager. Thin or feathered edge surface patching is not Acceptable. If the Contractor elects to overlay the deficient area(s) the overlay lift thicknesses shall meet the requirements of Table 905.1.4:5, "HMA/WMA Lift Thickness Requirements".

Table 905.1.4:5
HMA/WMA Lift Thickness Requirements

HMA/WMA Type	Lift Thickness (Inches)	
	Minimum	Maximum
SP-III	2.5	3.5
SP-IV	1.5	3.0

SP-V

0.75

1.5

The Contractor shall remove and replace rejected Material identified as per Table 905.1.4:1, "Single Test Pay Factor for Correlated In-Place Density", Table 905.1.4:2, "Single Test Pay Factor for Laboratory Air Voids" and Table 905.1.4:3, "Single Test Pay Factor for Asphalt Content".

In lieu of removing and replacing rejected Material, if in the best interest of the Department, the Project Manager may allow the Material to remain in place at 50% of the Bid Item Unit Price.

905.1.5 Price Adjustments

The Department will pay for Accepted quantities of Minor Paving by multiplying the Bid Item Unit Price by the composite pay factor determined on a lot by lot basis by:

Determining each component single test pay factor average as determined by:

1. Table 905.1.4:1, "Single Test Pay Factor for Correlated In-Place Density";
2. Table 905.1.4:2, "Single Test Pay Factor for Laboratory Air Voids";
3. Table 905.1.4:3, "Single Test Pay Factor for Asphalt Content";
4. Table 905.1.4:4 "Single Test Pay Factor for Thickness"; and.
5. Table 905.1.4:5 "HMA/WMA Lift Thickness Requirements.

The composite pay factor for each lot will be determined by multiplying the average of each component single test property pay factor and the weighting factors in Table 905.1.5:1, "Weighting Factors Minor Paving Type I" or Table 905.1.5:2, "Weighting Factors Minor Paving Type II".

The maximum pay factor per lot is one (1.0). If the composite pay factor for a lot is greater than one (1.0), the pay factor will be set at one (1.0).

**Table 905.1.5:1
Weighting
Factors Minor
Paving Type I**

Characteristic	"f" Factor (%)
Correlated In-place Density	35
Laboratory Air Voids	35
Asphalt Content	20
Thickness	10

Table 905.1.5:2

Weighting Factors
Minor Paving Type
II

Characteristic	"f" Factor (%)
Correlated In-place Density	50
Thickness	50

May 12, 2022

SPECIAL PROVISIONS MODIFYING

SECTION 906: MINIMUM TESTING REQUIREMENT'S (MTR'S)

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

Delete **Section 906: MINIMUM TESTING REQUIREMENT'S (MTR'S)** in its entirety and replace with the following:

906.1 DESCRIPTION

906.1.1 General

This work consists of Minimum Testing Requirement's (MTR's) for the T/LPA and Contractor which includes construction sampling, tests, and testing frequencies of materials incorporated into the Work for acceptance and quality control.

906.1.2 T/LPA Minimum Testing Requirements

Table 906.1.2:1 - EARTHWORK					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Embankment, Unclassified Excavation (Section 203)	In-Place Density and Moisture	Roadway	1 per 2,000 C.Y.	N/A	1 per 50,000 C.Y. or minimum 1 per project
	Moisture/Density Tests (Proctor), Soils Classification	Stockpile / Roadway	1 per material type per 20,000 C.Y.		1 per 50,000 C.Y. or minimum 1 per project if less than 50,000 C.Y.
Borrow (Section 203.2.1.3)	AASHTO T-190 R-Value, Soils Classification	Borrow Pit	N/A	1 per 10,000 C.Y.	N/A

* Project Quantities less than the minimum Agency Testing requirement do not require IA Testing if Agency Testing is certified by the Construction Engineer of Record.

Table 906.1.2:1 - EARTHWORK					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Road Bed Embankment (Section 203.3.5.1)	In-Place Density and Moisture	Roadway	1 per 2,500 S.Y.	N/A	Minimum 1 per project
	Moisture/ Density Tests (Proctor), Soils Classification		1 per material type		
Foundations / Backfill for Culverts and Minor Structures (Section 206)	In-Place Density and Moisture	Structure	See Table A	N/A	Minimum 1 per project
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
	Gradation		1 per 500 C.Y.		
	Electrochemical, where specified.		N/A	1 per material type	N/A
Subgrade Preparation (Section 207)	In-Place Density and Moisture	Roadway	1 per 3,000 S.Y.	N/A	1 per 30,000 S.Y. or minimum 1 per project if less than 30,000 S.Y.
	Moisture/ Density Tests (Proctor), Soils Classification		1 per material type		
Linear Grading and Blading and Re-shaping (Sections 208, 209)	In-Place Density and Moisture	Roadway	1 per half mile	N/A	1 per 5 miles
	Moisture/ Density Tests (Proctor), Soils Classification		1 per material type		

Table 906.1.2:1 - EARTHWORK					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Backfill for Major Structures (Section 210)	In-Place Density and Moisture	Structure	See Table A	N/A	1 per 5,000 C.Y.
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		Minimum 1 per project
	Gradation				
Treated Subgrade (Section 306)	In-Place Density and Moisture	Roadway	1 per 3,000 S.Y.	N/A	1 per 30,000 S.Y. or minimum 1 per project if less than 30,000 S.Y.
	Gradation		1 per material type		
	Moisture/ Density Tests (Proctor), Soils Classification				
	AASHTO T-290 Sulfate Testing	Borrow Pit	N/A	1 per 10,000 C.Y.	N/A
Backfill for Mechanical Stabilized Earth (MSE) Retaining Structures (Section 506)	In-Place Density and Moisture	Structure	See Table A	N/A	Minimum 1 per project
	Moisture/ Density Tests (Proctor)	Stockpile	1 per material type	1 per material type	
	Gradation, PI		1 per 500 C.Y.		
	Soils Classification Direct Shear, Electro Chemical		N/A		N/A
Foundations for Slope and Erosion Protection Structures (Section 602)	In-Place Density and Moisture	Structure	1 per structure	N/A	N/A
	Moisture / Density Tests (Proctor), Soils Classification	Foundation material location	1 per material type		

Table 906.1.2:1 - EARTHWORK					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Backfill for Soil and Drainage Geotextiles (Section 604)	In-Place Density and Moisture	Roadway	1 per lift	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Backfill for Drains (Section 605.3.4)	In-Place Density and Moisture	Roadway	1 per 1,000 L.F.	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Foundations for Sidewalks, Drive Pads and Concrete Median Paving (Section 608)	In-Place Density and Moisture	Roadway	1 per 150 S.Y.	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Foundation material location	1 per material type		
Bed Course Material for Sidewalks, Drive Pads and Concrete Median Paving (Section 608)	In-Place Density and Moisture	Roadway	1 per 150 S.Y.	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Foundations for Curb and Gutter (Section 609)	In-Place Density and Moisture	Roadway	1 per 500 L.F. or as site locations require	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Foundation material location	1 per material type		

Table 906.1.2:1 - EARTHWORK					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Bed Course Material for Curb and Gutter (Section 609)	In-Place Density and Moisture	Roadway	1 per 500 L.F. or as site locations require	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Foundations / Backfill for Cattle Guards (Section 610)	In-Place Density and Moisture	Structure	See Table A	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Bedding Material for Cattle Guards (Section 610)	In-Place Density and Moisture	Structure	1 per structure	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Stockpile	1 per material type		
Foundations / Backfill for Drop Inlets and Junction Boxes (Section 623)	In-Place Density and Moisture	Structure	See Table A	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Foundation material location	1 per material type		
Foundations / Backfill for Utilities (Section 660)	In-Place Density and Moisture	Structure	See Table A	N/A	N/A
	Moisture/ Density Tests (Proctor), Soils Classification	Foundation material location	1 per material type		

Table 906.1.2:2 - TABLE A**STRUCTURE DEFINITIONS, FOUNDATION AND BACKFILL REQUIREMENTS FOR ACCEPTANCE**

1. Transverse or skewed culvert or concrete box culvert (CBC), not connected to an underground drainage network, including end sections, wing walls if backfilled simultaneously, structural plate pipe, storm drains, and sewer lines (Note 1):
Foundation: One density per 100 linear feet. For pipe in a battery, up to 4 pipes may be considered as a unit for purposes of foundation density.
Backfill Density: 1 per 2 foot of fill per side* and to top of trench per 100 linear feet (Note 2).
* For a battery of pipes, the number of backfill densities required will be as follows: One-Half (1/2) of the required densities for up to 4 pipes.
One-Third (1/3) of the required densities for more than 4 pipes.
2. End section or CBC wing wall if backfilled separately from culvert pipe or CBC (Note 2): Backfill Density: 1 per 2 foot of fill per side.
3. Drop inlet (D.I.), junction box, cattle guard, light and signal base, manhole, etc.: Foundation: 1 per structure.
Backfill Density: 1 per 2 foot of fill.
4. Underground drainage network including interruptions such as D.I., manhole, junction box, plug, service connection, slotted drain, etc., if backfilled simultaneously:
Foundation: One per 100 linear feet.
Backfill Density: 1 per 2 foot of fill per side and to top of trench per 100 linear feet (Note 2).
5. Retaining wall / MSE wall:
Foundation: One foundations density per 100 linear feet.
Backfill Density: 1 per 2 foot of fill per 100 linear feet.
6. Bridge abutment back wall, wing wall or approach slab: Backfill Density: 1 per 6 inches of fill.
7. Pier footing:
Foundation: 1 per footing.
Backfill Density: 1 per 6 inches of fill.
8. Waterlines, electrical conduit, telephone cable or gas line, etc., within roadway prism

(traveled area and shoulder) *if trench width sufficient for density testing:*

Foundation: One per 100 linear feet.

Backfill Density: 1 per 2 foot of fill per 100 linear feet.

9. Waterline, electrical conduit, telephone cable or gas line, ect. outside the roadway prism (traveled area and shoulders) *if trench width sufficient for density testing:*

Foundation: 1 per 300 linear feet.

Backfill Density: 1 per 2 foot of fill per 300 linear foot.

Notes:

1. All extensions will be considered increments and as such structure units.
2. Determination of Backfill Depths Governing Minimum Testing Criteria Requirements:
 - a. When backfill construction is performed in trench conditions, the depth of compacted backfill to be tested shall be measured from the foundation to the top of the trench.
 - b. When backfill construction is performed in non-trench conditions, the depth of compacted backfill to be tested shall be determined through the use of the appropriate NMDOT standard drawings.
 - c. When one type of material is used for multiple items, only one proctor will be required per material type.

Table 906.1.2:3 - BASE COURSE					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Base Course (Section 303)	In-Place Density and Moisture	Roadway after compaction	1 per 2,000 tons	N/A	1 per 20,000 tons with Agency or minimum 1 per project
	Moisture/Density Tests (Proctor)	Stockpile	1 per material type		
	Gradations	Processed material from windrow or stockpile	1 per project		
	FF, LL, PI		1 per 4,000 tons		
	Thickness	Roadway after compaction	1 per 1,000 tons		

Table 906.1.2:4 - AGGREGATES					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Processing, Placing and Compacting Existing Pavement (Section 302)	In-Place Density	Roadway	1 per 1,000 S.Y.	N/A	1 per 50,000 S.Y. or minimum 1 per project
	Gradation (Dry field sieve verification per TTCP)		1 per 5,000 S.Y.		
Rip Rap Material (Section 602)	LA Wear & Soundness (AASHTO T- 96 AASHTO T-104)	Source	N/A	1 per year per pit	N/A

Table 906.1.2:5 - MINOR PAVING HOT MIX ASPHALT (HMA)/Warm Mix Asphalt (WMA)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
HMA/WMA Minor Paving (Section 416)	Asphalt Content (Strap Method)	Asphalt Plant	N/A	1 per day	N/A
	Air Voids	Roadway	3 per lot	N/A	Minimum of 1 per project over 5,000 tons
	Roadway Compactio n Nuclear Densomet er *		10 per lot	Contractor to provide three (3) cores for Correlation of Densometer	N/A
	Thickness		1 per lot	Obtain Cores	
Open Graded Friction Course (Section 403)	Gradation, FF	Cold Feed	1 per 3,000 tons with a minimum of 1 per day	1 per 250 tons 1st 2,000 tons then 1 per 500 tons after 2,000 tons	Minimum 1 per project
		Crushing	N/A	1 per 1,000 tons	
	Performance Graded Asphalt Binder	From storage tank or Delivery Truck	1 sample consisting of three separate 1- quart increments per Project	Samples will be obtained by contractor personnel and observed by Departm ent personnel	N/A

Table 906.1.2:6 - Asphalt Recycling					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach

Hot In-Place Recycling (Remixing Method) (Section 412)	Roadway Density (Nuclear Densometer)	Roadway	1 per 3,000 S.Y.	N/A	N/A
Single-Machine Hot In-Place Surface Repaving (Section 413)	Roadway Density (Nuclear Densometer)	Roadway	1 per 3,000 S.Y.	N/A	N/A
	HMA/WMA	Windrow / Hopper	See Section 416 Minor Paving		

Table 906.1.2:6 - Asphalt Recycling

Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Pavement Surface Restoration (In-Situ) (Section 415)	Roadway Density	Roadway	1 per 3,000 S.Y.	N/A	N/A
	Bulk Specific Gravity		2 sets per day		
Performance Graded Asphalt Binder (Section 402)	If required in the Contract Documents	N/A	N/A	N/A	N/A

Table 906.1.2:7 - Asphalt Mineral Admixture Materials

Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Asphalt Emulsion (Section 402)	The manufacture's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	N/A

Mineral Admixtures (Section 402)	The manufacturer's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	N/A
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Table 906.1.2:8 - MAJOR PAVING (Sections 423/424 / 900's) HOT MIX ASPHALT (HMA), WARM MIX ASPHALT (WMA)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
HMA/WMA Superpave (Section 423/424)	Asphalt Content, Gradation, Gmm, Gmb, Air Voids,VMA, VFA, DP	Roadway	1 per 5,000 tons. Gmm will be determined at least once per day.	1 per 2,000 tons. Gmm will be determined at least twice per day.	Minimum 1 per project
	Roadway Compaction (Cores)				
	Roadway Compaction (nuclear/non- destructive)	Cold Feed before addition of Mineral Admixtures	N/A	As needed	N/A
	FF, , SE, F&E, FAA, Moisture				
Performance Graded Asphalt Binder (Section 402)	If required in the Contract Documents	N/A	N/a	N/A	N/A
Asphalt Emulsion (Section 402)	The manufacture's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	N/A
Mineral Admixtures (Section 402)	The manufacture's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	N/A

Table 906.1.2:9 - Non QLA PORTLAND CEMENT CONCRETE					
Minor Structures, Curb & Gutter, Side Walks, etc. (509, 510, 511, 521)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Fine Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete production	1 per week during concrete production	1 per project

Table 906.1.2:9 - Non QLA PORTLAND CEMENT CONCRETE					
Minor Structures, Curb & Gutter, Side Walks, etc. (509, 510, 511, 521)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Coarse Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete production	1 per week during concrete production	1 per project
	FF, F&E		N/A	Minimum 1 per project per course aggregate type	N/A
Non-Shrink Mortar Aggregate	Manufacture 's certificate of compliance will suffice for testing credits	N/A	N/A	NA	N/A
Project Acceptance Test	Compressi ve Strength Cylinders and Plastic Properties (Slump, Unit Weight, Calculated Air Content, Temperatur e)	See Table B	Each mix design per day of placement. Test the first three loads, with one randomly sampled for one set of cylinders. Sample for testing and cylinders, one random load from each subsequen t 6 load subplot.	N/A	1 per project

Table 906.1.2:10 - Non QLA PORTLAND CEMENT CONCRETE					
Major Structures, Substructures, Drilled Shafts (502, 509, 510, 511, 521)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Fine Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete production	1 per week during concrete production	1 per project

Table 906.1.2:10 - Non QLA PORTLAND CEMENT CONCRETE					
Major Structures, Substructures, Drilled Shafts (502, 509, 510, 511, 521)					
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*
					Project Approach
Coarse Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete production	1 per week during concrete producti on	1 per project
	F.F, F&E		N/A	Minimum 1 per project per coarse aggregate type	N/A
Non-Shrink Grout Aggregate	Manufacture 's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	N/A
Project Acceptance Test	Compressiv e Strength Cylinders, and Plastic Properties (Slump, Unit Weight, Calculated Air Content, Temperatur e)	See Table B	Each mix design per day of placement. Test the first three loads, with one randomly sampled for one set of cylinders. Sample for testing and cylinders, one random load from each subsequen t 6 load sublot.	Each mix design per day of placement. Test the first three loads and one load from each 6 load subplot for plastic properties.	1 per project

Table 906.1.2:11 - Non QLA PORTLAND CEMENT CONCRETE PAVEMENT (509,451)						
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*	State Materials Bureau
					Project Approach	
Fine Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete placement	1 per week during concrete production	1 per project	N/A
	F.F., F&E		N/A	Minimum 1 per project per coarse aggregate type	N/A	
Coarse Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete placement	1 per week during concrete production	1 per project	N/A
	F.F., F&E		N/A	Minimum 1 per project per coarse aggregate type	N/A	
Project Acceptan ce Test	Compressiv e Strength Cylinders, and Plastic Properties (Slump, Unit Weight, Air Content, Temperatur e)	See Table B	Each mix design per day of placement. Test the first three loads, with one randomly sampled for one set of cylinders. Sample for testing and cylinders, one random load from each subsequent 6 load subplot.	Each mix design per day of placement. Test the first three loads and one load from each 6 load subplot for plastic properties.	1 per 10,000 S.Y.	N/A
	Thickness	Roadway	1 per 300 cy	N/A	N/A	

Environment al Conditions	Evaporation Rate	Placement Site	N/A	Evaporation Potential determined at intervals not greater than 5 minutes until final curing system in place	N/A	N/A
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Table 906.1.2:12 - Non QLA Superstructure Concrete (509, 510, 512)						
Item	Test Required	Sampling/ Testing Location	Agency Testing	Contractor Testing	Independent Assurance*	State Materials Bureau
					Project Approach	
Fine Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete placement	1 per week during concrete production	1 per project	N/A
	F.F., F&E		N/A	Minimum 1 per project per coarse aggregate type	N/A	
Coarse Aggregates	Gradation	Stockpile	1 per 2 weeks during concrete placement	1 per week during concrete production	1 per project	N/A
	F.F., F&E		N/A	Minimum 1 per project per coarse aggregate type	N/A	
Project Acceptance Test	Compressive Strength Cylinders, and Plastic Properties (Slump, Unit Weight, Air Content, Temperature)	See Table B	Each mix design per day of placement. Test the first three loads, with one randomly sampled for one set of cylinders. Sample for testing and cylinders, one random load from each subsequent 3 load subplot.	Each mix design per day of placement. Test the first three loads and one load from each 3 load subplot for plastic properties.	1 per 300 cy	N/A

Environment al Conditions	Evaporation Rate	Placement Site	N/A	Evaporation Potential determined at intervals not greater than 5 minutes until final curing system in place	N/A	N/A
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Table 906.1.2:13 - QLA PORTLAND CEMENT CONCRETE PAVEMENT (450)						
Item	Test Required	Samplin g/ Testing Locatio n	Agen cy Testin g	Contract or Testing	Independent Assurance*	State Materials Bureau
					Project Approach	
Fine Aggregates	Gradation	Stockpile	1 per week during concrete production	1 per day per day of production	Minimum 1 per project	Referee Testing
Coarse Aggregates	Gradation, F.F., F&E	Stockpile	1 per week during concrete production	1 per day per day of production	Minimum 1 per project	Referee Testing
Project Acceptance Test	Compressive Strength Cylinders, and Plastic Properties (Slump, Unit Weight, Calculated Air Content, Temperature)	See Table B	1 per 500 C.Y.	One set of cylinders from one of the first three trucks. 1 set per 125 C.Y. thereafter	1 per 2,500 cy	Referee Testing
			1 per 500 C.Y.	For each of the first three trucks. 1 set per 125 C.Y. from the trucks selected for compressive strength testing thereafter.		
	Thickness	Roadway	1 per 5,000 S.Y.	1 per 2,500 S.Y.	N/A	
Environmental Conditions	Evaporation Rate	Placement Site	N/A	Evaporation Potential determined at intervals not greater than 5 minutes until final curing system in place	N/A	N/A

Table 906.1.2:14 - TABLE B

<u>Method of Placement</u>	<u>Sample Location</u>
Pumped	Point of discharge from pump into structure
Direct Discharge from Truck	At end of discharge chute of truck
Crane and Bucket	From discharge chute of bucket
Conveyor belt conveyor	From material on roadway after being discharged from
Slip Form (Curb and Gutter/Barrier Walls)	Point of discharge into extrusion machine
Slip Form Paver (PCCP)	From grade in front of paving machine
Drill Shafts	At end of discharge chute of truck

**Table 906.1.2:15 - Tolerances for Comparison of Independent Assurance
Sample Tests to Acceptance and Process Control Tests**

<u>CHARACTERISTICS</u>	<u>TOLERANCES</u>
Moisture/Density Test (Proctor)	± 3.0 PCF*, ± 2 Units for Moisture
In Place Moisture/Density (Roadway)	± 3.0 PCF, ± 2 Units for Moisture
Plasticity Index (P.I.)	± 3 Units
*Only if proctors are run by both District and Project. If proctors are not run by both District and Project ± 5.0 PCF	
<u>GRADATION</u>	<u>TOLERANCES</u>
1 1/2" to 3/4"	± 6 Units
1/2" to No. 4	± 5 Units
No. 8 through No. 200	± 4 Units
Fractured Faces	± 5 Units
Flat & Elongated	± 5 Units
Fine Aggregate Angularity	± 3 Units
Sand Equivalent	± 4 Units
Aggregate Specific Gravity	± 0.020
<u>CONCRETE</u>	<u>TOLERANCES</u>
Slump	± 0.5 Inch
Unit Weight	± 2.0 PCF
Compressive Strength 5 %	Within-test coefficient of variation less than

HOT MIX ASPHALT (HMA)/ WARM MIX ASPHALT (WMA)
TOLERANCES

Roadway Density (Cores from project, retained by Agency and Contractor Personnel)	± 0.025 Units
Density (Nuclear)	± 4 Units
VMA	± 1.0 Units
Asphalt Content (Ignition Burn Oven)	± 0.50
Bulk Specific Gravity at Ndes	± 0.025 Units
Maximum Specific Gravity	± 0.020 Units
Air Voids	± 1.5 Units

3.4 TECHNICAL SPECIFICATIONS

3.4.1 SPECIAL PROVISIONS FOR SECTION 407 -C: HIGH DENSITY MINERAL REINFORCED ASPHALT EMULSION (ASTM D8099/8099M -17)

The Current Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

1.0 DESCRIPTION

This work consists of providing and applying high density mineral reinforced asphalt emulsion pavement sealer material to an existing hot -mix asphalt pavement surface, compliant with ASTM D8099/8099M -17 Specification for Asphalt Emulsion Pavement Sealer (high performance Mineral Reinforced Asphalt).

2.0 MATERIALS

The High Density Mineral Reinforced Asphalt Emulsion pavement sealer shall be manufactured to produce a water based asphalt emulsion (pavement sealer suitable for use as a weather -protective coating over bituminous pavements. The High Performance mineral Reinforced emulsion shall consist of a base asphalt emulsion, mineral filler (consisting of finely ground mineral, clay, silica, limestone, slate, basalt, slag, or other inert inorganic material), and additives approved by the manufacture. The emulsion supplier shall furnish the Department samples of the asphalt used in the finished emulsion. The High Density Mineral Reinforced asphalt emulsion used for pavement sealer shall comply with the following:

TEST Property	SPECIFICATION	
	Test Designation and Characteristics For	Emulsion Uniformity
	Min	Max
	See Note 1	

PASS

Product shall show no separation or coagulation that cannot be overcome by moderate stirring.

Property	ASTM Designation and Characteristics	
	Min	
Max		
Density at 77 F, b/mL (specific gravity)	1.0	1.5
Residue:		
Residue by Evaporation, %	See Note 2	30
Water Content, % ASTM D	95	70
Ash Content of Residue, % See Note 3	10	70
Drying Time, firm set, h See Note 4		8

Resistance to Heat	See Note 5	PASS*
	No blistering, sagging, or slipping.	
Resistance to Water	See Note 6	PASS*
	No blistering or re-emulsification after 24 hr. submersion in water	
Flexibility	See Note 7	
	No flaking, cracking, or loss of adhesion to the substrate	
Wet Film Continuity	See Note 8	PASS*
	A uniformly homogeneous consistency.	

3.0 CONSTRUCTION REQUIREMENTS

3.1 Application of High Density Mineral Reinforced Asphalt Emulsion

Uniformly apply to parking lots/roadways below 50 mph high density mineral reinforced asphalt emulsion material at the rate specified in the contract and/or as approved by the Project Manager.

3.2 Weather Limitations

Pavement sealer shall not be applied on a wet surface or when atmospheric temperature is below 50 F for an 8 hour period after application, or when temperatures drop below 40 F during a 24 hour period after application. Do not apply if rain is imminent or forecasted withing 12 hours.

3.3 Equipment

Equipment for pavement sealer application shall include a mechanical squeegee/brush equipment or spray equipment capable of spraying coatings with sand including spray wand and spray bars. Equipment shall have continuous agitation or mixing capabilities to maintain homogeneous consistency of mixed material throughout the application process. Equipment for other asphalt emulsion products (non -fog seal) shall be as recommended by the manufacturer and agreed by the project manager.

3.4 Application

The surfaces to be sealed shall be cleaned and free of dirt, surface moisture, vegetation and other deleterious materials.

4.0 METHOD OF MEASUREMENT

The Department will consider any water added to further dilute emulsified asphalts incidental to pavement sealer and no separate payment will be made.

5.0 BASIS OF PAYMENT

Pay Item	Pay Unit
High Density Mineral Reinforced Asphalt Emulsion	Ton

6.0 DEFINITIONS:

6.1 *Asphalt Emulsion* – This emulsion shall be made using binders prepared from crude

petroleum.

6.2 Mineral Filler (when used), shall consist of finely ground clay, silica, limestone, slate, basalt, slag, or other inert inorganic filler materials.

6.3 Sand/Aggregate

1. The aggregate shall be either a natural or manufactured angular aggregate composed of clean, hard, durable particles free of clay or other objectionable material. Aggregate used shall follow the manufacturers recommendations: however, in all cases 100% of aggregate shall pass a 2.38mm (N0.8) mesh -sieve. Aggregate may either be added at the point of manufacture, post -added at the job site, or both.

2. The aggregate shall meet the gradation requirements of Table 1, when tested in accordance with ASTM C136.

Sieve Size	% Retained Min.	% Retained Max
20# or coarser (0.850 mm)	0	2
#30 (0.600 mm)	0	12
#40 (0.425 mm)	2	60
#50 (0.300 mm)	5	60
#70 (0.212 mm)	5	60
#100 (0.150 mm)	5	30
#140 (0.106 mm)	0	10
#200 (0.075 mm)	0	2
Finer than #200	0	0.3

This table represents the maximum range of aggregate gradations.

NOTES:

1 Uniformity

1.1 Procedure—Examine the contents of a full container of not less than 1 L or 1 qt in volume that has stood undisturbed for 48 h.

1.2 Report —Make a notation of any separation of water, coagulation of the emulsified bitumen, or settlement of suspended matter that cannot be overcome by moderate agitation.

2 Residue by Evaporation

2.1 Apparatus:

2.1.1 Metal Dish, flat-bottom, having a diameter of 65 mm (2.5 in.) with walls 10 mm (5/8 in.) high.

2.1.2 Oven , forced draft, conforming to Specification E 145, Type II B.

2.1.3 Balance, capable of weighing 50 g to within ± 0.01 g.

2.2 Procedure —Weigh 10 ± 0.25 g in the tared metal dish to the nearest 0.01 g. Dry the dish and its contents in a forced draft oven at $105 \pm 2^\circ\text{C}$ ($221 \pm 4^\circ\text{F}$) until the residue shows a loss of not more than 0.05 g on successive hourly weighings (approx. 4 h), after cooling in a desiccator.

2.3 Calculation —Calculate the percent residue by evaporation, R_u from the mass of the dry residue and the mass of the original sample, as follows:

$$R_u = (R/S) \times 100 \quad (3)$$

where:

R = mass of dry residue, g, and S = mass of sample, g.

2.4 Report—Record the average of two determinations.

3 Ash Content

3.1 Apparatus:

3.1.1 Porcelain Crucible, 30 cm³ capacity, or equivalent.

3.1.2 Balance, capable of weighing 50 g to within ± 0.01 g

3.1.3 Muffle Furnace, capable of maintaining a temperature of $1100 \pm 10^\circ\text{F}$.

3.2 Procedure—Thoroughly mix the dry residue from the determination of residue by evaporation (store the residue in a desiccator at all times prior to this test) and weigh 3 ± 0.5 g to the nearest 0.01 g in a previously ignited and tared crucible. Incinerate the contents inside a muffle furnace at a temperature of 600°C (1110°F) to constant weight.^{1 2}

¹ This incineration will produce black smoke. This procedure should be carried out under a fume hood

² Other materials such as plexiglass have also been used successfully for these tests.

3.3 Calculation—Calculate the ash thus obtained, A_r , as percent of the residue by evaporation as follows:

$$A_r = (A/S) \times 100$$

where:

A = mass of ash after ignition, g, and S = mass of sample, g.

3.4 Report—Record the ash content A_r .

4 Drying Time

4.1 Apparatus:

4.1.1 Metal Panels—Metal panels 150 mm (6 -in.) square, 0.30 to 0.40 mm (28 to 30 gage) thick.

4.1.2 Brass Mask²—150-mm (6 -in.) square and 1.6 -mm (1/16 -in.) nominal thickness, with a 100 -mm (4 -in.) square opening in its center.

4.1.3 Preparation of Metal Panels for Coating—Prepare the metal panels for the application of the emulsion in accordance with ASTM Practice D 609. The panels shall be free of oil and rust or other corrosion and one face of each panel shall be lightly abraded with 00 steel wool or 00 garnet paper to a clean surface and wiped with a clean dry cloth.

4.2 Preparation of Test Panel—Thoroughly stir the sample of emulsion. Apply the brass mask to one metal panel so that the sides of the opening are approximately 25 mm (1 in.) from the edges of the panel, and spread the emulsion over the area within the mask opening. Doctor off the excess level with a flat scraper so that the test film, when prepared, is the same thickness as the mask.

4.3 Procedure—Expose two panels prepared in accordance with 4.1 through 4.2 in a horizontal position at a temperature of $73.4 \pm 3.6^\circ\text{F}$ and approximately 50 % relative humidity. After 24 hr., test the condition of the surface of the emulsion coat by lightly rubbing with the finger. Consider the emulsion to have reached a firm set when a light rubbing of the finger does

not break, roll, or displace the surface of the coating.

4.4 Report —Record whether or not firm set has been attained.

5 Resistance to Heat

5.1 Apparatus —A forced draft oven with internal dimensions not less than 300 by 300 by 300 mm (12 by 12 by 12 in.) and capable of maintaining a uniform temperature of $100 \pm 3^{\circ}\text{C}$ ($212 \pm 5^{\circ}\text{F}$).

5.2 Preparation of Test Panel —Prepare one panel in accordance with 13.1.2 through 13.2. Allow the test panels to dry for 48 h in a horizontal position at $73.4 \pm 3.6^{\circ}\text{F}$.

5.3 Procedure —Scratch light reference lines 25 mm (1.0 in.) apart, parallel to the original reference line across the test film, and continue them to the edges of the test panel. Suspend the test panel vertically in the oven with the reference line s horizontal, and maintain at a temperature of $100 \pm 3^{\circ}\text{C}$ ($212 \pm 9^{\circ}\text{F}$) for 2 h. At the end of the test period, examine the coating for blistering, sagging, and slipping.

5.4 Report —Record any sagging of the lines within the test film or slipping of the film beyond the lower reference line.

6 Resistance to Water

6.1 Method:

6.1.1 Apparatus —Use an oven as described in 5.1 and other equipment described in 4.1 through 4.2.

6.1.2 Preparation of Test Panel —Prepare in accordance with 5.2.

6.1.3 Procedure —Dry the coated panels for 24 h in a horizontal position in a forced draft circulation oven at a temperature of $60 \pm 3^{\circ}\text{C}$ ($140 \pm 5^{\circ}\text{F}$). After 24 h completely immerse the test panels in distilled water in a suitably sized glass container at $24 \pm 3^{\circ}\text{C}$ ($75 \pm 5^{\circ}\text{F}$) for 24 h.

6.1.4 Report —After taking the test panels out of the water, examine them for development of blistering and re-emulsification as inferred from the presence of dispersed bitumen particles in the water. Record the extent of blistering or re-emulsification.

7 Flexibility

7.1 Apparatus —The apparatus shall consist of 150 by 150 mm (6 by 6 in.) aluminum panel. The panel shall be 0.010 to 0.025 in. thick, clean and free of any deleterious matter. Provide a brass mask 150 by 150 mm (6 by 6 in.), 1.6 mm (1/6 in.) thick, with a 100 by 100 -mm (4 by 4 -in.) square opening in the center. The thickness of this mask is equivalent to the application of approximately 1.6 L/m^2 (4 gal/100 ft²) of emulsion.

7.2 Preparation of Film —Prepare two test panels as follows: Clamp the brass mask on the metal or aluminum panel and proceed as outlined in 4.2. Place the panels and apply the emulsion in a horizontal position. After allowing the film to set at standard conditions for 2 hr., remove the mask.

7.3 Procedure —Dry the two test panels for 48 hr. in a horizontal position at $73.4 \pm 3.6^{\circ}\text{F}$ and approximately 50 % relative humidity. Then dry the panels suspended vertically in an oven at $60 \pm 5^{\circ}\text{C}$ ($140 \pm 10^{\circ}\text{F}$) for 5 hr. After drying remove the panels from the oven and cool at room temperature for 1 hr.

7.4 For most emulsions, immerse the panels in water at a temperature of $0 \pm 0.5^{\circ}\text{C}$ ($32 \pm 1^{\circ}\text{F}$) for 1 hr. at the completion

of this period, take the panels from the water and immediately bend each panel smoothly and snugly around a 51 mm (2 in.); diameter mandrel that has been preconditioned to $32 \pm 1^{\circ}\text{F}$.

Note 1 —This bending must take place at a uniform speed through an arc of 180° in approximately 2 s. Make the bend with the uncoated surface of the panel next to the mandrel.

7.5 Report

7.5.1 Immediately after bending examine the coating for cracking. Use the following crack rating table for assessment of the cracking condition.

Crack Rating No. Description

- | | |
|---|---|
| 1 | Perfect, no cracks hairline or otherwise, no loss of adhesion. |
| 2 | Hairline cracks present, no loss of adhesion |
| 3 | Slight cracking present, no loss of adhesion, hairline cracks may or not be present. |
| 4 | Moderate cracking and/or loss of adhesion. Slight cracking, hairline cracking, may or may not be present. |
| 5 | Severe cracking typically with loss of adhesion. Other forms of cracking may be present. |

7.5.2 Report the crack rating number and optionally the corresponding description.

8 Wet Film Continuity

8.1 Procedure —Using a spatula, spread the wet emulsion to a thin film on a sheet of standard 66.7-g/m² (18-lb) copy machine paper. As the emulsion is drawn out to a smear, it shall show a uniformly homogeneous consistency.

8.2 Report —Make a notation of any inconsistency.

3.4.2 SPECIAL PROVISIONS FOR MICROSURFACING

General conditions:

All work performed shall meet the specifications as set forth in the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction, special provisions, standard drawings, and supplemental specifications (current edition).

The Contractor shall not park equipment during non -working hours inside the highway right of way unless it is determined by the Project Manager or their designee that a safe recovery area as defined by AASHTO Roadside Design Guide is achieved.

The Contractor warrants and represents that it has taken into consideration and is familiar with the project site conditions, the nature and location of the work, conformation of the ground and roadway, character of soils, materials and surface conditions to be encountered, availability and cost for labor, materials and equipment necessary to perform the work herein, scheduling requirements and impacts, applicable safety and security rules, regulations and any matter which may affect the project.

All equipment proposed to be used to accomplish the work described herein should be of sufficient size and in such mechanical condition to meet the requirements of work and to produce a satisfactory quality of work. Equipment used on any portion of the project shall be such that no damage to the roadway, adjacent property, or other highways will result from its use.

The NMDOT's drop -off policy shall be adhered to for all applicable operations and will be considered incidental to the work and no separate measurement or payment will be made, therefore. All materials and equipment storage shall adhere to the appropriate "Clear Zone" requirements for posted speeds and geometric conditions.

Temporary Pavement Markings:

The Contractor shall provide and install removable temporary reflectorized tape or reflectorized temporary pavement tab markings. The Contractor shall properly maintain all reflectorized pavement markings for a period of two weeks after placement. The Project Manager or their designee will have the option to decide which type of markings the Contractor is to provide. Pavement markings shall be installed at the end of each day's operations and shall be immediately tamped after application until it thoroughly adheres to the finished asphalt surface.

Scope of Work:

This work shall consist of a Type II or Type III Micro -Surfacing system, which shall be a mixture of mineral aggregate, cationic polymer modified asphalt emulsion, mineral filler,

water, and other additives mixed and placed on the paved surface in accordance with these specifications and to the dimensions designated by the Project Manager or their designee.

Type II micro surfacing aggregate gradation is used to fill surface voids, address surface distress, seal and provide a durable wearing surface. Type III aggregate gradation is used to provide a maximum skid resistance and improved wearing surface.

Type III micro surfacing is appropriate for heavily traveled pavements or for rut filling. The micro -surfacing system shall produce a cured mixture with a homogeneous appearance, a firm surface adhesion, and a skid resistant texture.

Submittals:

The contractor shall provide the Project Manager or their designee with a mix design fifteen (15) days prior to beginning construction that meets the following requirements.

1. A sample of emulsified asphalt with mixed design.
2. A Certificate of Compliance and analysis from the manufacturer of emulsified asphalt.
3. Target gradation for combined aggregate and mineral filler.
4. Provide test reports for mineral aggregate that meets the Material requirements below.
5. Provide verification that Hydrated Lime meets Material requirements below.
6. Provide a Manufacturer's Certificate of Compliance for Mineral Filler.
7. Provide calibration documentation for each mixing unit that includes an individual calibration for each material at various settings, which can be related to the machines metering devices.

Materials

Mineral Aggregate - Use one hundred percent (100%) manufactured mineral aggregates that shall be generated by crushing operations from a single source and shall be composed of clean, tough, and durable particles of crushed tap rock, crushed granite, crushed sandstone, or other high -quality aggregate as approved by the Project Manager or their designee. A sand equivalent of sixty -five (65) or higher is required. The aggregate shall show a maximum weight loss of twenty -five percent (25%) when subjected to four cycles of conditioning using magnesium sulfate solution in accordance with AASHTO T104 and Resistance to degradation of small -size coarse aggregate by abrasion and impact of thirty percent (30%) maximum in accordance with AASHTO T96. The tes ts shall be performed on the gradation to be used on the project.

Mineral Aggregate Gradation Type - When tested in accordance with AASHTO T 27 and AASHTO T 11, the mineral aggregate shall conform to the following gradation requirements for Type II or Type III as specified by the Project Manager or their designee.

Type II

<u>(Fine Graded Surface Course)</u>	<u>Percent Passing by Weight Stockpile</u>	<u>Tolerance</u>
3/8 inch	100	0
NO.4	90-100	±2
NO.8	65-90	±5
NO.16	45-70	±5
NO.30	30-50	±5
NO.50	18-30	±5
NO.100	10-21	±5
NO.200	5-15	±2

Type III

<u>(Course Graded Surface Course)</u>	<u>Percent Passing by Weight Stockpile</u>	<u>Tolerance</u>
½ inch	100	0
3/8 inch	98-100	±2
NO. 4	86-94	±5
NO. 8	45-65	±5
NO.16	25-46	±5
NO. 30	15-35	±5
NO. 50	10-25	±4
NO.100	7-18	±3
NO.200	5-15	±2

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance from the mix design submitted by the contractor while also remaining within the specification gradation band. The percentage for aggregate passing any two

successive sieves shall not change from one end of the specified range to the other end.

Screening shall be required at the stockpile if there are any problems created by oversized materials in the mix.

Mineral Aggregate Stockpiling and Storage:

If the mineral aggregates are stored or stockpiled, they shall be handled in such a manner as to prevent segregation, mixing of the various materials or sizes, and contamination with foreign materials. The grading of aggregates proposed for use and as supplied to the mixing plant shall be uniform. Suitable equipment of acceptable size shall be furnished by the Contractor to work the stockpile sand to prevent segregation of the aggregates. The aggregate shall be passed over a scalping screen prior to transfer to the micro-surfacing mixing machine to remove oversize material.

Emulsified Asphalt:

The asphalt emulsion materials shall be designated as CSS -1hP or CQS -1hP and shall meet the requirements of AASHTO M 208 for each perspective designation (CS S-1hP or CQS -1hP) with the following exceptions.

EMULSION TESTS

<u>TEST METHOD</u>	<u>DESCRIPTION</u>	<u>SPECIFICATION</u>
AASHTO T 59 Maximum	Settlement and Storage of Emulsified Asphalts 24 -h	1%
AASHTO T 59 Minimum	Distillation of Emulsified Asphalt *	62%
AASHTO T 53 135°F Minimum	Softening Point of Asphalt Residue	

*The temperature for this test should be held at 350 ± 9 °F for 20 Minutes. The mixture shall be agitated constantly during the distillation process with a gentle stirring action. Complete the total distillation in 60 ± 5 minutes from the first application of heat.

The polymer shall be incorporated by blending with approved base asphalt prior to emulsification or it shall be co -milled with the asphalt to produce the finished emulsion. The distillation residue of the modified emulsion shall contain a minimum of 3.0 percent polymer by weight. Each load of emulsified asphalt shall have a certificate of analysis/Compliance indicating that the emulsion meets specifications.

Mineral Filler:

Mineral filler shall be non -air-entrained Portland cement or hydrated lime which is free of lumps or foreign matter conforming with the requirements of AASHTO -M17. The type and amount of mineral filler needed shall be determined by a laboratory mix design and will be considered as part of the mineral aggregate gradation. An increase or decrease of less than one percent (1%) may be permitted when the micro-surfacing is being placed if it is found to be necessary for better consistency or set times.

Hydrated lime shall be used on projects for evaluation purposes only and with prior written approval from the Project Manager or their designee.

The Contractor shall conduct trial mix designs for both Portland cement and hydrated lime mixes for each individual project and or aggregate source. The trial mix results shall be submitted to the County for review and written approval two weeks prior to construction.

The projects where hydrated lime is used shall be monitored by the County in conjunction with the Contractor for performance for a three -year period. The County in co-operation with the Contractor shall develop a work plan for the evaluation of each project where hydrated lime is used. The work plan shall include as a minimum the following items:

- Measurements of rut depths, cracking, etc.
- Mix properties
- Report on construction process
- Six-month field reviews with reporting
- Comparisons to control sections with Portland cement.
- Consideration of different aggregate sources will be made

Water:

The water shall be potable and shall be free of harmful soluble salts, reactive chemicals, and any other contaminants.

Other Additives:

With the approval of the Project Manager or their designee additives approved by the emulsion manufacturer may be added to the emulsion mix or to any of the component materials to provide control of the set time in the field. Appropriate additives and their applicable use range should be approved by the laboratory the submitted the mix design.

Mix Design:

The mixture design and resulting job mix formula shall be supplied by the Contractor. The following shall be required in the mix design provided by the Contractor: The mix design shall show the results of the wet cohesion test run in accordance with ISSA -TB-139 and shall have minimum values of 12 kg -cm min, at 30 minutes and 20 kg -cm min. at 60 minutes. The mix design shall show the results of the loaded wheel test run in accordance with ISSA -TB-109 and shall have a maximum value of 50 g/sq. ft. The mix design shall show the results of the wet track abrasion test run in accordance with ISSA -TB-100 and shall have maximum values of 50 g/sq. ft. after one hour of soaking and 75 g/sq. ft. after six days of soaking. The optimum asphalt content shall be selected between the minimum asphalt content found by the wet track abrasion test and the loaded wheel test. The mix design shall show the source of the aggregate to be used in the mix, the results of tests, mix compatibility tests, and mix design gradation. The mix design shall show the type of asphalt emulsion, the base stock asphalt cement, the manufacturer of the polymer, and the manufacturer of the emulsified asphalt. The mix design shall show the percent asphalt emulsion to be included in the mix as percent of dry aggregate weight. The mix design shall show the type of mineral filler and the percentage of aggregate weight and allowable variation. The mix design shall show allowable additives and allowable percentage of additives by weight of aggregate, to control mixing and breaking. These mix design requirements may be subject to verification to testing of laboratory produced mixes or trial batch material prior to placement of project material.

Composition of Mixture:

The polymer modified micro -surfacing shall consist of a uniform mixture of aggregate and CSS -IP emulsion and mineral filler, water and field control additive as required. The emulsion and aggregate must be compatible so that a complete uniform coating of the aggregate will be obtained in the mixing process. The mixture must have sufficient working life to allow for proper placement at the existing ambient temperature and humidity. When the paving mixture is placed with the relative humidity of not more than 50% and ambient air temperature at not more than 75 degrees F, it must cure sufficiently in order that uniformly moving traffic can be allowed in one hour with no damage to the surface. Location subject to sharp turning or stopping and starting traffic may require additional curing. The job mix formula shall meet with the approval of the Project Manager or their designee; and proportions to be used shall be within the following limits:

Residual asphalt 6.0 to 9.0% combined weight of dry aggregate and mineral fill.

Mineral filler 0.5 to 3.0% by weight of dry aggregate
(Portland cement or Hydrated lime)

Field control Additive As required to provide control of break and cure.

Water As required to provide proper consistency.

The mixture shall be designed so that the mineral aggregate will produce a gradation which conforms to the limitations for the design grading for the type specified herein. The gradation will be determined in accordance with AASHTO T11 and shall be based upon aggregate and mineral filler.

Determination of Mixture Composition and Tolerances:

Determination of aggregate gradation may be based on sieve analysis of representative samples taken from the stockpile at the job site. The amount of mineral filler added to the mix shall be included in determining the total minus no. 200 aggregate fraction. (The asphalt content may be determined with a nuclear asphalt content gauge (NAC). Alternatively, aggregate gradation and asphalt content may be determined by AASHTO - T164.

Mix samples will be taken from the mixing unit discharge in a manner such that the complete discharge stream is included in the sample. Mix samples shall be dried to constant weight at 230°F plus or minus 10° F prior to determination of asphalt content and aggregate gradation.

Construction Requirements

General:

It shall be the responsibility of the Contractor to produce, transport, and place the specified paving mixture in accordance with these specifications and as approved by the Project Manager or their designee. The finished micro -surfacing shall have a uniform texture free from excessive scratch marks, tears, or other surface irregularities. The cured mixture shall adhere fully to the underlying pavement.

Equipment:

All equipment for the handling of all materials and mixing and placing of the mixture shall be maintained in good repair and operating condition and is subject to the approval of the Project Manager or their designee. Any equipment found to be defective and potentially affecting the quality of the paving mixture shall be replaced. All scales used in weighing aggregate and emulsion shall conform to the requirements of section 401.

The material shall be mixed by a self -propelled micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate emulsified asphalt, mineral filler, field control additive and water to a revolving multi -blade mixer; and discharge the mixed product on a continuous flow basis, such

that the micro-surfacing can be applied continuously. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, field control additive, and water to maintain an adequate supply to the proportioning controls. The machine shall also be equipped with self-loading devices which provide for the loading of all materials while continuing to lay micro-surfacing, thereby eliminating unnecessary construction joints. The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the mix operator to have full hydrostatic control of the forward and reverse speed during application of the micro-surfacing material. The self-loading devices, opposite side driving stations and forward and reverse speed controls shall be original equipment manufacturer design individual volume or weight controls. Truck mounted mixing machines are not allowed. Individual volume or weight controls for proportioning each material to be added to the mix shall be calibrated and properly marked. The aggregate feed to the mixer shall be equipped with a revolution counter or similar devices so that the amount of aggregate used may be determined at any time.

The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray immediately ahead of and outside the spreader box. It also shall be equipped with an approved fines feeder that shall provide a uniform, positive, accurately entered, metered, predetermined amount of the specified mineral filler.

The machine shall have an Electronic Monitoring System ("EMS"). The EMS shall monitor, and display application rates and totals used for aggregate, emulsion, fines, water and additive. It shall also calculate and display ratios of emulsion to aggregate, fines to aggregate, additive to aggregate, water to aggregate and application rate in lbs. per sq. yd. (requires operator to input spreader box width). A hard copy report must be able to be printed on demand which will display: date, weight of aggregate used since last reset, weight of emulsion used since last reset, weight of fines used since last reset, gallons of additive used since last reset, gallons of water used since last reset, emulsion to aggregate ratio, fines to aggregate ratio, additive to aggregate ratio, water to aggregate ratio.

Spreading Equipment:

The paving mixture shall be spread uniformly by means of a mechanical type of spreader box attached to the mixer, equipped with paddles or other devices to agitate, and spread the materials throughout the box. The spreader box used must be capable of obtaining the desired lines and grade as shown on the plans. A front seal shall be provided to insure no loss of the mixture at the road contact surface. The rear seal shall act as a strike off and shall be adjustable. The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of aggregate

and asphalt on the surface. The spreader box and rear strike -off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike -off. The seam where two spreads join shall be neat appearing and uniform. A secondary strike -off shall be provided to improve surface texture. The secondary strike -off shall have the same adjustments as the rear seal.

Surface Preparation:

The Contractor shall always supply and make available all the necessary equipment required to clean and sweep the surfaces to be treated. Areas to be swept and cleaned are to be determined by the Project Manager or their designee. A self -propelled power sweeper will be required for surface preparation.

The County will, prior to operations, make repairs to roadway base, curbs and gutters, and potholes. Major cleaning that requires blading and the disposal of debris shall be the responsibility of the contractor.

Placement Operations:

The area to be surfaced shall be thoroughly cleaned of all vegetation, loose aggregate, and soil. Water used in pre-wetting the surface ahead of and outside the spreader box shall be applied at a rate to dampen the entire surface without any free-flowing water ahead of the spreader box.

Temperature & Weather

The material shall be spread only when the atmospheric temperature is at least 50 °F and rising and the weather is not foggy or rainy and there is no forecast of temperatures below 32 °F within 24 hours after mix placement.

Ruts:

The Project Manager or their designee may direct that preliminary micro -surfacing material be placed to fill ruts, utility cuts, depressions in the existing surface, before the final surface course is placed. Ruts of ½ inch or greater depths shall be filled independently with a rut filling spreader box either 5 foot or 6 foot in width. For irregular or shallow rutting less than 1/2-inch depth, a full -width scratch coat pass may be used as directed by the Project Manager or their designee. Each individual rut fill, utilizing a rut filling spreader box shall be crowned to compensate for traffic compaction. Ruts that are more than 1 -1/2 inches depth may require multiple placements with the rut filling spreader box to restore the original cross section.

Surface Tolerances:

No excessive build -up, uncovered area, or unsightly appearance will be permitted on longitudinal or transverse joints. Longitudinal joints shall be placed on lane lines. Excessive overlap will not be permitted. Care shall be taken to insure straight lines along the roadway centerline, lane lines, or shoulder or curb lines. Lines at intersections will be kept straight to provide a good appearance.

Areas which cannot be reached with the mixing machine shall be surfaced using hand tools to provide complete and uniform coverage. The area to be hand worked shall be lightly dampened prior to mix placement.

Care shall be exercised in areas that require hand work so that the finished surface is uniform in texture, dense, and of overall appearance comparable to that produced by the spreader box. Micro-surfacing material required to repair deficiencies due to unsatisfactory workmanship will be designated by the Project Manager or their designee.

Method of Measurement:

Micro -surfacing will be measured by the ton.

Aggregate:

The quantity of aggregate used in accepted portions of the work shall be measured by electronic monitoring system on paving machine as provided in printed tickets. The amount of aggregate must fall between the specified ranges of 23 to 28 lbs. of dry aggregate per square yard of micro -surfacing treatment to be acceptable.

Polymer Modified Asphalt Emulsion:

The quantity of polymer modified asphalt emulsion in the accepted portions of the work shall be measured by tons of material based on the accepted load tickets issued from the supplier at the completion of the project any unused emulsion shall be weighed back, and that quantity deducted from the accepted asphalt emulsion quantity delivered. Mineral filler, modifier, water, and all other additives shall be considered subsidiary items and shall not be paid for separately.

Mineral Filler:

The quantity of mineral filler (Portland cement or hydrated lime) in the accepted portion of the work shall be measured by the ton and shall be included in the micro -surfacing items. At the completion of the project any unused mineral filler shall be weighed back, and that quantity deducted from the accepted mineral filler quantity delivered.

Temporary Pavement Markings:

Reflectorized tape pavement marks will be measured on a linear foot basis (actual length of stripe only) applied to the treated asphalt surface as directed and verified by the Engineer of using agency or designee. Tab pavement marks will be measured by each as applied to the treated asphalt surface as directed and verified by the Engineer of using agency or designee.

Temporary pavement markings (tape or tabs) shall be removed within two weeks of re-establishment of permanent striping.

Basis of Payment:

Micro -surfacing will be paid for at the contract unit price per ton for the composite mixture. This will include aggregate, emulsified asphalt, mineral filler. Separate payment will not be made for additives used in the emulsion mix or to any other component materials which provide control of the setting time in the field.

The price shall be full compensation for furnishing all preparations: mixing and applying materials and for all labor, equipment, tools, test designs, cleaning, and incidentals necessary to complete the job as specified therein.

All quantities are to be measured by the Project Manager or their designee and shall be considered final, and all payments shall be made on this basis.

3.4.3 SPECIAL PROVISIONS FOR MASTIC TYPE I**MATERIAL REQUIREMENTS****Hot Applied Asphalt Aggregate Filled Mastic**

Mastic Type One is a hot -applied, pourable, aggregate filled, black color, polymer modified asphalt pavement repair mastic. Mastic Type One complies with ASTM D 8260 Type One. Mastic Type One is used for sealing, filling, and repairing many distresses in both asphalt concrete and Portland cement concrete pavements and bridge deck surfaces that are larger than those typically repaired by crack or joint sealing, but smaller than repairs requiring remove and replace patching procedures. Typical uses include sealing, filling and leveling of wide transverse or longitudinal cracks and joints, filling potholes and utility cuts, localized skin patch repairs, repairs prior to surface treatments, and leveling bridge approaches or faulted areas. When properly applied, Mastic Type One forms a well-bonded, flexible, durable, traffic resistant repair. To use, Mastic Type One is placed into an appropriate melter (Patcher), mixed and heated until application temperature is reached, poured into the prepared repair area and then leveled. Mastic Type One is formulated to provide neat, feathered edge installation. Mastic Type One is then ready for traffic when it has cooled and solidified. VOC = 0 g/l.

PROPERTIES

Properties of the binder, aggregate and blended and heated Mastic Type One according to ASTM D8260 are as follows:

<u>PROPERTY</u>	<u>REQUIREMENT</u>
POLYMER MODIFIED BINDER	
Cone Penetration, 77°F (ASTM D5329)	60 max
Cone Penetration, 122°F (ASTM D5329)	120 max
Softening Point, (ASTM D36)	200°F min
Flexibility, (1", 180°, 10 sec) (ASTM D3111 modified)	Pass at 32°F
AGGREGATE	
Abrasion Resistance (ASTM C131)	35% max
BLENDED PRODUCT	
Flexibility, 32°F (ASTM D5329)	Pass
Adhesion, 77°F (ASTM D5329)	25 PSI min
Specific Gravity	1.7 -2.0
Minimum Application Temperature	375°F
Maximum Application Temperature	400°F

TEST**ASTM D8260 TYPE 1 SPECIFICATION LIMITS**

Mastic Resilience (ASTM 8260)	
Effects of Rapid Deformation (ASTM D2794)	3 passing specimens no chipping, cracking or separation 8 N -m
Crack Bridging (ASTM C1305 modified)	Pass 3 cycles
Mastic Stability (ASTM D8260)	40.0 mm maximum

MELTABLE PACKAGING MASTIC

Mastic is to be supplied in meltable, box less plexi -melt packaging. Each package contains premeasured polymer modified binder and aggregate. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are

interlock stacked on 48 x 40 in. 4- way pallets; can be stored outside; and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.

Plexi meltable packaging consists of 30 lb. blocks of product with 70 packages per pallet, weighing 2100 lb. To use, the pallet wrap is removed, and individual blocks are placed in the melter. Cardboard boxes are not acceptable. The individual packages and palletized unit shall not contain any cardboard components to open, empty, handle, or dispose of. The packages and palletized unit shall be water and weather resistant and shall be able to be stored outside. The individual packages of product shall be encased in a high- strength, low-density, protective covering that quickly melts into the product at normal use temperatures without affecting product installation characteristics or specification conformance. The protective covering shall not weigh more than 0.50% of the product weight and shall have the following properties:

Thickness (ASTM D1777, 7.15 psi, 0.625 in. dia. presser)

Puncture Resistance (ASTM E 154)

Tensile Strength (ASTM D5035, cut strip, 2 in. /min)

Density (ASTM D792) 0.004- 0.008 in. 75 lb. minimum 20 lb. /in. minimum 0.50 g/cc maximum

MASTIC CONCRETE Fine/Course

Mastic Concrete Fine/Course a hot -applied, flexible mastic sealant compounds made of polymer -modified synthetic resin containing fibers, fillers, fines and high-quality aggregate. Mastic Concrete to be supplied in powder / granular form in meltable bags. To use, bags of mastic concrete are in an approved Melter (Patchers) where it is mixed and heated to the required installation temperature range. Heated Mastic Concrete is then poured into the prepared pavement section and leveled. The repair is then covered with a surfacing aggregate specified in the project. The repair is allowed to cool and solidify prior to opening to traffic.

Mastic Concrete Fine contains ideal pre- measured, pre -mixed combination of polymer -modified synthetic resin binder and fine aggregate designed to provide all the benefits. Fine mix to contain smaller aggregate is used in shallow repairs where neat edge feathering is required. Fine mix is designed to treat wide cracks and joints with a minimum width of 1.5 inches and up to 4 inches wide and up to full -depth repairs. Fine Mix is designed for treating most other distresses as partial-depth repairs less than 0.75 inch deep.

Mastic Concrete Course contains ideal pre- measured, pre -mixed combination of proprietary binder and aggregate designed to provide all the benefits. Course mix contains larger aggregate and is used in larger and deeper repairs - a minimum of 1.5 -inch depth is required to install. Course mix is designed to treat wide cracks and joints greater than or equal to 2 inches wide and up to full -depth repairs. Course mix is designed for treating most other distresses as partial -depth repairs from 0.75 to 8 inches deep, recognizing that the minimum application depth is 1.5 inches.

SPECIFICATION CONFORMANCE

Specification limits for Fine Mix and Course Mix are as follows:

<u>PARAMETER</u>	<u>Fine Mix</u>	<u>Course Mix</u>
Color	Gray	Gray
Form	Powder	Powder
Bulk Specific Gravity, g/cc @ 25 °C (ASTM D2726 Modified)	1.85- 2.05 g/cc	1.93- 2.18 g/cc
Binder Content (ASTM D6307 Method A), %	15-25	15-25
Aggregate Passing the 0.625 inch (ASTM D5444), % Retained on the No. 16	100 minimum	55 minimum
Passing the No. 4 Sieve, %	85 minimum	--

Flow (ASTM D5329 Modified), 5h 140 F, mm	5 maximum	5 maximum
Tensile Test (Briquette) (AASHTO T140 Modified TTM5) at 20 F, 3 specimens, pounds.	100-250 (445- 1112 N)	50-220 (222 – 979 N)
	at least 2 out of 3 fail between grips	
Tensile Adhesion, (ASTM D5329 Modified), psi	12 psi minimum	12 psi minimum
minimum elongation	0.15 inches	0.5 inches
Impact Testing (ASTM D2794 Modified, 2- inch)	No cracking, chipping	No cracking, chipping
Flexibility, Lab Standard Conditions (ASTM D3111)	No Cracking/Loss of Aggregate Adhesion	
Minimum Application Temperature	330 Degrees F	330 Degrees F
Maximum Heating Temperature	400 Degrees F	400 Degrees F
Shelf Life	2 years	2 years

EQUIPMENT REQUIREMENTS**PATCHER 200 (400) Gallon**

The purpose of these specifications is to describe a double-boiler type mixer specifically designed for and shall be capable of heating and melting Mastic products. All qualified bidders must have and maintain a complete inventory of repair parts and have experienced factory-trained service personnel for this equipment.

GENERAL:

This machine shall be the manufacturer's current production model manufactured in the United States of America. The machine will be capable of starting at ambient temperature and be ready for operation in one and a half hours or less. A comprehensive safety manual and an operational/maintenance manual shall be supplied with each unit. Thermostatic control for the heat transfer medium shall be provided and shall have sufficient sensitivity to maintain product temperature within the manufacturer's specified application temperature range. Temperature indicating devices shall have intervals no greater than 5°F and shall be calibrated as required to ensure accuracy. The mixer shall have a continuous material mixing system to provide uniform viscosity and temperature of the material being applied.

REQUIRED SAFETY FEATURES:

The unit shall have a safety shut off on the lid that automatically stops the agitator when the lid is opened. This unit shall have a safety chain in place to prevent accidental discharge of material. The unit shall be oil jacketed to ensure safe heating and handling of materials. Direct fire and air-jacketed units are not acceptable. All fluid tanks shall be located and mounted above the top of the trailer frame to prevent exposure and damage. The material tank meets all FMCSA requirements for elevated temperature materials by meeting CFR Title 49, Part 173.247.

HEATING TANK:

The material heating tank shall be a U- shaped vessel with 17 (18.5) inches radius by 48 (87.5) inches long having a capacity of 200 (400) gallons at ambient temperature. The tank will have a rear discharge with a minimum opening of 42 square inches, which drops material onto an eight-inch-long spout. The minimum height from the bottom of the spout to the ground shall be 19 (21) inches to allow the use of a material handler or optional material chutes. A double boiler -type jacket shall create a reservoir that shall hold a minimum of 35 (50) gallons of heat transfer

oil at 70°F. (Note: at 500°F the heating oil will expand by approximately 18%). The jacket shall wrap around 100% of the outside area of the material tank including the sides, front, back and bottom and allow for complete circulation of the heated transfer oil. The tank and jacket shall be made of not less than 0.1875-inch hot roll steel. There shall be one plug to allow the entire heat transfer oil system to be drained. The heat transfer oil shall be ISO grade 68. The heating tank shall be insulated with a minimum of 1.5 inches thick high temperature ceramic insulation and covered by a 12-gauge steel outer wrapper. Fiberglass or rock wool insulation is unacceptable due to their moisture retention properties resulting in a significant loss of their insulating value. Tank shall have two (2) 1500- watt 110-volt electric overnight heaters. (220V heaters available as options).

EXPANSION TANK:

A vented expansion tank for heat transfer oil shall be provided.

HYDRAULIC SYSTEM:

The hydraulic system shall incorporate a hydraulic pump to power the mixer. Mixer valve shall be solenoid operated by toggle switch located in the burner control box. The control will allow for bi-directional operation of the mixer. A flow control valve will be mounted by the burner control box to allow the operator to adjust the mixer operating speed. The minimum 15-gallon hydraulic tank will be equipped with an internal 10- micron full -flow filter. The filter shall be equipped with a restriction indicator to indicate the need for service.

INSULATION:

The heating tank shall be insulated with a minimum of 1-½ inch thick high temperature ceramic insulation and covered by a 12- gauge steel outer wrapper. Fiberglass or rock wool insulation is unacceptable due to their moisture retention properties resulting in a significant loss of their insulating value.

LOADING HATCH:

One low profile opening for loading shall be required. The loading height shall not exceed 61.5 (63) inches. The opening shall have a minimum area of 384 square inches. One opening shall be equipped with a permanent grated inner cover plate suitable to store a material bucket to allow draining back into the material tank. Each lid shall have a latching system to prevent accidental opening.

HEATING SYSTEM:

The heat transfer oil is heated by a 369,000 (411,000) BTU diesel burner at the bottom of the heat transfer oil tank. The burner shall fire into an easy access removable burner combustion box. The box will be insulated by a high temperature flexible insulation that is resistant to damage from the vibration and over road travel. Rigid insulation is unacceptable. The burner and combustion box shall be positioned offset from the center of the machine towards the passenger side frame rail. To allow safe and easy access for maintenance and repair, no components shall be positioned between the passenger side frame rail and the burner/combustion box.

The total area exposed to the burner shall be a minimum of 5,941 (10,394) square inches. The material tank shall have a minimum of 5,736 (9,455) square inches of contact with the heat transfer oil. If equipped with an optional heated material chute system, a pump that circulates the heat transfer oil is also included to provide fast and reliable heating of the heated material chute.

IGNITION OF BURNER:

The burner shall be lit by a constant duty high voltage transformer powering an electric spark igniter. This igniter shall work with a sensor that detects a lack of burn or ignition and shuts down the fuel supply. The burner fuel system is self-priming with a removable in-line filter along with feed and return lines to the main fuel tank. The thermostat control is located on the curbside of the machine for operator safety.

TEMPERATURE CONTROL:

The mixer shall have a thermostatic control device that will automatically regulate hot oil and material temperature. The control shall have a digital readout for temperatures of hot oil and material. The thermostat shall control burner ignition for a material temperature range from a low of 200°F up to a high of 450°F. The hot oil temperature range shall be from a low of 150°F up to a high of 550°F. The controls shall be activated by a single power switch. All temperature controls shall be contained in a single weatherproof control box. The burner has an audible 105db alarm that will sound in the event the burner goes into lockout mode. There is a reset switch to reset the burner if it goes into lockout mode.

DRIVE AND DRIVE CONTROLS:

The motive force of the mixer shall be a hydraulic motor driven by a single hydraulic pump. The drive control governing the rotational direction of the mixer shall be controlled by a solenoid - operated hydraulic control valve. The valve is electrically actuated by a toggle switch on the burner control panel and can be reversed as required. A flow control valve can be used to adjust mixer rotational speed. The hydraulic tank will be equipped with an internal 10-micron full flow filter that includes an indicator to indicate the need for service. A sight level indicator equipped with a thermometer to measure oil temperature will be mounted on the tank and located where it is easily viewed.

AGITATION:

The material shall be mixed by a hydraulically driven, full sweep horizontal mixer shaft with four opposing V-shaped paddles. (For the 400 gallon – eight angled paddles oriented in succession to move material towards the rear of the tank when rotating in a clockwise rotation). This feature ensures that material remains in complete suspension. The mixer shaft shall be coupled from a 6 to 1 gearbox reducer to the hydraulic motor capable of 400 ft. lbs. of torque. The mixer rotates in both directions. For additional safety the mixer will shut off automatically when the loading hatch is opened.

ENGINE:

The unit shall be equipped with a diesel engine complying with the following specifications:

Electric Start

Three cyl. 19hp@ 3000 RPM, Tier 4 Final Emissions Full Flow Oil Filter

Water cooled

Dual Speed Control

Engine Shutdown Package (low oil pressure & high temperature)

Digital Engine Controller

Digital engine controller shall have a gauge package that includes battery voltage, hour meter, and engine RPM. It shall also have an Auto Start function which preheats and starts engine. The controls will run the engine at “warm up” RPM for 30 seconds before it automatically adjusts to a standard engine idle RPM for material heating. There is a switch that raises engine speed for mixing the material when ready and/or needed. The melter shall have a 26 gallon (98.4 L) diesel fuel tank for operation of the entire unit.

TOOL HEATING BOX AND TOOLS:

The tool heating box shall be 44 inches in height, 14 inches in width, and 30 inches long. The tool heating box shall be constructed of not less than 0.105 HRS outer skin, be insulated with a minimum of 1-inch-thick high temperature ceramic insulation and have 0.06 stainless steel inner liner. Fiberglass or rock wool insulation is unacceptable due to their moisture retention properties resulting in a significant loss of their insulating value over an eighteen-month period. The diesel burner shall be bolted to the side of a combustion chamber, and the tool heating box is welded to the top of this chamber. The burner shall have a minimum of 82,000 BTU supplied by a 12Vdc burner. The burner shall be controlled by an "On" – "Off" switch located at the rear of the machine. The tool heating box shall include a front door opening for heating larger tools. The door opening shall be 26.8 inches in height, and 11.5 inches in width. The door opening is designed in such a way to support the tool handle when the door is closed. The tool heating box shall include a side door opening for cleaning out used material. The door opening shall allow access to the entire lower portion of the burner box. The tool heating box shall include an internal removable deflector/chute to protect the burner from tool damage and to direct used material into the collection area away from the burner. Tools included shall be: Two (2) each ironing wands, Two (2) each chute scrapers, One (1) each tank scraper, Two (2) each metal pour buckets.

REMOVABLE MATERIAL CHUTE:

The material chute shall be minimum 37 inches in length by 8 inches in width by 4 inches in depth with a steel thickness of 0.1345 inches. The material chute shall pivot under the material drain and be easily removable. The material chute is designed to aid in the placement of material from machine directly into repair area.

PROPANE TORCH AND BOTTLE:

30 lb. bottle with regulator, 500,000 BTU propane hand torch with 20-foot hose.

TRAINING:

An authorized factory-trained representative will be made available for a full day of training at job site. At this training session a complete operational, mechanical and safety overview will occur.

PAVEMENT CUTTER (ROUTER)**GENERAL**

The purpose of these specifications is to describe a Pavement Router with Clutch. This unit must be of the manufacturer's current production. This unit shall be capable of routing while accurately following random cracks in asphalt or concrete surfaces at an estimated speed of 1,500 linear feet per hour.

FRAME

There shall be a stub axle attached on each side of the frame assembly in line with the cutter head. Attached to each stub axle shall be a pneumatic tire with tapered bearing (Total tires on machine is 2). The entire assembly of engine, cutter head, cutter head housing and all other part assemblies shall be mounted on a heavy steel frame, electric welded through 100% of the metal thickness at each joint for maximum strength and rigidity.

ENGINE

The engine shall be mounted on a hinged saddle to permit belt tension. The cutter shall be powered by a gasoline engine with hour meter. This engine shall be capable of producing 24.9 HP per SAE J1349 or 27 HP per SAE J1940 / J1995 at 3600 RPM. The engine shall have a full flow oil filter and oil cooler. A heavy duty air cleaner shall be installed on the engine.

CUTTER HEAD

The cutter head shall be mounted on a drive shaft having a minimum diameter of 1¾ inch and is fastened with a minimum of two ½ inch hex head cap screws in conjunction with a minimum 3/8 inch x 4 inch key. The cutter head drive shaft shall be mounted by means of two self-aligning ball bearings. The cutter head shall accommodate a minimum of six - eight tooth carbide tipped cutters. By rearranging the spacers, the cut width can be varied from ½ inch to 2 inch wide. The cutter head shall be housed in a steel -housing capable of containing the cutter assembly and covering 80% of the total cutter assemblies surface area. The driving force from the engine to the cutter head shall be transmitted through a clutch and twin grooved sheaves and twin matched "V" belts covered with a removable metal guard ventilated to prevent upward suction of pavement debris. The cutter head and its protective housing shall be able to raise and lower a minimum of four inches by means of an electric lineal actuator operated by a fingertip control switch mounted on the operator handle. The cutter head and its protective housing shall be able to raise and lower a minimum of four inches by means of an electric lineal actuator operated by a fingertip control switch mounted on the operator handle.

CLUTCH

An electric clutch shall be mounted on the engine in such a manner as to stop the cutter head on demand without stopping the engine. The clutch switch shall be located on the handle in order to facilitate easy access by the operator.

CARBIDE SKID PLATE

A pavement router shall be equipped with a replaceable carbide skid plate mounted at the rear of the cutter head housing in order to facilitate stopping of the unit, controls speed and increases crack tracking accuracy.

BATTERY

The unit shall be equipped with a 12-volt battery capable of starting the engine and operating the clutch and actuator. The battery shall also be housed in a fully enclosed box that is weather resistant and heavy duty.

CUTTERS

The unit shall be supplied with pins, spacers and a complete set of wide hub carbide cutters.

HOT MASTIC APPLICATOR

The purpose of these specifications is to describe a direct fire mastic applicator that is specifically designed for and shall be capable of maintaining heat and applying all grades of mastic asphalt rubber sealant without any further equipment modification. This unit shall be the manufacturer's current production model manufactured in the United States of America.

GENERAL SPECIFICATIONS

The applicator shall be capable of accepting and maintaining the heat of an already melted mastic material mixture from a larger mastic heating and mixing machine, to move and apply the mastic sealant to the ground.

A. Material capacity of 10 gallons. Shipping weight of 147 lbs, without material. Loading height of 18.1". The overall dimensions are 52.5"L x 35.75"H x 31.75"W. It is heated with a removable 150,000 BTU propane hand torch with a manual torch striker. Tank mounting bracket, CSA/UL Approved regulator and hose designed for a 20 lb L tank. Equipped with a flip open lid, with stop bracket. Two bushing mounted steel wheels to not pickup sealant, 11.25" diameter, .25" thick. Two swivel wheels for easy steering and control, 4" diameter, .25" thick. Manual sweep agitator. Removable drag/shoe box, size is 8" W x 8" L x 3" H, hand lever to raise and lower drag box, can be locked in up or down position. Lifting handles to pick up unit for transporting in a truck and tie down locations. Scraper tool storage/holder (scraper tool not included). Side mounted, handle operated slide gate and chute applicator. Heated chute for consistent pouring. Rotating handle system so unit can discharge material on right or left side of unit (so operator is always facing traffic for safety purposes). All welded steel construction using various thickness steel from 16 GA (.060") up to .25". Material tank has angled side walls and base to promote flow of material to the discharge gate. Single person operation with all controls accessible from single location. Heat shield to protect LP tank from torch flame. Angled torch mount to keep torch secure while applying sealant with fast easy removal and installation of torch. Scraper lip inside the tank to clean off scraper tools. Operation and safety decals installed and in easy view of operator.

3.4.4 SPECIAL PROVISIONS FOR 704-F BIKE LANE RESIN BONDED AGGREGATE SURFACING TREATMENT

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction shall apply in addition to the following:

704-F.1 DESCRIPTION

Under this work, the Contractor shall furnish and apply a resin bonded aggregate surface containing an epoxy binder to bind aggregates together in accordance with patterns as specified on provided Work Orders or Plans, or as ordered by the Engineer and in conformance with these specifications.

Resin bonded aggregate surfacing shall consist of:

1. A two-part resin bonded treatment containing epoxy binder to bind aggregate together.
2. Resin applied to the surface and loose aggregates are scattered onto the surface before the resin sets.
3. Color Coated Glass Aggregate shall be broadcast to 100% penetration into the epoxy binder.
4. An aggregate approved by NMDOT or Los Alamos County for color and sharpness.
5. The epoxy shall be covered with 0.8mm to 1.2mm sized aggregate.
6. Have a coefficient of friction of at least 0.65 when tested in conformance BS/BPN
7. The aggregate should have an angular geometry for better adhesion to the two-part epoxy and better overall friction rating.

704-F.2 MATERIALS

The resin bonded aggregate surfacing shall be capable of application on new and existing asphalt and Portland cement concrete surfaces. New asphalt surface shall be cured a minimum of 30 days prior to installation and shall:

Be VOC compliant and lead chromate free.

1. Not contain 0.1% or more of any chemical listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the US Occupational Safety and Health Administration (OSHA) as a carcinogen.
2. Conform to current Federal, State, and Local air pollution regulations, including those for the control (emission) of volatile organic compounds (VOC)

3. Be packaged and stored in accordance with the manufacturer's instructions and requirements for shelf life and storage conditions in original unopened containers.
4. The color shall be approved by NMDOT or Los Alamos County prior to the material purchase by the Contractor.
5. Incorporated aggregates approved by the manufacturer for compatibility and handling in compliance with manufacturer recommendations - providing a minimum surface friction level of 65 PSV (Polished Stone Value).
6. Follow the Federal, State and City environmental disposal regulations for unused resin bonded aggregate surfacing materials, tarps, tapes, and garbage.
7. Present a marking whose color and chemical resistance will not degrade under normal exposure to weather, street sweeping/plowing, calcium chloride, sodium chloride, automotive or food oils and automotive fuels.
8. Use color pigments that remain stable under exposure to ultraviolet light.

704-F.2.1 Polymer Resin Binder

Provide a polymer resin binder which holds the aggregate topping firmly in place, and which meets the following requirements.

Polymer Resin Binder Requirements

Condition material to	65°F – 85°F (18°C – 29°C) before using.
Mix Ratio	1:1 by volume
Viscosity (ASTM D2393)	1,700 cps @ 77°F
Gel Time (60 g mass) (ASTM D881)	20 minutes
Cure Rate (ASTM D1640, 0.2" thickness)	3 hours max
Tack Free Time (73°F or 23°C)	2 to 5 hours
Tensile Properties (ASTM D638), 7-day cure Tensile Strength: Tensile Elongation:	2,500 psi (17.2 MPa) 40%
Bond Strength (ASTM C882) 2-day cure: 14-day cure:	2,000 psi (13.8 MPa) 2,500 psi (17.2 MPa)
Compressive Strength (ASTM C579) 3-hour cure 7-day cure	1,500 psi (10.3 MPa) 5,000 psi (34.5 MPa)
Flexural Strength (ASTM D790)	3,000 psi (20.9 MPa)
Shrinkage on Cure (ASTM D2566)	0.2%
Thermal Compatibility (ASTM C884)	Pass
Heat Deflection Temperature (ASTM D648)	120°F (49°C)
Water Absorption (ASTM D570)	0.2% (24 hr.)
Chloride Ion Permeability (AASHTO T277)	0.0 coulomb

704-F.2.2Aggregate Topping

Furnish a color coated glass aggregate. The aggregate topping is to be clean, dry, and free from deleterious matter. The aggregate topping must meet the following:

Technical Data

Characteristic	Color Coated Glass Aggregate
Specific Gravity	2.5
Hardness	6.0 Mohs
Softening Point	~1350°F
Bulk Density	Avg 86lb/ft ³
Loss on Ignition	0.03%
Biochemical Oxygen Demand	0 PPM
Moisture Content	<1%
Reactivity	100% Acid Insoluble <3% Loss - Magnesium Soundness TCLP - EPA compliant
Size Range Available	0.8-1.2mm
Physical & Chemical Composition	No Lead Panel Glass & Clear Soda Lime Glass
Physical Composition	Amorphous Silica
Color Retention	100%

704-F.3 CONSTRUCTION REQUIREMENTS

General The resin bonded aggregate surface shall be installed as shown on the Contract or Work Order Documents or as ordered by the Engineer.

When applied under traffic, the Contractor shall provide all necessary flags, markers, signs, etc. in accordance with the MUTCD to maintain and protect traffic including pedestrians and bicyclists and to protect marking operations and the markings until thoroughly set.

The Contractor shall be responsible for removing, to the satisfaction of the Engineer, all tracking marks, spilled resin bonded material applied in unauthorized areas.

Atmospheric Conditions Resin bonded aggregate surface shall only be applied during conditions of dry weather and on dry pavement surfaces. At the time of installation, the pavement surface temperature shall be at or above manufacturer recommendations.

Surface Preparation The Contractor shall clean the pavement and existing materials to the satisfaction of the Engineer. At the time of application, all pavement surfaces shall be free of pavement markings, oil, dirt, dust, grease, and similar foreign materials.

704-F.3.1 APPLICATION

Resin bonded aggregate surface shall be placed at the friction, thickness, and pattern designated by the Contract Documents. The installation shall not begin until the applicable surface preparation work is completed and approved by the Engineer, and the atmospheric conditions and pavement surface temperature are acceptable to the Engineer.

Masking tape or similar should be removed as material gels, but before it cures and be properly disposed of.

Personal Protective Equipment Follow all exposure, respiratory and personal protective equipment controls, handling and safety precautions, and spill and disposal procedures as identified by safety data sheets (SDS), labels and other manufacturer's recommendations for the products used.

704-F.3.2 WORK ZONE TRAFFIC CONTROL (WZTC)

The Contractor is responsible for ensuring appropriate WZTC in compliance with the MUTCD appropriate for the dry time of the selected material applied. The Contractor is responsible to ensure adequate WZTC to prevent those walking, skating, bicycling, and driving from coming into contact with applied material that is still capable of being tracked. The Contractor shall be liable for such tracking and property damage should it occur.

704-F.4 METHOD OF MEASUREMENT

The quantity for payment, in square feet of resin bonded aggregate surface, shall be computed within the payment lines shown on the plans, Work Order, or as otherwise ordered in writing by the Engineer.

704-F.5 BASIS OF PAYMENT

<u>Pay Item</u>	<u>Pay Unit</u>
Colored Bike Lane Markings	Square Feet

704-F.5.1 Work Included in Payment

The following Work and items will be considered as included in the payment for the main item(s) and will not be measured or paid for separately:

1. Furnishing all labor, materials, and equipment

END SECTION

SECTION 906 MINIMUM TESTING REQUIREMENTS (MTR's)

(August 2021 – Not to be used on Federally Funded Projects)

The special provision shall supersede section 906 of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction:

906.1 DESCRIPTION**906.1.1 General**

This Work consists of Minimum Testing Requirement's (MTR's) for the County and Contractor which includes construction sampling, tests, and testing frequencies of Materials incorporated into the Work for Acceptance and Quality Control.

906.2 Minimum Testing Requirements

Earthwork				
ITEM	Test Required	Sampling/Testing Location	Minimum Testing Frequency	NMDOT Requirements (Revised, Same)
Embankment, Unclassified Excavation and Borrow	Moisture/Density Tests (Proctor), Soils Classification	Roadway	1 per material type	Same
	In-Place Density and Moisture	Roadway	1/500 cy	Revised
Natural Standard 203.3.5.1) Ground Spec. (NMDOT Section	Moisture/Density Tests (Proctor), Soils Classification	Roadway	1 per material type	Same
	In-Place Density and Moisture	Roadway	1/500lf per 2 lane Roadway	Revised
Surfacing Required (NMDOT Standard Spec. Section 203)	Estimated "R" Value	Top 2 feet of Roadway	1/500lf per 2 lane Roadway	Revised
Foundations/Backfill	In-Place Density and Moisture	Structure	See Table A	See Table A
for Culverts and Minor Structures	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
	Gradation		1/300cy	Same
Subgrade Preparation	Moisture/Density Tests (Proctor), Soils Classification	Roadway	1 per material type	Same
	In-Place Density and Moisture		500lf/lane	Revised

Backfill for Major Structures	In-Place Density and Moisture	Structure	See Table A	See Table A
	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
	Gradation		1/300cy	Same
Backfill for Mechanical Stabilized Earth (MSE) Retaining Structures (NMDOT Standard Spec. Section 506)	In-Place Density and Moisture	Structure	See Table A	See Table A
	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
	Gradation, PI		1/300cy	Same
Foundations for Slope and Erosion Protection Structures (NMDOT Standard Spec. Section 602)	In-Place Density and Moisture	Structure	1 per 25sy	Same
	Moisture/Density Tests (Proctor), Soils Classification	Foundation Material location	1 per material type	Same
Foundations For Sidewalks, Drive pads, and Concrete Median Paving (NMDOT Standard Spec. Section 608)	In-Place Density and Moisture	Roadway	1/500lf and at least 1 per day	Revised
	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
Bed Course Material for Sidewalks, Drive Pads, and Concrete Median Paving (NMDOT Standard Spec. Section 608)	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
	In-Place Density and Moisture	Roadway	1/500lf and at least 1 per day	Revised
Foundations For Curb and Gutter (NMDOT Standard Spec. Section 609)	In-Place Density and Moisture	Roadway	1/500lf and at least 1 per day	Same
	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same
Bed Course For Curb and Gutter (NMDOT Standard Spec. Section 609)	In-Place Density and Moisture	Stockpile	1 per material type	Same
	Moisture/Density Tests (Proctor), Soils Classification	Roadway	1/500lf and at least 1 per day	Same
Foundations/Backfill for Drop Inlets and Junction Boxes (NMDOT Standard Spec. Section 623)	In-Place Density and Moisture	Structure	See Table A	See Table A
	Moisture/Density Tests (Proctor), Soils Classification	Foundation Material location	1 per material type	Same
Base Course				

ITEM	Test Required	Sampling/Testing Location	Minimum Testing Frequency	
Base Course	In-Place Density and Moisture	Roadway	1/500ft/lift	Revised
*if the percent passing the No. 10 sieve is less than 10% of AASHTO T-27 test procedure,	Moisture/Density Tests (Proctor), Soils Classification	Stockpile	1 per material type	Same

than this test does not need to be performed.	Gradation	Processed Material	1 per source and 1 per 1000 tons of placement	Revised
	FF, LL*, PI*	Processed Material	1 per source and 1 per 1000 tons of placement	Revised
	Thickness	Roadway after Compaction	1/500ft/lane	Revised

Asphalt				
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ITEM	Test Required	Sampling/Testing Location	Minimum Testing Frequency	
Pavement	Asphalt Content	Roadway	1/500 tons/lift, with a minimum of 1 per day's run	Revised
	Air Voids, Roadway Compaction (Cores)	Roadway after Compaction	1 per days run or as required by the County Inspector	Revised
	Roadway Compaction (Nuclear Densometer)	Roadway after Compaction	1 per 500ft/lane	Revised

	Gradation, FF, PI, SE, F&E, FAA, Moisture	Cold Feed before addition of lime or Anhydrite material	1/segment	Revised
Performance Graded Asphalt Binder	The manufacturer es certificate of compliance will suffice for testing credits	From storage tank of injection line to the plant	1 per binder type per project	Revised
Portland Cement Concrete				
ITEM	Test Required	Sampling/Testing Location	Minimum Testing Frequency	
Fine Aggregates	Gradation	Stockpile	1/100cy	Revised
	SE, FM		2 per project	Revised
Course Aggregates	Gradation	Stockpile	1/100cy	Revised
	FF, F&E		2 per project	Revised
Non-Shrink Mortar Aggregate	Gradation	Stockpile	1/10 cy	Revised
Project Acceptance Test	Compressive Strength Cylinders	See Table B	1 set (4) of cylinders from one of the first three trucks, minimum of 1 per day	Same
	Slump, Unit Weight, Air Content, Temperature		1 per first three trucks, then 1 within the next 6 trucks,	Same
			minimum of 1 per day	

Table 906.1.2:14

Method of Placement	Sample Location
Pumped	Point of discharge from pump into Structure
Direct Discharge from Truck	At end of discharge chute of truck
Crane and Bucket	From discharge chute of bucket
Conveyor belt	From Material on Roadway after being discharged from conveyor
Slip Form (Curb and Gutter/Barrier Walls)	Point of discharge into extrusion machine
Slip Form Paver (PCCP)	From grade in front of paving machine
Drill Shafts	At end of discharge chute of truck

Los Alamos County Public Works Minimum Testing Requirements

Table A

Structure Definitions, Foundation and Backfill Requirements

1. Transverse or skewed culvert or concrete box culvert (CBC) not connected to an underground drainage network, including end sections, wing walls if backfilled simultaneously, structural plate, pipe, storm drains and sewer lines¹:

Foundation: One density per 200 linear feet. For pipe in a batter, up to 4 pipes may be considered as a unit for purposes of foundation density. ³

Backfill Density: 1 per 1 foot of fill per side* and to top of trench per 200 linear feet. ²

*For a battery of pipes, the number of backfill densities required will be as

follows: One-half (1/2) of the required densities for up to 4 pipes. ⁴

One-third (1/3) of the required densities for more than 4 pipes. ⁴

2. End section of CBC wing wall if backfilled separately from culvert pipe or CBC²:

Backfill Density: 1 per 1 foot of fill per side. ³

3. Drop Inlet (DI), junction box, cattle guard, light

and signal base, manhole, etc.:

Foundation: 1 per structure⁴

Backfill Density: 1 per 1 foot of fill³

4. Underground drainage network including interruptions such as DI, manhole, junction box, plug service connection, slotted drain, etc., if backfilled simultaneously:

Foundation: 1 per structure⁴ Backfill

Density: 1 per 1 foot of fill³

5. Retaining Wall/MSE wall:

Foundation: One foundation density per 50 linear feet. ³

Backfill Density: 1 per 1 foot of fill per 50 linear feet. ³

Bridge abutment back wall, wing wall or approach slab.

Backfill Density: 1 per 6 inches of fill⁴

6. Pier Footing:

Foundation: 1 per footing⁴

Backfill Density: 1 per 6 inches of fill⁴

Notes:

1. All extensions will be considered increments and as such structure units.
2. Determination of backfill Depths Governing Minimum Testing Criteria Requirements:
 - a. When backfill construction is performed in trench conditions, the depth of compacted backfill to be tested shall be measured from the foundation to the top of the trench.
 - b. When backfill construction is performed in non-trench conditions, the depth of compacted backfill to be tested shall be determined through the use of the appropriate NMDOT standard drawings unless where Los Alamos County Utilities Specifications would apply.
3. Revised from NMDOT minimum testing requirements
4. Same testing requirements as NMDOT Minimum Testing Requirements

Table B

<u>Method of Placement</u>	<u>Sample Location</u>
Pumped	Point of Discharge
from pump into structure	Direct Discharge from Truck
of discharge chute of truck	At end

Crane and Bucket	From discharge chute of bucket
Conveyor belt after being discharged from conveyor	From material on roadway
Slip Form (C&G, Sidewalk, CWB, etc.)	Point of
discharge into extrusion machine Slip For Paver (PCCP)	
	From Grade in
front of paving machine	

END SECTION

SECTION 423 HOT MIX ASPHALT (HMA)

(August 2021 – Not to be used on Federally Funded Projects)

The special provision shall supersede the section 423 of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction:

423.1 DESCRIPTION

This Work consists of constructing one (1) or more pavement courses of Hot-Mix Asphalt (HMA) on a prepared base, to include crushing, stockpiling, hauling, binder, mineral admixture, mix design, mixing, providing cold feeds, process control testing and placement.

423.2 MATERIALS

423.2.1 General

HMA is a mixture of asphalt binder, aggregate, blending sand, mineral filler, and mineral admixture. Unless otherwise prohibited in the Contract, the County will allow Recycled Asphalt Pavement (RAP) in HMA mixtures as long as the resulting mixture conforms to all Specification requirements. The Contractor shall size, uniformly grade, and combine aggregate fractions in accordance with the Contract. The Contractor shall test Materials in accordance with applicable AASHTO/ASTM methods, as modified by the County or other test procedures as directed by the County. The Project Manager will decide all questions pertaining to the interpretation of test procedures.

423.2.2 Aggregate

The Contractor shall ensure the aggregate gradation of the HMA mixture meets the requirements of Table 540 .2.2.1:1, "HMA Aggregate Gradation Control Points." of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction. The Project Manager may require, at no additional cost to the County, wet preparation, per AASHTO T 146, Method A, if the Project Manager determines there are Deleterious Materials present in the aggregate stockpiles before aggregate gradation testing. The Contract will specify the type of HMA the Contractor is to use. The County will allow the Contractor to combine Materials from two (2) or more sources to produce aggregate only when each individual aggregate source meets all applicable quality requirements

423.2.2.1.1 Aggregate Quality

For each Material source, the Contractor shall ensure the HMA coarse aggregate has an AI of 25 or less when calculated in accordance with Section 901, "QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)."

The Contractor shall regulate the crushing of aggregate to:

1. Minimum Fractured Faces content of the plus No. 4 Material complies with the requirements of Table 423.2.2.1.2:1, "Fractured Faces, Sand Equivalent, and Fine Aggregate Angularity," of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction and evaluation by AASHTO 335-09, "Fractured Face Determination for Coarse Aggregate;"
2. Ensure the combined plus 3/8 inch material contains no more than 20% flat, elongated particles with a dimensional ratio of 3:1 or greater as determined by ASTM D 4791 (TTCP Modified);
3. Ensure the combined Material, excluding RAP; passing the No. 40 sieve is non-plastic;
4. Ensure that before the addition of mineral admixtures, the minimum sand equivalent value and the minimum fine aggregate angularity value of the combined aggregate, excluding RAP, complies with the requirements of Table 423.2.2.1.2:1, "Fractured Faces, Sand Equivalent, and Fine Aggregate Angularity," of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction and
5. Determine the Sand Equivalent value in accordance with AASTHO T 176, Alternate Method No. 1, and Fine Aggregate Angularity value in accordance with AASHTO T 304, Method A.

423.2.2.1.2 Fractured Faces

The County will consider a face to be fractured when at least one-half of the projected particle area exhibits a rough, angular, or broken texture with well-defined edges.

423.2.2.2 Production

When producing aggregates for HMA, the Contractor shall:

1. Remove natural fines by screening and stockpiling separately;
2. Use a No. 4 screen, minimum, or a larger screen if needed to properly control the crushing and screening operation;
3. Crush the aggregate retained on the scalping screen and separate the crushed Material into at least two (2) stockpiles of fine and coarse aggregates; and
4. Regulate crushing operations to produce Material that meets design requirements when combined.

423.2.2.3 Stockpiling

The following requirements apply to stockpiles, the Contractor shall: Place stockpiles upon prepared sites;

1. Make stockpiles neat and regular to prevent segregation;
2. Provide enough storage space for each size of aggregate;
3. Separate the aggregate stockpiles far enough apart to prevent mixing, or with walls or partitions;
4. Prevent contamination (store stockpiles away from vehicular and Equipment traffic);
5. Keep the storage yard neat and orderly and keep the stockpiles accessible for

- sampling; and
6. Keep the aggregate sizes separated until delivered to the cold feed system that feeds the drier.

423.2.2.4 Combining

When combining crushed Materials from different stockpiles, including RAP (if in the mixture); the Contractor shall ensure the product is in accordance with the mix design gradation requirements. The Contractor shall use controlled feeders from each stockpile to combine crushed Material.

423.2.3 Asphalt Binder

The Contract will specify the type and grade of asphalt binder. The Contractor shall provide asphalt binders in accordance with Section 402, "Asphalt Materials and Mineral Admixtures." The Contractor shall not change the asphalt source after approval of the mix design without written approval of the State Materials Bureau.

423.2.4 Mineral Admixtures

The Contractor shall provide mineral admixtures in accordance with Section 402, "Asphalt Materials and Mineral Admixtures."

423.2.5 Blending Sand

Blending sand consists of the following:

1. Natural fines from the scalping process;
2. Concrete sand;
3. Sandy Material; or
4. A combination of these, graded to the mix design requirements.

The Contractor shall determine the need for and percentage (a maximum of 20.0%) of blending sand using mix design tests on samples taken from stockpiles during crushing operations and submitted to an approved testing Laboratory.

423.2.6 Mineral Filler

The Contractor shall, if required by mix design, provide mineral filler in accordance with AASHTO M 17 and approved by the NMDOT State Materials Bureau. Fly ash as a mineral filler for HMA is not allowed.

423.2.7 Reclaimed Asphalt Pavement (RAP)

Unless otherwise specified in the Contract, the Contractor may use RAP removed under the Contract consisting of salvaged, milled, pulverized, broken, or crushed asphalt pavement. The Contractor may use RAP produced from outside sources provided the following is met: after the Contractor obtains sufficient quantities of RAP aggregate samples in accordance with AASHTO T 308; the County will Accept RAP for which the coarse aggregate has a percent

wear of 40.0 or less, at 500 revolutions, when tested in accordance with AASHTO T 96. The Contractor shall provide plus No. 4 RAP Material with a minimum of 75% Fractured Faces content (one (1) face). The County will make no additional payment for the asphalt binder in the RAP or asphalt binder due to asphalt binder grade adjustment.

The Contractor may use a maximum of 15% RAP (by weight) in the production of HMA mixtures without changing the asphalt binder.

For quantities greater than 15% and up to 25% RAP, the Contractor shall:

1. Either lower the asphalt binder's high and low temperature grades by one (1) grade (e.g. lower a PG 76-22 to a PG 70-28); or
2. Extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M 323, Appendix A, ensuring the resultant binder meets the entire AASHTO M 320 (excluding direct tension) required Project PG asphalt binder properties indicated on the approved mix design.

For quantities greater than 25% and up to 35% RAP, the Contractor shall:

1. Extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M 323, Appendix A; and
2. Ensure the resultant binder meets the entire AASHTO M 320 (excluding direct tension) required Project PG asphalt binder properties indicated on the approved mix design.

The County will not allow the Contractor to use more than 35% RAP in the production of HMA mixtures.

For Projects of entirely new construction, the Contractor shall:

1. Limit the RAP to 15% in the top mat or extract, recover and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M323, Appendix A; and
2. Ensure the resultant binder meets the entire AASHTO M320 (excluding direct tension) required Project PG asphalt binder properties indicated on the approved mix design.

If Plus Grades of PG asphalt binder is specified on the project, for quantities greater than 15% RAP, the Contractor shall extract, recover, and combine the RAP's asphalt binder with a virgin asphalt binder per AASHTO M 323, Appendix A. The Contractor shall ensure the Section 423: Hot Mix Asphalt (HMA) (Major Paving) Page 214 resultant binder meets the entire AASHTO M 320 required Project PG asphalt binder properties indicated on the approved mix design including the additional Plus Grade requirements for Elastic Recovery and Solubility.

The Contractor shall:

1. Process RAP so that 100% passes a 1-1/2-inch sieve;
2. Maintain adequate stockpile management (i.e. sufficient quantities and shaping of the stockpiles);
3. Address in the Quality Control Plan how RAP will be controlled, such as which screen will be used to split into two (2) stockpiles, or by what method the RAP will

- be controlled to keep the resultant mix within Acceptable limits;
4. Account for the weight of the binder in the RAP when batching aggregates;
 5. Provide RAP that is free of Deleterious Materials; and
 6. Perform process control testing in accordance with Section 901, "Quality Control/Quality Assurance (QC/QA)" and Table 901.5:3, "Minimum Process Control Guidelines for Aggregates, Base Course, and RAP (QC);" as RAP is produced and prepared for inclusion in the HMA.

If problems with HMA consistency or compliance with Project Specifications occur, additional efforts taken to achieve Acceptable levels of consistency and compliance with Contract Specifications, at the Contractor's discretion (at no additional cost to the County), include, but are not limited to:

1. Reduce the top size of the RAP from 1-1/2 inch to one (1) inch;
2. Fractionate the aggregates on a second screen, such as the 3/8 inch or 1/4 inch Screen so that the RAP is maintained in three (3) stockpiles, one being RAP larger than 1-1/2 inch to two (2) inches, Coarse RAP and the third being Fine RAP;
3. Ensure that the RAP used in the HMA mix design is representative of the RAP available on the Project;
4. Cover the RAP pile(s) so that ambient moisture is not absorbed; and
5. Process and maintain the stockpiles so that the RAP Material is equally and uniformly distributed throughout the entire stockpile(s) and is withdrawn such that uniform, non-segregated RAP is delivered to the hoppers

423.2.8 Mix Design

The Contractor shall provide a mix design developed by a NMDOT approved testing Laboratory, reviewed and signed by a professional Engineer licensed by the New Mexico Board of Registration for Professional Engineers and Land Surveyors. A list of approved private testing laboratories is available from the NMDOT State Materials Bureau. The Contractor shall develop the mix design at no additional cost to the County. The Contractor may develop the mix design at any time prior to the Project Pre-Construction meeting.

The Contractor shall provide to the Project Manager the mix design developed in accordance with the Contract documents and AASHTO R35 as modified by NMDOT for review and concurrence. The Contractor shall summarize the mix design results from the NMDOT approved testing Laboratory. County concurrence of a mix design will not relieve the Contractor of full responsibility for producing an Acceptable mixture. The mix design may require adjustment in accordance with Section 423.2.9, "Job Mix Formula. The County will require a minimum of one percent (1.0%) for mix designs that include hydrated lime, anhydrite based Material, or Portland cement. The Contractor shall include these mineral admixtures in the gradation for developing the mix design. AASHTO T 354 may be used in lieu of AASHTO T 84/T 85. If lubricating antistripping is used as a mineral admixture, the percent dosage shall be done in accordance with the manufacturer's recommendation and approved by the Contractor's design Lab. Lubricating antistripping shall be approved by the County and included in the most current NMDOT Approved Products List (APL). The mix design shall be in accordance with Table 423.2.8:1, "HMA Superpave Design Requirements for Aggregates with

Less Than three percent (3.0%) Absorption,” or Table 423.2.8:2, “HMA Superpave Design Requirements for Aggregates with three percent (3.0%) or Greater Absorption” of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction.

The Contractor shall test the HMA in accordance with AASHTO T 283, as indicated below:

1. Use six (6) inch diameter specimens; Compact all test specimens in accordance with AASHTO T 312;
2. Conditioned specimens shall include one (1) freeze thaw cycle;
3. On the AASHTO T283 Section 11.3 scale of zero (0)-five (5), with five (5) exhibiting the most damage from moisture, visually estimate the amount of damage caused by moisture on the interior surfaces of each broken specimen; and
4. The tensile stress ratio shall be a minimum of 85%. The Contractor shall provide a mixture that meets all applicable criteria. If tests indicate the need for additives or modifiers not specified in the Contract or a change in source of binder to satisfy mix design requirements, the Contractor shall perform the required changes at no additional cost to the County.

NMDOT reviewed commercial mix designs are Acceptable for use on Project with the concurrence of the Project Manager The commercial mix design will be submitted for review and concurrence by the Project Manager for conformance with the Contract documents and re-issued with Project information.

An approved mix design is valid up to one (1) year from the date of review. If the Aggregate Index expires within that year, a new Aggregate Index needs to be established in order to keep the mix design valid. The Contractor shall submit a new mix design if changing the source of Materials.

For Projects that are longer than one (1) year and aggregate Materials are produced and stockpiled the mix design and Aggregate Index (AI) may be approved for an extension by the Project Manager.

423.3 CONSTRUCTION REQUIREMENTS

423.3.1 General

The Contractor shall:

1. Provide sufficient storage space for each size of aggregate and RAP;
2. Keep the different sizes separate and ensure that segregation, degradation, or combination of Materials of different aggregate sizes does not occur until delivery to the cold feed system; Re-screen or waste segregated or degraded Material;
3. Provide separate storage and feeder for mineral filler if the Contract requires mineral filler; and
4. If the Project Manager determines that uncoated aggregate exists, the Contractor shall take corrective action.

423.3.2 Mix and Laydown Temperature Requirements

The Contractor shall not allow the temperature of the HMA discharged from the mixer into the transport vehicle to be greater or less than ten percent (10%) of the target mixing temperature specified in the mix design, not to exceed 350° F, unless written concurrence by the asphalt binder supplier and design lab are provided to the Project Manager.

HMA delivered to the Project with mix temperatures outside the acceptable laydown temperature range as specified in the mix design shall, at the sole discretion of the Project Manager, be removed and replaced at no cost to the County.

423.3.3 Addition of Mineral Admixtures

The Contractor shall:

1. Monitor the out feed of the mineral admixture with sensors that provide audible and visual signals to control the out feed with an accuracy of $\pm$ three percent (3.0 %) by weight;
2. Control the mineral admixture content such that it meets the range specified in the approved mix design;
3. Add the mineral admixture to the aggregate in an enclosed pug mill immediately after leaving the cold feed and just before introduction into the drier drum or aggregate drier; and
4. Minimize the loss of mineral admixture while adding to the aggregate.

When mixing the aggregate and mineral admixture, the Contractor shall maintain the moisture content of the combined aggregate at the recommended moisture content as shown on the approved mix design.

423.3.4 Equipment

423.3.4.1 Mixing Plants

423.3.4.1.1 Plant Scales

The Contractor shall ensure that the scales are accurate to 0.5% of the maximum allowable load in accordance with the Federal Motor Carrier Safety Administration (FMCSA) publication, as certified by a licensed scale technician. The Contractor shall submit a copy of the certification to the Project Manager.

423.3.4.1.3 Storage of Asphalt Binder Materials

The Contractor shall provide storage tanks for asphalt binder capable of holding, heating and circulating the asphalt at the required temperatures and measuring the temperature of the asphalt in the tank. The Contractor shall allow measuring and sampling of asphalt binder from the delivery trucks upon arrival.

423.3.4.1.3 Feeder for Drier

The Contractor shall equip the plant with an accurate feeding mechanism to deliver the aggregate into the drier and maintain uniform production.

423.3.4.1.4 Drier

The Contractor shall equip the plant with a system to continuously agitate the aggregate during the heating and drying process. The Contractor shall use a drier that can dry and heat the aggregate and prevent fuel oil or carbon from coating the aggregate. The Contractor shall take corrective action if the aggregate becomes coated with burner fuel.

423.3.4.1.5 Bins

The Contractor shall equip the plant with storage bins large enough to supply the mixer when it is operating at full capacity and arrange the bins to ensure separate and adequate storage of the appropriate aggregate sizes. The Contractor shall equip the bins with warning devices that notify the control panel when the bins are low.

423.3.4.1.6 Asphalt Binder Control Unit

The Contractor shall equip the plant with a scale or meter to control the rate of flow to determine the amount of asphalt binder added to the mix.

423.3.4.1.7 Thermometers

The Contractor shall equip the discharge chute of the drier with a recording thermometer to register the temperature of the heated aggregates or mix. The Contractor shall provide the Project Manager with a record of discharge temperatures at the end of each week's production or as requested by the Project Manager.

423.3.4.1.8 Truck Scales

The Contractor shall weigh the HMA on approved plant or truck scales provided by the Contractor or public scales in accordance with Section 109.1, "Measurement of Quantity."

423.3.4.1.9 Requirements for Batching Plants

423.3.4.1.9.1 Weigh Box or Hopper

The Contractor shall provide a batching plant that can accurately weigh aggregate in a weigh box or hopper suspended on scales. The Contractor shall use a weigh box or hopper that can hold a full batch. The Contractor shall ensure that the gate of the weigh box or hopper does not allow Material to leak into the mixer while being weighed. The Contractor shall test the scales in accordance with Section 109.1, "Measurement of Quantity."

423.3.4.1.9.2 Mixer

The Contractor shall provide a batch mixer with a capacity of at least 2,000 lb, capable of producing a uniform mixture within specified tolerances.

423.3.4.1.9.3 Control of Mixing Time

The Contractor shall equip the mixer with an accurate timing device that signals the end of the mixing time.

423.4.1.10 Drum Mix Plants

The Contractor shall equip the drum mix plant with the following auxiliary Equipment and capabilities:

1. Separate cold feed controls for each Material;
2. An automatic interlocking device for cold feed, asphalt, and mineral admixtures;
3. A means for controlling moisture content of aggregate. A means for sampling individual cold feeds and provisions for sequential sampling of aggregate, RAP, asphalt binder, and mineral admixtures;
4. Equip the bins with mechanical or electrical devices that provide an audible or visual warning when the bins are less than 1/4 full;
5. Bins shall be designed and equipped to prevent segregation;
6. Equip the bin containing fine aggregate and filler, if required, with a device that prevents Material hang-up during plant operation;
7. A minimum of one (1) cold feed bin for each aggregate size in the mix;
8. Equip the cold feed with mechanical or electrical devices that indicate with an audible or visual warning when the cold feed belt is not carrying the proper amount of Material;
9. A separate cold feed for RAP Material. Introduce RAP so that it does not come into direct contact with the burner flame; and
10. Couple the asphalt feed control with the total-aggregate-weight measurement device to automatically vary the asphalt feed rate to maintain the required proportion.

423.3.4.2 Haul Equipment

The Contractor shall haul asphalt mixtures with trucks that are tarped and have tight, clean, smooth metal beds and a thin coat (a minimal amount) of a County approved release agent in accordance with Section 423.3.4.2.1, "Asphalt Release Agent (ARA)."

423.3.4.2.1 Asphalt Release Agent (ARA)

The Contractor shall use Asphalt Release Agents (ARA) for prevention of asphalt mixtures adhering to haul trucks and any other type of Equipment that is used for asphalt paving operations. ARA shall meet the requirements of Table 423.3.4.2.1:1, "Asphalt Release Agent Properties" of the 2019 Edition of New Mexico Department of Transportation Standard Specification for Highway and Bridge Construction. All testing will be in accordance with NTPEP Evaluation of Asphalt Release Agents AASHTO ARA 14

423.3.4.3 Pavers

The Contractor shall use self-contained, self-propelled pavers, with activated screeds or strike-off assemblies, heated if necessary, and capable of spreading and finishing courses of HMA in accordance with the Plans.

423.3.4.4 Compaction Equipment

The Contractor shall provide a sufficient number, weight, and type of rollers to obtain the required compaction and specified pavement density while the HMA is in a workable condition. All rollers must be capable of reversing direction without shoving or tearing the mixture.

423.3.5 Placement Operations

For cold milled surfaces, the Contractor shall prepare the surface in accordance with Section 414, "Cold Milling." The Contractor shall clean the existing surfaces and apply a tack coat as required in the Plans or at an application rate as approved by the Project Manager in accordance with Section 407, "Tack Coat."

The Contractor shall place HMA on prepared Base Course in accordance with Section 303, "Base Course." The Contractor shall apply prime coat as required in the Plans or at an application rate as approved by the Project Manager in accordance with Section 408, "Prime Coat."

The Contractor shall place the HMA on the Accepted surface, spread and compact to specified width, lift thickness, and cross slope in accordance with the Plans.

Materials Transfer Vehicle (MTV): The Contractor shall use a MTV with storage and remixing capabilities on all mainline construction that utilizes greater than 25% RAP when placing HMA State approved designs. The MTV will independently remix and deliver mixture from the hauling Equipment to the paving Equipment.

The Contractor shall furnish an MTV with the following capabilities:

1. An unloading system to receive mixtures from the hauling Equipment;
2. A minimum storage capacity of 13 tons with a remixing system in the MTV storage bin;
3. A discharge conveyor to deliver the mixture to the paver hopper; and
4. The MTV system cannot exceed maximum legal loading on Structures.

Pick-up machines, hopper inserts and Material transfer devices are not considered MTVs. In

the event the MTV malfunctions during paving operations, the Contractor can finish the Day without the MTV. The Contractor shall not resume further mainline mix placement until the MTV is operational.

Consistently overloading the HMA mix into the paving machine is not Acceptable. The Contractor shall coordinate the speed of the paving machine with the production of the plant and keep enough haul Equipment available to achieve continuous operation. The Contractor shall use the control system on the paving machine to control the grade and the transverse slope by either of the following methods:

1. One end directly and the other indirectly through controlling the transverse slope; or
2. Each end independently, including screed attachments.

The Contractor shall suspend operations if the control system does not achieve the typical

section in accordance with the Plans. The Contractor shall place, spread, and finish the courses of HMA according to the following:

1. Without segregation or tearing;
2. True to the line, grade, and crown in accordance with the Plans; and
3. With self-propelled pavers, except as otherwise directed.

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing Equipment impracticable, the Contractor shall dump, spread, and level the HMA by other methods to achieve the required compacted thickness.

423.3.5.1 Weather Limitations

The Contractor shall not place HMA on wet or frozen surfaces or if weather conditions prevent proper handling, finishing, and compacting. The Contractor shall place HMA when the Chill Factor is at least 40 °F and rising. If the air temperature is 60 °F or warmer do not consider the Chill Factor.

423.3.5.2 Compaction

The Contractor shall:

1. Compact the HMA thoroughly and uniformly immediately after placement. Operate rollers at speeds slow enough to minimize displacement of the HMA, including the lines and grades of the asphalt edges. Remove marks from pneumatic rollers;
2. Prevent the HMA from sticking to the roller wheels by keeping the wheels moistened with water; water mixed with very small quantities of detergent or other approved Material. Do not use diesel fuel or other petroleum diluents;
3. At locations inaccessible to the rollers, the Contractor shall compact the HMA with hot hand tampers, smoothing irons, or mechanical tampers;
4. Use a trench roller or cleated compression strips under the roller to transmit compression to depressed areas; and
5. Remove areas that become loose, broken, mixed with dirt, segregated or defective, replace with fresh HMA, and compact to match the surrounding area, at no additional cost to the County.

423.3.5.3 Joints

The Contractor shall off set longitudinal joints at least six (6) inches relative to the longitudinal joints of the underlying course.

Unless otherwise specified, the Contractor shall taper transverse and longitudinal joints as follows:

At least a three (3) ft taper for transverse joints, with a taper slope no steeper than 24:1;

1. At least a one (1) ft taper or a notched taper, for longitudinal joints, with a taper slope no steeper than 6:1 or a notched taper with a one (1) inch vertical edge at the top of the taper connected to a slope no steeper than 6:1;
2. Cut and square off transverse tapers before commencing new Work;
3. Clean and tack coat longitudinal joints from previous operations; and

4. Avoid placing longitudinal joints in the wheel paths, unless approved by the Project Manager.

The Contractor shall completely bond joints and provide smooth surface for each course at the joints. The County will not allow deviations greater than 3/16 inch when tested with a ten (10) ft straightedge in any direction. When paving under traffic, the Contractor shall schedule the daily surfacing operations so that tapered longitudinal joints are not exposed for longer than seven (7) Days.

423.3.5.4 Surface Tolerances

The Contractor shall provide a final HMA surfacing course that conforms to Section 401, "Pavement Smoothness Measurement.

423.3.5.5 Plan Surfacing Thickness

The Contractor shall:

1. Place pavement at the thickness specified in the Contract;
2. Monitor thickness by calculating continuous production yields using the formula found in the MT-1, as maintained by the NMDOT State Materials Bureau;
3. Calculate the required yield and the corresponding yields for 0.25 inch increase (upper limit) and decrease (lower limit). The Project Manager may adjust the required yield to fit field conditions. If adjusted, the new target yield will be communicated to the Contractor in writing;
4. Control production to keep yield within the upper and lower limits;
5. Correct deficiencies at no cost to the County;
6. Correct deficient depths during placement; and
7. Address Plan Surfacing thickness in the Quality Control Plan.

423.3.6 Sampling and Testing

The Contractor shall sample and test in accordance with Section 901, "Quality Control Quality Assurance General Provisions," and Special Provision for Section 906 Minimum Testing Requirements. The County will sample and test in accordance with Section 901, "Quality Control /Quality Assurance General Provisions," and Special Provision for Section 906 Minimum Testing Requirements.

A Quality Control/Assurance asphalt concrete material field sample shall be taken in accordance with the requirements of ASTM D979 for each job mix delivered. The materials shall be sampled at the greater rate of either one sample for each 500 tons, or one sample perday, for each type of material placed on a project, as directed by the Project Manager. The sample shall be of such size to provide material for all tests specified and a split sample to perform verification/referee tests for gradation and binder content, if required.

423.3.6.1 CONTRACTOR QUALITY CONTROL FOR COMPACTION

The Contractor shall:

1. Monitor the compaction process by determining the density of the HMA with a portable densometer in accordance with the Plan;
2. Establish calibration of the portable densometer from cut pavement samples;
3. Determine the density readings of the cut pavement samples in accordance with AASHTO T 166 (weight, volume method); determine the density readings of the pavement with the portable densometer and correlate these test results;
4. Conduct Quality Control testing in accordance with Division 900, "QUALITY CRITERIA" and provide test results to the Project Manager;
5. Perform Quality Control density testing while the asphalt mixture is hot enough to permit further compaction;
6. Not roll for compaction when it becomes ineffective or damages the HMA; and
7. Not use vibratory mode when it becomes ineffective or damages the HMA.

The County shall perform Quality Assurance compaction testing in conjunction with contractor.

423.3.6.2 Acceptance

The County will evaluate Materials using Contractor and County test data for Acceptance.

Acceptance Testing Tolerances^a	
Characteristic	Specification limit, percentage points from TV
Air Voids, %	± 1.4
Pavement Density % ^c	± 2.5
Mineral Admixture % ^e	Minimum of JMF Target Value
Voids in the Mineral Aggregate (VMA), % ^{a,d}	± 1.6
Asphalt Content % ^{a,b}	± 0.50

^a All gradation, Asphalt Content, VMA, and VFA values shall be determined using the AASHTO T 308 testing results.

^b HMA will not be rejected based on Asphalt Content Determined by AASHTO T 308.

^c Density payment will be adjusted in accordance with Section 901.3.11, "QLA."

^d If Gmm fluctuates more than ±0.03 on a consistent basis, it is recommended that the Specific Gravity of the aggregates be checked in order to verify VMA.

^e If Mineral Admixture is below Design TV cease hot mix production, investigate and correct.

423.3.6.2.1 Acceptance of Pavement Density

The target density for Acceptance of HMA will be 94.50% of the theoretical maximum density as determined from AASHTO T 209. For determination of maximum specific gravity, the Contractor shall obtain and test a minimum of two (2) samples and ensure the County obtains

and tests a minimum of one (1) sample for each Day that the HMA is placed. Each individual density test value obtained less than 92.0% or more than 97.0% of the theoretical maximum density will be evaluated in accordance with Section 423.3.6.3.2, "Adherence to Specifications and Rejection of Non-specification Material."

For purposes of Acceptance and pay factor determination:

1. Determine the density from cut pavement sections (cores) with six (6) inch diameters extending through the full thickness of the HMA;
2. Determine the pay factor in accordance with Section 904, "Quality Level Analysis;"
3. To be prepared for dispute resolution, the Contractor shall provide one (1) additional core for each core tested by the County for Acceptance of density in

accordance with section 423.3.7, "Dispute Resolution;" and

4. If a composite pay factor of more than one (1.00) is calculated, the composite pay factor will be a one (1.00) for the purposes of payment.

423.3.6.2.2 Adherence to Specifications and Rejection of Non-Specification Material

The Contractor shall produce Material in substantial compliance with all Specification requirements. The County will evaluate Air Voids, Pavement Density, Void in Mineral Aggregate (VMA), and Asphalt Content test results for Specification compliance. Evaluation of Material that does not meet Specifications will be in accordance with the following:

Individual Test Results.

If an individual test is outside the Specification limits but is less than two (2) standard deviations from the mean of previously produced Material of the current lot, investigate and propose corrective actions but production may continue and the result will be entered into QLA. If an individual test result (for the current lot) is outside the Specification limits and is two (2) or more standard deviations from the mean of previously produced Material, the Contractor shall cease production, investigate the causes of the failure, and propose corrective actions. The Contractor shall not resume production until the proposed corrections are approved by the Project Manager.

Consecutive Test Results.

If two (2) consecutive test results of the same property (for the current lot) are outside the Specification limits, cease production, investigate the causes of the failure, and propose corrective action. The Contractor shall not resume production until the proposed corrections are Accepted by the Project Manager in writing. Limit production to a maximum of 1,000 tons, production will include a minimum of two (2) Contractor tests and one (1) County test. If testing indicates that the problem has been corrected, the Contractor shall resume full operations. If the problem has not been corrected, the Contractor shall perform further trial runs and testing.

Pavement Density Below 90.000%.

All pavement density tests that are below 90.000% are rejected and the Contractor shall remove and replace all Material represented by the test with Specification Material at the Contractors expense. The Contractor shall submit a Plan in writing for approval by the Project Manager that determines the limits of Material to be removed within 48 hours of reporting a Quality Control test or receiving a Quality Assurance test for pavement density below 90.000%

density. If the test below 90.000% is a County test, the County will obtain a new test from the Material replaced by the Contractor to replace the density test reported by the County. If the test below 90.000% is a Contractor test, the Contractor shall obtain a new test from the Material replaced by the Contractor to replace the test reported by the Contractor. The test obtained from the replaced Material will be input into the QLA to replace the test below 90.000%. All Material that is rejected, at the sole discretion of the County, shall be removed and replaced with Specification Material at the Contractor's expense. If the Material is allowed to remain in place by the County all random, sample data will be entered into QLA, this does not apply to pavement density below 90.000% that shall be removed and replaced. Sampling for corrective action will not be entered into QLA.

The Project Manager may reject Material that appears to be defective based on visual inspection.

423.4 METHOD OF MEASUREMENT

If the County measures HMA by the square yard, the County will use the average width of the HMA in place and the length from station to station along the centerline of the Roadway when calculating quantities.

423.5 BASIS OF PAYMENT

<u>Pay Item</u>	<u>Pay Unit</u>
HMA Complete	Ton or Square Yard
HMA	Ton or Square Yard

The County will pay for Accepted quantities at the Bid Item Unit Price. Providing and transporting all cores, samples and storage containers shall be Incidental to the Pay Items above.

423.5.1 Work Included in Payment

The County will consider as included in the payment for the pay item(s) listed in this section and will not measure or pay separately for the following Work:

1. Asphalt binder, aggregate, blending sand, mineral filler, mineral admixture, and WMA additive or process as appropriate;
2. Mixing, hauling, placement, and compaction of HMA or WMA;
3. Quality Control in accordance with Section 902, "Quality Control;"
4. Providing and transporting all cores for correlation;
5. Providing Mix Design in accordance with Section 423.2.8, "Mix Design;" and
6. Providing storage container for samples and cores if referee testing is used.



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