Special Provisions

INDEX OF SPECIAL PROVISIONS

The 2019 Edition of the New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction (Standard Specifications) shall govern construction of this Project unless otherwise noted.

The following Special Provisions shall supplement the above Standard Specifications.

STANDARD SPECIAL PROVISIONS

Modifying Section 100: Section 100 for TLPAs (4/21/23)
Clarifying Section 106.12: Buy America Requirements (10/3/22)
Modifying Sections 511: Concrete Structures, 532: Penetrating Water Repellent Treatment, 533: Concrete Structure Repair, 606: Metal Barrier, Cable Barrier and Concrete Wall Barrier (2/8/21)
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 (3/4/20)
Modifying Section 303: Base Course (8/8/22)
Modifying Section 402: Asphalt Materials and Mineral Admixtures (8/8/22)
Modifying Section 405: Detour Pavements (7/26/22)
Modifying Section 416: Minor Paving (1/21/21)
Modifying Section 423: Hot Mix Asphalt (HMA) (Major Paving) (5/28/19)
Modifying Section 452: Sealing and Resealing Concrete Pavement Joints (7/13/20)
Modifying Section 501: Driven Piles (4/6/20)
Modifying Section 502: Drilled Shafts (9/29/21)
Modifying Section 504: Load Testing of Bearing Piles (4/6/20)
Modifying Section 509: Portland Cement Concrete Mix Designs (6/13/22)
Modifying Section 511: Concrete Structures (2/1/21)
Modifying Section 512: Superstructure Concrete (4/15/19)
Modifying Section 514: Concrete Barrier Railings for Bridges (12/20/19)
Modifying Section 518: Prestressed Concrete Members (3/10/22)
Modifying Section 537: Polyester/Epoxy Concrete Overlay (12/20/19)
Modifying Section 540: Steel Reinforcement (7/15/21)
Modifying Section 542: High-Strength Bolts (5/27/22)
Modifying Section 543: Metal Railing (12/20/19)
Modifying Section 548: Coating of Concrete (2/8/21)
Modifying Section 560: Elastomeric Bearing Pads (5/9/19)
Modifying Section 562: Bridge Joint Strip Seals (12/7/20)
Modifying Section 601: Removal of Structures and Obstructions (5/14/21)
Modifying Section 602: Slope and Erosion Protection Structures (9/29/21)
Modifying Section 603: Temporary Erosion and Sediment Control (4/6/23)
Modifying Section 606: Metal Barrier, Cable Barrier and Concrete Wall Barrier (1/1/19)
Modifying Section 607: Fence (7/17/23)
Modifying Section 610: Cattle Guards (9/10/21)
Modifying Section 618: Traffic Control Management (9/22/20)
Modifying Section 621: Mobilization (4/8/22)

Modifying Section 622: Field Laboratories and Field Offices (5/3/23)
Modifying Section 632: Revegetation (7/17/23)
Modifying Section 635: Bat Boxes (7/25/23)
Modifying Section 701: Traffic Signs and Sign Structures (5/10/21)
Modifying Section 702: Construction Traffic Control Devices (12/1/22)
Modifying Section 704: Pavement Markings (8/7/20)
Modifying Section 704-A: Temporary Marking Tape (12/23/19)
Modifying Section 704-B: Retroreflective Preformed Plastic Markings (Tape) (12/23/19)
Modifying Section 704-C: Hot Thermoplastic Markings (12/23/19)
Modifying Section 704-D: Preformed Thermoplastic Pavement Markings (12/23/19)
Modifying Section 706: Signal and Lighting Service Systems (3/7/19)
Modifying Section 713: Detectors (5/24/19)
Modifying Section 716: Luminaires (5/1/19)
Modifying Section 902: Quality Control (2/11/19)
Modifying Section 904: Quality Level Analysis (QLA) (1/1/19)
Modifying Section 905: Quality Assurance for Minor Paving (1/21/21)
Modifying Section 906: Minimum Testing Requirements (MTR'S) (5/12/22)

PROJECT-SPECIFIC SPECIAL PROVISIONS
For Section 601: Removal of Structures and Obstructions (2/7/24)
For Section 602: Slope and Erosion Protection Structures (9/5/23)

April 21, 2023

SPECIAL PROVISIONS
MODIFYING
DIVISION 100: GENERAL PROVISIONS

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 **Sections 101 through 109** in its entirety and replace with the following:

SECTION 101: ABBREVIATIONS, SYMBOLS, TERMS, AND DEFINITIONS

101.1 ACTIVE VOICE, IMPERATIVE MOOD, REFERENCES, USE OF LANGUAGE

These General Conditions were developed with an emphasis on the active voice. In a sentence written in the active voice, someone acts on something. For example: “The Engineer will take a sample.” A similar sentence in the passive voice “A sample will be taken” would be unclear about who was responsible for taking the sample.

This edition of the Standard Specifications also makes use of the imperative mood. The imperative mood is used when the party issuing an instruction and the party receiving it are already understood. In these Standard Specifications, the T/LPA is stating its requirements or directions for Work to the Contractor; such statements have the same force as if they contained the word “shall.” In an imperative sentence such as, “Pour the concrete,” the T/LPA is indicating that it requires the Contractor to pour the concrete. Before an Award of a Contract, imperative statements are directed to the Bidder. After a Contract has been Awarded, imperatives are directed to the Contractor. The Standard Specifications are divided into various parts in this order: divisions, sections and subsections.

The T/LPA will identify parties other than the Bidder or Contractor to whom it gives a responsibility in these Standard Specifications. In phrasings where the responsible party has already been clearly identified or in factual statements when it is not important to do so, the T/LPA may use the passive voice.

The word “shall” is used in a mandatory or imperative sense and signifies that the T/LPA is imposing a duty on a person or body that is the subject in the sentence. The word “may” is used to signify the conferring of a discretionary power, privilege, or right. However, use of the term “may not” signifies that a right, privilege, or power is intended to be denied.

The titles or headings of the sections and subsections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

The Contractor, having an obligation to comply with, observe, and comply with all federal and State law and regulations, any reference to any federal or State law or regulation shall constitute a reference to any applicable amendment or successor law or regulation.

101.2 ABBREVIATIONS

When the following abbreviations are used in the Plans, the Specifications, other Contract documents, and T/LPA correspondence, their meaning is as follows:

Table 101.2:1
Acronyms and Abbreviations

Acronym or short form	Full name or meaning
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AI	Aggregate Index
AMRL	AASHTO Material Reference Laboratory
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
AWPA	American Wood Preservers' Association
AWWA	American Water Works Association
CBC	concrete box Culvert
CCD	closed circuit detection
CD	compact disc
CFR	Code of Federal Regulations
CMP	corrugated metal pipe
CN	control number
CPM	Critical Path method
CTR	certified test report
CWB	concrete wall barrier
DBE	disadvantaged business enterprise
EA	Entrance Angle
ESAL	equivalent single axle loading
FHWA	Federal Highway Administration
GRT	gross receipt tax
HDPE	high density polyethylene
HFE	high-float emulsion
HID	high-intensity discharge
HMA	hot-mix asphalt
HMWM	high molecular weight methacrylate
IES	Illuminating Engineering Society
IMC	intermediate metallic conduit
ITE	Institute of Transportation Engineers
JMF	Job Mix Formula
LCD	liquid crystal display
LL	liquid limit

Table 101.2:1 Acronyms and Abbreviations	
Acronym or short form	**Full name or meaning**
SDS	Safety Data Sheet
MTR	mill test report
MUTCD	Manual on Uniform Traffic Control Devices
MFBM	Thousand Board Feet
NCHRP	National Cooperative Highway Research Program
NEC®	National Electrical Code®
NEMA	National Electrical Manufacturers Association
NMAC	New Mexico Administrative Code
NMDA	New Mexico Department of Agriculture
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NMSSPWC	New Mexico Standard Specifications for Public Works Construction
NPDES	National Pollutant Discharge Elimination System
NTSC	National Transmission Standards Committee
OA	Observation Angle
OGFC	open-graded friction course
OSHA	Occupational Safety and Health Administration
PCC	portland cement concrete
PCCP	portland cement concrete pavement
PCI	Prestressed Concrete Institute
PCT	process control technician
PE-P	penetrating emulsified prime
PI	plasticity index
PTL	private testing Laboratory
PVC	polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
QCT	Quality Control technician
QLA	Quality Level Assurance
RAP	reclaimed asphalt pavement
ROW	Right of Way
SSPC	Society of Protective Coating (formerly Steel Structures Painting Council)
SWPPP	storm water pollution prevention plan
TERO	Tribal Employment Rights Organization
TTCP	Technician Training and Certification Program
TV	target value
UBC™	Uniform Building Code™
UL	Underwriters Laboratories
USEPA	United States Environmental Protection Agency
UV	Ultraviolet
VMA	voids in mineral aggregate
VTM	voids in total mix
WMA	warm mix asphalt

101.3 SYMBOLS

Within the Specifications and Contract, reference to the English system of measurement symbols is a reference to the U.S. Customary (Inch-pound) system.

Some of the symbols for units of measurement used in the Specifications and in the Bid Schedule are defined as shown in Table 101.3:1, “Measurement Symbols.” The symbols for other units of measurement used in the Specifications are as defined in the various Specifications and tests referenced in the Specifications.

Table 101.3:1
Measurement Symbols

Physical Characteristic	Unit name	Symbol
Length	Microinch	µin
	mil (0.001 inch)	Mil
	Inch	In
	Foot	Ft
	Yard	Yd
	Mile	Mi
Area	square inch	in^2
	square foot	ft^2
	square yard	yd^2
	square mile	mi^2
	Acre	Acre
Volume	Pint	Pt
	Quart	Qt
	Gallon	Gal
	cubic inch	in^3
	cubic foot	ft^3
	cubic yard	yd^3
Mass (weight)	Ounce	Oz
	Pound	Lb
	ton, short (2,000 lb)	Ton
Temperature	degree Fahrenheit	°F
Time	Millisecond	Ms
	Second	S
	Minute	Min

Table 101.3:1
Measurement Symbols

Physical Characteristic	Unit name	Symbol
	Hour	H
Speed	miles per hour	Mph
Pressure	pound-force per square inch	Psi
Power, energy and electricity	Watt	W
	Kilowatt	kW
	Milliampere	mA
	Ampere	A
	Volt	V
	Volt-ampere	VA
	Ohm	Ω
	Hertz	Hz
	Joule	J
	Lumen	Lm
	Footcandle	Fc
	Horsepower	Hp
Force	pound-force	Lbf
	1,000 pounds-force	Kip
Torque	pound-force foot	lbf•ft
Viscosity, dynamic	Centipoises	cP
	Poise	P
Viscosity, kinematic	Centistokes	cSt
Flow	gallons per minute	Gpm
Concentration	parts per million	Ppm
Inductance	Henries	H
Frequency, concrete consolidation	vibrations per minute	Vpm
Sound	Decibel, A-Scale	dbA

101.3.1 Engineer's Estimate Symbols

The measurement symbols shown on the Engineer's Estimate may differ from those found in the rest of Contract documents. Table 101.3.1:1, “Symbols for Engineer's Estimate,” lists and defines the symbols found in both the Engineer’s Estimate and Contract documents.

Table 101.3.1:1
Symbols for Engineer's Estimate

Symbol	Unit of measure or meaning
LS	Lump Sum
EACH	Each
ALOW	Allowance
L.F.	Linear Foot
MILE	Mile
S.F.	Square Foot
S.Y.	Square Yard
SYIN	Square Yard Inch
ACRE	Acr
C.Y.	Cubic Yard
LB	Pound
TON	Ton

101.4 TERMS AND DEFINITIONS

Unless the context otherwise requires, if the following capitalized terms are used in the Contract documents and T/LPA correspondence, the intent and meaning shall be interpreted as follows:

Acceptance. (Also called **Accept, Accepted and Acceptable**) 1) The determination by the **T/LPA** that **Materials** and **Work** are in compliance with the **Contract**. 2) The process by which the **T/LPA** determines whether or not the quality of produced **Material** or **Work** is **Acceptable** pursuant to the **Contract**, including sampling, testing, certifications and assessment of test results. **Acceptance** shall not be construed as a warranty by the **T/LPA** that the **Contractor's** methods will succeed or will be the most efficient or economical method of accomplishing the **Work**, nor shall the term be construed that the actual **Materials** used in construction will perform as represented in test results supplied to the **T/LPA** by the **Contractor**.

Addendum. A change in the **Contract** issued after the **Advertisement** and before the **Bid Opening**.

Advertisement. A public announcement, as required by law, inviting **Bids** for **Work** to be performed or **Materials** to be provided. Also called **Invitation for Bids**.

Apparent Low Bidder. The **Bidder** who submits a **Total Bid Amount** that is numerically lower than the **Total Bid Amount** submitted by other **Bidders**, but who's **Bid** may later be subject to rejection, recalculation or other modification that may change the order of **Bidders**.

Award. The **T/LPA's** selection of a **Bidder's Bid** subject to the **Contractor's** and **T/LPA's** execution of the **Contract**.

Base Course. The layer or layers of specified **Material** placed on a **Subbase** or a **Subgrade** normally used to support a **Surface Course**.

Basis of Payment. The terms under which **Work** is paid, as a designated **Pay Item** in accordance with the quantity measured and the **Pay Unit**. Basis of Payment includes the performance of all **Work** and furnishing of all labor, **Equipment**, **Materials** and **Incidentals** described in the text of a specific item included in that **Contract**.

Bid. The offer of a **Bidder** for performing the **Work** at the prices quoted.

Bidder. An individual, partnership, firm, corporation, joint venture, or their authorized representative submitting a **Bid**.

Bid Form. The approved form on which the **T/LPA** requires **Bidders** to prepare and submit **Bids**.

Bid Guaranty. The security provided with a **Bid** to guarantee that the **Bidder** will enter into the **Contract** if the **T/LPA Accepts** its **Bid**.

Bid Item (Contract Item, Pay Item). A specifically described unit of **Work** for which a **Bidder** provides a **Bid Item Unit Price** and **Bid Item Price**. The **Bid Items** become **Contract Items** when the **Contract** is fully executed. The **Contract Items** become **Pay Items** when calculating **Progress Payments**.

Bid Item Price. The extended price established by the **Contractor** for each individual **Bid Item** on the **Bid Schedule** which is the product of the **Bid Item** quantity and the **Bid Item Unit Price.**

Bid Item Unit Price. The price established by the **Contractor** for each unit of an individual **Bid Item** on the **Bid Schedule**. A **Bid Item Unit Price** reflects a **Bidder**'s actual and direct costs for the item plus a reasonable proportionate share of the **Bidder's** anticipated profit, overhead costs, and other indirect costs.

Bid Opening. A public reading of the properly submitted **Bids**, on a date established by the **Advertisement**.

Bid Schedule. Listing or table of **Bid Items** containing the estimated quantities for which **Bid Item Unit Prices** are invited.

Borrow Pit. A **Contractor** selected source outside the **Roadway Prism** from where suitable **Material** is obtained.

Breakaway. The ability of a system to yield at a predetermined impact force.

Bridge. A **Structure** having a length — as measured along the center of the **Roadway** — of more than 20 ft between undercopings of abutments or extreme ends of openings for multiple boxes or extreme ends of openings for Culverts placed in series with a spacing between Culverts not exceeding ½ the diameter, and carrying a pathway or **Roadway** over a depression or obstacle. It includes all appurtenances necessary to its proper use. The length of a **Bridge Structure** is the distance along the line of survey stationing back-to-back of backwalls of abutments, if present, or end-to-end of the **Bridge** floor, and in no case less than the total clear opening of the **Structure**. The **Bridge Roadway** width is that clear unobstructed width of **Bridge** deck available for vehicle use measured normal to the centerline of the **Bridge**.

Business Hours. **Business Hours** are the hours during the Day as established by the governing body of the **T/LPA** in which business is commonly conducted.

Calendar Day. Each and every **Day** shown on the calendar, beginning and ending at midnight. Also referred to as "**Day.**"

Certificate of Compliance. A certification, including a signature by a person having legal authority to act for the manufacturer, stating that the product, assembly, or **Material** to be incorporated into the **Project** was fabricated in accordance with and meets the applicable terms of the **Contract**.

Change Order. A **Change Order** is the only method authorized for changing the **Contract**. A written order, with or without the consent of the **Contractor**, implementing the **Contract** changes. A **Change Order** may consist of a **Supplemental Agreement** or **Field Sheet**.

Chief Engineer. The **Engineer** in charge of the design of **Projects**, acting either directly or through his duly authorized representatives, for the **T/LPA**.

Chief Procurement Officer. The person designated by the T/LPA who is responsible for the control of procurement of items of tangible personal property, services or construction. "**Chief Procurement Officer**" includes the **State** purchasing agent.

Chill Factor. The ambient temperature (in degrees Fahrenheit) minus wind velocity (in miles per hour).

Claim. A timely **Contractor** request or demand for a **Contract** adjustment, equitable adjustment, additional time or compensation and other contractual damages, **Delay** damages, an extension of **Contract Time**, certified pass-through **Subcontractor Claims**, or for any other remedy arising from a dispute, disagreement, or controversy concerning respective rights and obligations under the **Contract**.

Commercial Material Source. A **Material** source that has been utilized by a private producer in a commercial operation from which **Material** has been sold within the last 24 months before the date of the letting.

Completion Dates. Contracts may have the following **Completion Dates** as defined herein:
Substantial Completion Date;
Physical Completion Date; or
Mandatory Completion Date.

Construction Maintenance Easement (CME). A real property interest in land acquired by the **T/LPA** in conjunction with a **Highway, Street, or Road Project** to provide permanent access to private property to perform specific construction and maintenance functions.

Construction Liaison Engineer (CLE). An engineer employed by the **NMDOT** assigned to oversee each T/LPA administered **Project** to ensure compliance with Federal requirements throughout design and construction. The CLE will perform **Project** inspections on any/all **Project** files and will provide at a minimum a final inspection report on all **Projects**.

Construction Zone. The area within the **Right of Way** from the first traffic control sign announcing the **Road Work** to the last sign announcing the end of **Road Work** within which the **Contractor** shall perform construction activities.

Contract. The entire and integrated written agreement between the **T/LPA** and the **Contractor** setting forth the obligations of the parties, including, but not limited to, the performance of the **Work** and the **Basis of Payment**.

The **Contract** includes the **Advertisement**, **Required Documents for Bid Submittal**, **Standard Specifications**, **Supplemental Specifications**, **Special Provisions**, **Addenda**, **Notice To Contractors**, general and detailed **Plans**, **Standard Drawings**, and **Notice to Proceed** — also any **Change Orders** and agreements that are required to complete the construction of the **Work** in an **Acceptable** manner, including authorized extensions thereof, all of which constitute one (1) instrument.

Contract Bonds. The approved form of security executed by the **Contractor** and the **Contractor's Surety** or sureties. The performance bond guarantees complete execution of the **Contract** and all **Change Orders** pertaining thereto, and the payment bond guarantees payment of all legal debts pertaining to the construction of the **Project**.

Contractor. The individual, partnership, firm, corporation, or joint venture contracting with the **T/LPA** for performance of the **Work**.

Contract Time. The time specified in the **Advertisement** for completion of the **Contract**. This time may be defined as a specified fixed date(s), **Mandatory Completion Date**, a given

number of **Working Days**, or a given number of **Calendar Days** or a combination of the above. The **Contract Time** may be amended by a **Supplemental Agreement** to include authorized time extensions as the performance of the **Contract** requires.

County. The **County** in which the **Work** herein specified is to be done.

Cultural Resource. Any prehistoric or historic period artifact, site, building, **Structure**, material remains, or traditional use area resulting from, or associated with, human cultural activity. Historically important **Cultural Resources** are those eligible for inclusion on the National Register of Historic Places or placed on the New Mexico register of cultural properties either permanently or temporarily per NMSA 1978, Section 18-6-3 and the National Historic Preservation Act Section 106.

Cultural Resource Professional. An individual that is permitted to meet the requirements of the Cultural Properties Act, NMSA 1978, 18-6-1 through -17 and issued by the Cultural Properties Review committee with the concurrence of the **State** Archaeologist and the **State** historic preservation officer or appropriate tribal preservation officer, or federal land managing agency when applicable.

Culvert. Any **Structure** not classified as **Bridge** or casing that provides an opening under a **Roadway**.

Critical Path. The longest continuous sequence of activities through the **Project** schedule that establishes the minimum overall **Project** duration to **Substantial Completion**.

Critical Path Method Schedule. A network based method to represent the **Contractor's** plan for constructing the **Project**. The **Critical Path Method Schedule** consists of two primary components 1) Activities that represent the entire **Project** scope of **Work** and 2) logic relationships that connect the activities to one another to determine the sequence of **Work**.

Day. Calendar Day.

Delay. Any event, action, force or factor that negatively impacts the **Critical Path** on the **Project**, whether it be excusable, inexcusable, nonexcusable, concurrent, compensable or noncompensable.

Deleterious Material. Unacceptable **Material** detrimental to the final product.

Detour. A temporary route for traffic (vehicular or otherwise) around a closed portion of a **Project.**

Debarment. Any final order of the secretary of the New Mexico General Services Department - **State** Purchasing Division, that denies a **Contractor** the right to **Bid** or offer to enter into a **Contract**, other than a contract for **Professional Services**, with the **State** purchasing agent or any company (entity) or individual that has been declared ineligible to receive

Federal **Contracts** or certain subcontracts and from certain types of Federal financial and nonfinancial assistance and benefits that is listed in the System for Award Management (SAM) electronic roster.

District. The six **Highway** construction **Districts** established by the **NMDOT** for the purpose of executing the **NMDOT's** construction, maintenance, and administrative activities.

District Engineer. The **Engineer** in charge of a **NMDOT District**.

Embankment. The portion of a **Roadway** that is below the **Subbase**, **Base Course**, and **Surface Courses** and that is built up in layers consisting principally of soil and broken rock or a combination thereof.

Engineer. Whenever the word "**Engineer**" is used in these General Conditions is shall be understood as referring to the licensed professional **Engineer** in the **State** of New Mexico designated by the T/LPA to be in charge for the T/LPA, acting personally or through any assistants duly authorized by the **Engineer**.

Entrance Angle (EA). The angle between the reference axis and the axis of incident light (Counter-clockwise rotation of the reference axis relative to the axis of incident light is considered positive.)

Environmental Professional. An individual qualified to perform **Hazardous Material** investigations. This individual must possess the qualifications described in 40 C.F.R. Section 312 Subpart C, the USEPA's Standards and Practices for All Appropriate Inquiries.

Environmental Bureau Manager. The individual in charge of the Environmental Bureau of the **NMDOT**.

Environmental Geology Bureau Manager. The individual in charge of the Environmental Geology Bureau of the **NMDOT**.

Environmental Resource. The physical and biological components of the human and natural environment.

Environmental Specialist. An individual with at least four (4) years of full-time paid experience in environmental investigations, including analyzing and preparing documentation needed to meet the FHWA approval requirements for the National Environmental Policy Act and related legislation.

Equipment. All machinery, tools, and **Equipment**, together with the necessary supplies for upkeep and maintenance, necessary for the construction and completion of the **Contract**.

Extra Work. Work not provided for in the **Contract** but found by the **Project Manager** to be essential to the satisfactory completion of the **Contract** within its intended scope.

Fabricator. A **Supplier** that fabricates or supplies **Structural Steel** or other structural items.

Field Sheet. A type of **Change Order** that does not require a **Contractor's** signature.

Final Acceptance: The **T/LPA's** payment of the balance due on the final payment voucher.

Free Float: The amount of time identified in a specific activity that can be delayed without causing a delay to successor activities.

Total Float or Float: The amount of time that an activity can be **Delayed** without causing a **Delay** to the **Critical Path** or negatively impacting the **Project Completion Date**.

Force Account. The **Basis Of Payment** for the directed performance of **Work**, with payment based on the actual cost of labor, **Equipment**, and **Materials**, and including various constant additives.

Fractured Face. At least one-half of the projected particle area exhibits a rough, angular, or broken texture with well-defined edges.

General Office. The **T/LPA's** main place of business unless otherwise designated by the **T/LPA**.

Hazardous Materials. Any substance, product, waste, or other **Material** of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to all applicable laws all as amended, or any other federal, **State**, or local statute law, ordinance, resolution, code, rule, regulation, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic, or dangerous waste, substance, or **Material**.

Highway, Street, or **Road.** A general term denoting a public way for purposes of vehicular or pedestrian travel.

Holiday. Any day recognized as a paid legal **Holiday** for the employees of the **T/LPA.**

Independent Assurance. A construction management tool in which a third party, not directly responsible for process control or **Acceptance**, provides an independent assessment of the **Work**, **Materials**, or the reliability of test results obtained from process control and **Acceptance** testing.

Incentive/Disincentive Provision. Predetermined adjustments to the **Contract** price.

Incidental. Occurring or likely to occur at the same time or as a result of other items of **Work** as

specified in the **Contract** for which no separate or additional payment will be made. Unless otherwise indicated in the **Contract**, **Incidental** costs shall be included in the **Contractor's Bid Item Unit Price** for **Bid Item** 621000 Mobilization.

Indian Tribe. Any **Indian Tribe**, band, nation, or other organized group or community that is recognized by the United States as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Inspector. Individual assigned to make detailed inspections of **Contractor's Work**.

Job Mix Formula (JMF). The combined aggregate gradation and the percentage of each **Material** component in the mix.

Laboratory. A testing **Laboratory** of the **T/LPA**, **Contractor** or any other testing **Laboratory** that is AMRL Certified.

Landscape Architect. The individual designated to in charge of Landscape Architecture for the **T/LPA**.

Lighting and Signal Engineer. The **Engineer** in charge of the **T/LPA's** signal and lighting design.

Local Public Agency (LPA). A municipality, **City**, **County**, village, special authority or any other instrumentality of a local government sponsoring a federally funded transportation **Project** and determined to be qualified to assume the administrative responsibilities for such **Project** by the **NMDOT**.

Luminaire (Luminaries). A lighting device designed to illuminate the surface of a specific area from a mounting on a **Standard**, including the housing, optical control, lamps, and necessary ballasts.

Lump Sum. The price **Bid** by a **Contractor** as a single amount for a complete **Contract Item** as defined by the specifications, or price proposed by a **Contractor** as a single amount for the performance of **Extra Work**.

Major Contract Item. Any item, excluding mobilization, having a **Bid Item Price** of ten percent (10.0%) or more of the **Total Bid Amount** for the **Contract**, minus the amount **Bid** for mobilization.

Mandatory Completion Date. The date on which the **Project** shall be completed. This may be either **Substantial Completion** or **Physical Completion** as specified in the **Contract**. If neither is specified, it shall mean "**Substantial Completion**."

Materials. Any substances specified for use in the performance of the **Work**.

Median. That portion of a **Highway, Street or Road** separating the **Traveled Way** for traffic in opposing directions.

Method of Measurement. The method in which a **Pay Item** is measured to conform with the **Pay Unit**.

NMDOT. The New Mexico Department of Transportation as constituted under the laws of the **State** for the administration of transportation **Work**. Per the Stewardship and Oversight Agreement between FHWA New Mexico Division and **NMDOT**, the **NMDOT** is responsible and accountable for T/LPA compliance with all applicable Federal laws and regulations.

Nominal Maximum Sieve. One (1) sieve size larger than the first sieve that retains ten percent (10%) or more of a given **Material**.

Non-Conformance. Contractor's failure to comply with the **Contract**. **Non-Conformances** are subject to a withholding of 25% of the **Progress Payment**. **Non-Conformance** withholdings will be paid at the subsequent **Progress Payment** following resolution of all **Non-Conformances**.

Notice of Preliminary Award of Contract. The **T/LPA's** written notification issuing preliminary **Award** that is provided before the **Contractor** and the **T/LPA** execute the **Contract**.

Notice to Proceed. Written notice to the **Contractor** to proceed with the **Contract Work** including the beginning date of **Contract Time**.

Notice to Contractors. An addition to the **Contract** made prior to Advertisement.

Observation Angle. The angle between the axis of incident light and the observation axis.

Partial Suspension. The suspension of **Work** on some, but not all **Contract Items**.

Pavement Structure. The combination of **Subbase**, **Base Course**, and **Surface Course** placed on a **Subgrade** to support and distribute the traffic load to the **Roadbed**.

Pay Adjustment. An adjustment to a payment for a specific portion of the **Work** based on the quality of the **Work** performed by the **Contractor** and **Accepted** by the **T/LPA**. Other **T/LPA** documents may refer to this term as disincentives, incentives, pay reductions, price adjustments, and/or price reductions.

Pay Unit. The unit of measurement for **Acceptable Work**.

Petrographer. Individual with credentials in the study of petrography.

Physical Completion. All the **Work** is physically completed on the **Project** and is **Accepted** by the **District Coordinator**. All documentation required by the **Contract** and by law shall be furnished by this date.

Pit Agreement. An agreement between the **Contractor** and property owner to provide **Material**.

Plans. The Professional **Engineer** stamped and approved **Contract** drawings showing profiles, typical cross sections, that shows the location, character, dimensions, and general or specific details of the **Work** to be done or exact reproductions of the same.

Post Construction Plans. Final drawings reflecting **Work** and quantities performed under the **Contract**.

Pre-Bid Due Diligence. The **Bidder's** exercise of due diligence before submittal of a **Bid** which includes the careful, independent examination of the site of the proposed **Work**, including **Materials** pits and haul **Roads**, the **Bid Package**, all **Contract** documents including **Standard Specifications, Special Provisions, Supplemental Specifications**, and standard drawings and b which are representative of the condition at the precise location where each boring was made but conditions may vary between boring locations.

Pre-Cast Inspector. The **T/LPA's** authorized representative as indicated in the **Contract**.

Pre-Construction Conference. A meeting between the **T/LPA** and the **Contractor** prior to any **Work** taking place to review and discuss **Contract** requirements.

Pre-Deck Conference. A meeting between the **T/LPA** and the **Contractor** prior to the commencement of deck placement operations to review, discuss and coordinate the **Work** associated with the deck placement.

Pre-Drilled Shaft Conference. A meeting between the **T/LPA** and the **Contractor** prior to the commencement of drilling operation to review, discuss and coordinate the **Work**.

Pre-Fabrication Conference. A meeting between the **T/LPA** and the **Contractor** prior to any fabrication **Work** taking place**.**

Pre-Pave Conference. A meeting between the **T/LPA** and the **Contractor** prior to the commencement of paving operations to review, discuss and coordinate the **Work** associated with paving operations.

Pre-Pile Driving Conference. A meeting between the **T/LPA** and the **Contractor** prior to the commencement of pile driving operations to review, discuss and coordinate the **Work**.

Pre-Seeding Conference. A meeting between the **T/LPA** and the **Contractor** prior to the commencement of seeding operations to review, discuss and coordinate the **Work**.

Professional Service. Is a service provider that may or may not be a **Subcontractor,** who provides a specialized service requiring professional licensure by the **State** of New Mexico, e.g. Professional **Engineers**, Professional Surveyors and Attorneys. The **Professional Service** distinction in this **Contract** is separate from the professional service definition in the Department of Workforce Solutions regulations.

Profile Grade. The location of the **Profile Grade** will be designated by the **T/LPA** and shown on the **Plans**. The profile grade line is usually the centerline and elevation to which the **Roadway** will be built. The **Profile Grade** may be used to designate the gradient and elevation of other construction features such as tops of curb, channels, **Sidewalks**, etc.

Progress Payment. A monthly payment, including zero dollar ($0.00), provided by the **T/LPA** to the **Contractor** for **Work**, subject to adjustment by the **T/LPA**.

Project. The specific section of property on which **Work** is to be performed as specified in the **Contract**.

Project Manager. Wherever the term “Project Manager” is used it shall refer to the person, or his designee, assigned by the T/LPA to facilitate the construction **Contract** for the T/LPA.

Project Limits. The beginning of the **Project** (BOP) to the end of the **Project** (EOP) as designated in the **Contract**.

Punch List. A list, prepared by the **Project Manager**, of corrective **Work** items not conforming with the **Contract** and to be completed by the **Contractor**. The final **Punch List** is provided after **Substantial Completion** but before **Contractor’s** request for final inspection. The **Punch List** is limited to items of the **Work** that are necessary to correct minor imperfections, deficiencies and deviations from the requirements of the **Contract** but which have no material or adverse effect on the full operability of the **Project** for its intended purpose and may be safely and effectively used by the public without **Delay**, disruption, or impediments.

Quality Assurance (QA). The **T/LPA**’s sampling, testing, inspection, and other activities to determine payment and make **Acceptance** decisions. Includes **Quality Control**, **Acceptance** by the agency, and use of qualified **Laboratories** by both parties.

Quality Control (QC). The **Contractor’s** actions and considerations necessary to assess production and construction processes so as to control the level of quality being produced in the end product. **Quality Control** includes sampling and testing by the **Contractor** to monitor and adjust its process. **Quality Control** does not include **Acceptance** sampling and testing by the **T/LPA**.

Quality Level Analysis (QLA). Is equivalent to **QC/QA**.

Required Documents for Bid Submittal. Those documents specified for Bid Submittal including, but not limited to, **Advertisement**, **Bid Form**, **Bid Schedule**, **Bid Guaranty**, Bidder's List of Quoters, Non-Debarment Certification, Pay Equity Acknowledgment, Disadvantaged Business Enterprise Goal Form A-585, Subcontractor's Fair Practices Act Compliance.

Resource Loading. The **Contractor's** assigning of resources necessary to develop an **Acceptable Critical Path Method Schedule** for the **Project**. **Resource Loading** shall include personnel, production rates, **Contract** dollars earned, **Materials**, facilities and **Equipment** associated with each activity within the CPM.

Lowest Responsible Bidder. The **T/LPA** determined **Bidder** who submits the lowest adjusted and **Responsive Bid.** The **Bidder** shall also be responsible and when required furnish information and data to prove that its financial resources, production or service facilities, personnel, service reputation and experience are adequate to make satisfactory delivery of the services, construction or items of tangible personal property as described in the **Advertisement.**

Responsive Bid. A **Bid** which conforms in all material respects to the requirements set forth in the **Advertisement** and the **Contract**. Material respects of a **Bid** include but are not limited to price, quality, quantity or delivery requirements.

Right of Way (ROW). A general term denoting land or property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Roadbed. The graded portion of the **Highway, Street or Road,** with top and side slopes prepared as a foundation for the **Subgrade**, **Pavement Structure**, and **Shoulders**.

Roadway. A general term denoting the **Traveled Way** and the **Shoulders**.

Roadway Prism. The **Roadway** construction limits within the outside limits of the side slopes.

Shop drawings. Contractor, Supplier or Fabricator-furnished drawings or sets of drawings typically required for **T/LPA** review and approval of **Work** components. **Shop Drawings** shall include detailed information to compare to the **Contract** for approval prior to fabrication.

Shoulder. The portion of the **Roadway** contiguous with the **Traveled Way** for accommodation of stopped vehicles, for emergency use, and for lateral support of **Base** and **Surface Courses**.

Sidewalk. That portion of the **Roadway** primarily constructed for use by pedestrians.

Signal Assembly. A housing containing the required illuminated **Traffic Signal** indications (vehicular and pedestrian) mounted on a **Standard**.

Special Provisions. Additions and revisions to the **Standard** and **Supplemental Specifications** covering conditions applicable to an individual **Project**.

Specifications. A general term applied to all written provisions and requirements pertaining to performance of the **Work**.

Specific Intensity. Candlepower of the returned light at the chosen **Observation** and **Entrance Angles** for each lumen per square meter, foot-candle of illumination at the reflector on a plane perpendicular to the incident light.

Standard. In traffic lighting, a pole-type **Structure** that supports and positions signal and lighting devices, including arms, mounting hardware, and lowering and **Breakaway** devices as required by the **Contract**.

Standard Drawings. Detailed drawings for specific items of **Work** approved for repetitive use.

Standard Specifications. The **NMDOT's** book of **Specifications** approved for use in the construction of Public Works Projects.

State. The State of New Mexico acting through its authorized representatives.

State Geotechnical Engineer. The **Engineer** in charge of the **NMDOT's** Geotechnical Engineering/Exploration Section of the **State** Materials Bureau.

State Pavement Engineer. The **Engineer** in charge of the **NMDOT's** Pavement Management and Design Bureau.

Structures. Buildings, **Bridges**, **Culverts**, catch basins, drop inlets, retaining walls, cribbing, manholes, end-walls, sewers, service pipes, under drains, foundation drains, and other such features that may be encountered in the **Work**.

Structural Steel. Steel shapes, plates, H-piling, sheet piling, and any other items identified in the **Contract**.

Subbase. The layer or layers of specified **Material** thickness placed on a **Subgrade** to support **Surface Courses**.

Subcontractor. An individual, partnership, firm, corporation, or joint venture, at any tier, other than a **Trucker**, who is performing **Work** on the **Project**. A **Subcontractor** has no privity of **Contract** with the **T/LPA** and has no direct or indirect cause of action against the **T/LPA** for any **Claim** or cause of action, including nonpayment by the **Contractor**, arising out of the **Project**.

Subgrade. The portion of the **Roadbed** prepared as a foundation for the **Pavement Structure**.

Substantial Completion. The **Day** following the last charged **Day** and when all the following items are met:

1. All **Critical Path** activities on the **Project** have been completed and deemed **Acceptable**;
2. The **Project** is complete such that it can be safely and effectively used by the public;
3. The **Contractor** has requested a determination of **Substantial Completion** from the **– District Coordinator**; and
4. The **District Coordinator** has made a determination that the **Project** is **Substantially Complete**.

For safe and effective use by the public, it is the point at which all the following **Work** is complete (or as otherwise defined in the **Contract**):

- **Bridge** deck;
- **Pavement Structure**;
- **Shoulder**;
- Permanent signing;
- A minimum of one (1) application of striping;
- Traffic barrier;
- Signalization and Lighting; and
- Safety appurtenances.

Substructure. The **Bridge** below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the backwalls, wingwalls, and wing protection railings.

Superintendent. The **Contractor's** agent authorized in writing to be in responsible charge of the **Project**.

Superstructure. The entire **Bridge** except the **Substructure**.

Supplemental Agreement. A type of **Change Order** that may require **Contractor** signature.

Supplemental Specifications. Approved additions and revisions to the **Standard Specifications**.

Supplier. Any individual, partnership, firm, corporation, or joint venture that manufactures, fabricates or supplies **Materials** to be incorporated into a construction **Project** but who performs no actual **Work** on the **Project** site.

Surety. The corporation, partnership, or individual, other than the **Contractor**, executing a bond furnished by the **Contractor**.

Surface Course. Layer or layers of a **Pavement Structure** designed to accommodate the traffic

load, the top layer of which resists skidding, traffic abrasion, and the disintegrating effects of climate.

Surfacing Pit. A source from which suitable **Material** for the production of **Surface Course** aggregate is obtained.

Temporary Construction Permit (TCP). A temporary interest in land acquired in conjunction with a **Project** to provide for the temporary use of private property for the duration of the **Project** to perform construction activities as designated in the **Contract**.

Technical Irregularity. A minor informality or irregularity that is not a material defect of a **Bid**, that is a matter of form that can be waived without prejudicing other **Bidders**, or result in a change to the order of **Bidders**.

Termini. A general term used to describe the **Project Limits**, and including the beginning and end of the **Project**, its **Right of Way**, pit sites, haul **Roads**, and temporary and permanent construction or maintenance easements.

Tribal/Local Public Agency (T/LPA). A Federally recognized **Indian Tribe**, a municipality, **City**, **County**, village, or other special authority sponsoring a federally funded transportation **Project** and determined to be qualified to assume the administrative responsibilities for such **Project** by the **NMDOT**.

T/LPA District Coordinator. NMDOT person assigned to coordinate and work directly with the **T/LPA** and the **NMDOT** Bureaus, Divisions, and Offices during construction.

T/LPA Region Coordinator. NMDOT person assigned to coordinate and work directly with the **T/LPA** and the **NMDOT** Bureaus, Divisions, and Offices during design.

Total Bid Amount. The sum of all the **Bid Item Prices** on the **Bid Form**. The **Total Bid Amount** represents the total cost of performing all the **Work** described in the **Contract** based upon estimated quantities.

Total Original Contract Amount. The total amount **Bid** as compensation for the **Contract**.

Town, City, County or **District.** Subdivisions of the **State** used to designate or identify the location of the proposed **Work**.

Traffic Lanes. See **Traveled Way**.

Traffic Services Engineer. The **T/LPA's** representative for traffic engineering.

Traffic Signal. The complete installation of a traffic control system at an intersection, including the illuminated signal indications, supports, electrical controls, and distribution system.

Traveled Way. The portion of the **Right of Way** designated for the movement of vehicles, exclusive of **Shoulders** and Auxiliary Lanes.

Trucker (Also called Trucking, Trucking Deliveries, Deliveries and Hauling)**.** A **Trucker** is an individual, partnership, firm, corporation, or joint venture that transports or delivers **Materials** to and from the **Project** and does not perform **Work** on the **Project** site. A **Trucker** transports, but does not place, **Materials** (i.e. pit **Materials**, plant **Materials**, fabricated **Materials**, demolished and milled **Materials**, trash and waste **Materials**).

Unbalanced Bid. A **Bid** containing **Bid Item Unit Prices** that are unbalanced, to the potential detriment of the **T/LPA**. There are two types of **Unbalanced Bids**; (1) mathematically unbalanced and, (2) materially unbalanced. The mathematically **Unbalanced Bid** is a **Bid** containing **Lump Sum** or unit **Pay Items** which do not reflect reasonable actual costs plus a reasonable proportionate share of the **Bidder's** anticipated profit, overhead costs and other indirect costs but not necessarily to the detriment of the **T/LPA**. These costs should be related to the performance of the items in question. The materially **Unbalanced Bid** is a mathematically **Unbalanced Bid** which the **T/LPA** determines leaves reasonable doubt that **Award** will result in the lowest ultimate cost to the **T/LPA** or that **Award** is in the public interest.

Value Engineering Cost Proposal. A **Contractor**-provided form that details an alternative to the **Work** methods or **Materials** specified in the **Contract** that establishes a better or approved-equal product or result without affecting the functional purpose of the **Work** being revised, and that produce a net savings to the **T/LPA**.

Work. The providing of all documentation, supervision, labor, **Materials**, **Equipment**, transportation, and other **Incidentals** necessary for the successful completion of the **Project**, the successful completion of **Pay Items**, and the carrying out of the duties and obligations imposed by the **Contract**.

Working Day. Every **Day** except Saturdays, Sundays, and **Holidays**. Based on a review of weather conditions and the actual **Work** performed by the **Contractor,** the **Project Manager** will determine (between the end of the **Day** and noon of the next **Day**) if the **T/LPA** will charge a **Working Day**. If the **Contractor Works** for six (6) or more hours on a Saturday, Sunday, or **Holiday**, a **Working Day** will be charged.

Working Drawings. Contractor-furnished documents including, but not necessarily limited to:

1. Stress sheets;
2. Shop Drawings;
3. Bending diagrams for reinforcing steel;
4. Plans for erection, false **Work**, frames **Work**, cofferdams, and other items; and
5. Such other similar data required for the successful completion of the **Work**.

SECTION 102: BIDDING REQUIREMENTS AND CONDITIONS

102.1 RESERVED

102.2 PREQUALIFICATION

Prequalification of Bidders is a condition for submitting a Bid as authorized by the New Mexico Procurement Code, NMSA 1978, § 13-1-82 and 13-1-134 (1984, amended 2011).

Bidders shall be prequalified in accordance with 18.27.5 NMAC.

102.3 SUSPENSION AND DEBARMENT

The T/LPA may suspend, debar, reject a Bid as non-responsive, prohibit from the performance of Work, or terminate a Contract with any Bidder, Contractor, Subcontractor, at any tier, Suppliers, individual officers, directors in accordance with NMSA 1978, § 13-1-177 to 13-1-180 (1984, as amended 2011) and 1.4.7 NMAC or local ordinance. If an Indian Tribe or a LPA exempted from the Procurement Code pursuant to Section 13-1-98.K NMSA 1978 are authorized to do so under applicable law, the entity may suspend, debar, reject a Bid as non-responsive, prohibit from the performance of Work, or terminate a Contract with any Bidder, Contractor, Subcontractor, at any tier, Suppliers, individual officers, directors.

102.4 REQUIRED DOCUMENTS FOR BID SUBMITTAL

The T/LPA will make available to prospective Bidders the Required Documents for Bid Submittal. The Project's Required Documents for Bid Submittal are those specified in the Contract's Index of Required Documents for Bid Submittal.

102.5 REJECTION OF BIDS

102.5.1 Mandatory Rejection of Bids

The T/LPA reserves the right to reject any or all Bids, to waive technicalities, or to advertise for new Bids if, in the judgment of the T/LPA, the best interests of the public and the T/LPA would be promoted thereby. The T/LPA will reject Bid(s) for the following reasons:

1. A Bidder is not Prequalified;
2. A Bidder is determined to be a non-Responsible Bidder;
3. A Bidder fails to comply with any requirement in the Contract documents;
4. A Bidder omits any portion of the Required Documents for Bid Submittal when submitting its Bid;
5. A Bidder adds provisions reserving its right to Accept or reject an Award, or reserving its right to refuse to enter into a Contract after an Award;
6. A Bidder defaults under a previous Contract, including Contracts with other public entities;

7. The Bidder or its principals, individual officers or corporate directors are presently suspended, debarred, declared ineligible, or voluntarily excluded from bidding;
8. The T/LPA issued a notice of proposed Suspension or Debarment to the Bidder and the Bidder failed to timely respond to the notice of proposed Suspension or Debarment;
9. A Bidder submits more than one (1) Bid for the same Project control number;
10. A Bid Item Unit Price results in an Unbalanced Bid. The T/LPA may require the Apparent Low Bidder to detail and justify in writing how its prices were determined;
11. A Bidder contacts or communicates with any member of the T/LPA's governing body or any T/LPA personnel responsible for Bid review or the Award of the Contract in relation to the Bid review or Award process before the T/LPA's execution of the Contract, except for a response to an inquiry from the T/LPA's Chief Procurement Officer; or
12. A Bidder is subject of a judgment or verdict imposing a civil or criminal penalty under either the Federal False Claims Act or the New Mexico Fraud against Taxpayers Act.

102.5.2 Discretionary Rejection of Bids

The T/LPA may reject Bid(s) for the following reasons:

1. A Technical Irregularity exists;
2. A Bid Item Unit Price or Total Bid Amount differs significantly from the Engineer's Estimate or from other Bids;
3. A Bidder is responsible for uncompleted Work that might reasonably be expected to hinder or prevent the prompt completion of additional Work;
4. A Bidder fails to timely pay, satisfactorily settle, or provide security for the payment of Claims for labor, Equipment, Materials, supplies, or services legally due on previous or ongoing Contracts;
5. A Bidder performs previous Work unsatisfactorily, or fails to comply with Section 108.4, "Unsatisfactory Progress of Work;"
6. The T/LPA issues a notice of proposed Suspension or Debarment to the Bidder;
7. Evidence exists of collusion among Bidders or prospective Bidders; If the T/LPA becomes aware of an error in the quantity of a Bid Item shown in the Bid Schedule, Plans, or other Contract documents which may call into question the T/LPA's ability to determine which Bid will result in the lowest ultimate cost to the T/LPA;
8. To redesign the Project or change the Contract;
9. A potential benefit to the public or the T/LPA exists if the Contract is re-advertised; or when it is in the best interests of the public or the T/LPA.

102.6 INTERPRETATION OF QUANTITIES

The quantities appearing in the Contract are approximate only and are prepared for the comparison of Bids. Payment to the Contractor shall be made only for the actual quantities of Work performed and Accepted, or Materials furnished, or as otherwise specified (e.g., Computed Quantities) in the Contract.

102.7 EXAMINATION OF CONTRACT, SITE OF WORK, AND REQUESTS FOR CONTRACT INTERPRETATION

1. The submission of a Bid shall be considered conclusive evidence that the Bidder has exercised Pre-Bid Due Diligence and Accepts the conditions to be encountered in performing the Work and Accepts the provisions and requirements of the Contract.
2. When available, subsurface investigation records related to the Project will be provided by the T/LPA with the Bid package. When a log of test borings is included in the subsurface investigation record, the data shown in the individual log of each test boring apply only to that particular boring and are not intended to be conclusive as to the character of any Material between or around test borings. If Bidders use this information in preparing a Bid, it is used at its own risk, and Bidders are responsible for all conclusions, deductions, and inferences drawn from such information. If the Bidder requires additional information other than what the T/LPA furnished the Bidder may, at its own expense, and with T/LPA approval perform its own site investigation. The T/LPA providing subsurface investigation information does not relieve the Bidder from considering geotechnical data from previous Projects performed by the Bidder in the vicinity of the Project, and determining how subsurface conditions may affect the means, methods and cost of the Work. “The Bidder shall carefully study and compare all Contract documents and shall immediately report to the Chief Procurement Officer any error, inconsistency or omissions that may be discovered.”

102.7.1 Requests for Contract Interpretation

1. Requests for Contract interpretation shall be in writing, addressed to the Chief Procurement Officer and must be received by the Chief Procurement Officer at least 72 hours before the Bid Opening time in the Advertisement in order to receive a written response to the request. Questions received after the designated period may not be considered. The T/LPA will not be bound by any statement or representation concerning the Work unless it is included in the Contract. The Bidder shall only rely on written responses from the Chief Procurement Officer and oral responses, explanations, interpretations, or instructions given before the Bid Opening by the T/LPA, its employees or agents, are not binding. Any response made by the T/LPA will be provided in writing to all Bidders by Addendum. It is the responsibility of each Bidder to obtain a copy of any Addendum issued by the T/LPA by monitoring the T/LPA’s website. Written responses from the Chief Procurement Officer will be posted on the T/LPA’s website. Written responses will be provided, whenever practicable, no later than twenty-four (24) hours prior to Bid Opening.
2. The Bidder shall take no advantage of any error or omission in the Contract. In the event the Bidder discovers an error or omission, the Bidder shall notify the Chief Procurement Officer in writing. The Bidder also agrees that it will make no Claim because of misinterpretation or misunderstanding of the Contract or because of lack of information; and,

3. If a written response by the T/LPA to a request for Contract interpretation is not provided, the Bidder shall Bid the Contract according to the Contract documents.

102.8 PREPARATION OF BID

1. Submit the Bid as provided in the Advertisement;
2. Specify a Bid Item Unit Price for each Bid Item, except when a Bid Item Unit Price is established by the T/LPA;
3. Show the amounts for the respective Bid Item Unit Prices to a maximum of three (3) decimal places. Round additional decimal places in excess of three (3);
4. Exclude the applicable State GRT, local option tax, Indian business tax, TERO tax, and other tax imposed by a tribal government. The T/LPA will pay the applicable tax or increase in the applicable tax effective after the Contract is executed by the T/LPA;

If no Bid Item appears on the Bid Schedule for any Work or Materials required or specified by the Contract, such Work and Materials shall be Incidental to the Contract and the cost of such Work shall be included in any Bid Item(s) related to or associated with such Work. For the convenience of the Contractor, some Contract documents may specify Work which is incidental; identification of such incidental items of Work is not all–inclusive.

102.9 INNOVATIVE INCENTIVE/DISINCENTIVE PROVISIONS

The T/LPA reserves the right and may include innovative Incentive/Disincentive Provisions in the Contract.

102.10 RESERVED

102.11 BID GUARANTY

A Bidder shall submit with the Bid, a Bid Guaranty in the amount of five percent (5%) of the Total Bid Amount. The requirement of the Bid Guaranty is to ensure that the Bidder will promptly execute the Contract in accordance with the Advertisement and in the manner and form required by the Contract Documents and that the Bidder will furnish good and sufficient Contract Bonds and required insurance. The Bid Guaranty shall be in the form in the Required Documents for Bid Submittal. The Bid Guaranty will remain in force up to 30 Days after Bid Opening, or until Award of Contract as it may be extended by the T/LPA, notice of which extension(s) to the surety is hereby waived.

102.12 RESERVED

102.13 RESERVED

102.14 WITHDRAWAL OF BIDS

102.14.1 Bidder

A Bidder may withdraw its Bid before Bid Opening. A Bid containing a mistake discovered before Bid Opening may be modified or withdrawn by a Bidder prior to the time set for Bid Opening by delivering written or telegraphic notice to the location designated in the Invitation for Bids as the place where Bids are to be received.

Once a Bid Opening has commenced at the date, time and place designated in the Advertisement Bids may not be withdrawn and no modifications in Bid prices or other provisions of Bids shall be permitted. After Bid Opening, a Low Bidder alleging a material mistake of fact which makes his Bid nonresponsive 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.

102.14.2 Procurement Officer

Any decision by a procurement officer to permit or deny the withdrawal of a Bid on the basis of a mistake contained therein shall be supported by a determination setting forth the grounds for the decision.

102.15 RESERVED

102.16 RESERVED

SECTION 103: AWARD AND EXECUTION OF CONTRACT

103.1 CONSIDERATION OF BIDS

The Chief Procurement Officer shall review, evaluate Bids and make recommendations for rejection or issuance of the Notice of Preliminary Award. The Chief Procurement Officer will review the Bid Item Unit Pricing to determine if the Bid Item Unit Pricing is responsive, unbalanced either materially or mathematically, or any other abnormalities exist. The T/LPA reserves the right to request justification from the Bidder for any aspect relating to its Bid and the Bidder shall respond to the request. The results of the completed analysis will be available to the public after the T/LPA issues the Notice of Preliminary Award of Contract letter.

If two (2) Contractors submit identical lowest Total Bid Amounts, the T/LPA shall Award by lottery to one of the identical Low Bidders or reject all Bids and resolicit Bids. An Invitation for Bids may be canceled or any or all Bids may be rejected in whole or in part when it is in the best interest of the T/LPA. A determination containing the reasons for cancellation shall be made part of the procurement file. If no Bids are received or if all Bids received are rejected, then new invitations for Bids shall be requested. Any or all Bids may be rejected when it is in the best interest of T/LPA at any time prior to execution of the Contract. A determination containing the reasons for cancellation shall be made part of the procurement file. If all Bids are rejected the T/LPA may issue a new Advertisement.

103.2 NOTICE OF PRELIMINARY AWARD OF CONTRACT

Except as described in Section 103.3, “Bidding Dispute Resolution Procedures,” the T/LPA will issue the Notice of Preliminary Award of the Contract within 30 Days after Bid Opening to the Lowest Responsible Bidder. Bidders may agree to a later Notice of Preliminary Award time if requested to do so by the T/LPA, failure to agree to a later Notice of Preliminary Award time as requested by the T/LPA will be deemed the Bidder’s withdrawal of its Bid. The Notice of Preliminary Award letter, if it is mailed within 30 Days of the Bid Opening, shall bind the Lowest Responsible Bidder to Accept the Contract or to reject the Contract and forfeit the Bid Guaranty it has provided.

103.3 BIDDING DISPUTE RESOLUTION PROCEDURES

103.3.1 Right to Protest

Any bidder who is aggrieved in connection or Award of a contract may protest to the Chief Procurement Officer. The protest shall be submitted in writing within fifteen Calendar Days after knowledge of the facts or occurrences giving rise to the protest. Upon the filing of a timely protest, the Chief Purchasing Officer shall give notice of the protest to the Bidder if Award has been made or, if no Award has been made, to all Bidders who appear to have a substantial and reasonable prospect of receiving an Award if the protest is denied.

103.3.2 Authority to Resolve Protests

The Chief Procurement Officer shall have the authority to resolve protests. the authority to take any action reasonably necessary to resolve a protest of an aggrieved bidder. The Chief Procurement Officer shall have the authority to take any action reasonably necessary to resolve a protest of an aggrieved Bidder. This authority shall be exercised in accordance with regulations promulgated by the T/LPA but shall not include the authority to Award money damages or attorneys' fees.

103.3.3 Protest Determination

The Chief Procurement Officer shall promptly issue a determination relating to the protest. The determination shall:

1. state the reasons for the action taken; and
2. inform the protestant of the right to judicial review of the determination pursuant to Section 156 [13-1-183 NMSA 1978] of the Procurement Code.

A copy of the determination shall immediately be mailed to the protestant and other Bidders involved in the procurement.

103.4 CANCELLATION OF AWARD

The T/LPA may reject all Bids, rescind the Notice of Preliminary Award of Contract, and cancel the Award of any Contract at any time prior to the execution of the Contract by all parties without incurring liability where such cancellation is deemed by the T/LPA to be in the best interests of the T/LPA. No Bidder has a contractual, equitable, implied, or any other right to the Contract until executed by both parties.

103.5 RESERVED

103.6 CONTRACTOR EXECUTED CONTRACT

The T/LPA will provide the Contract to be executed by the Contractor and returned to the T/LPA. The Contractor shall return the signed Contract with Contract Bonds and other documents required by the Notice of Preliminary Award letter within the 15 Days from the date of the letter. The Contract Bonds shall become binding upon Contract execution.

The value of each bond shall equal the Total Original Contract Amount.

All Contract Bonds shall be procured from Sureties with an A.M. Best Company financial strength rating level of A- or better, Class VII or better, unless otherwise approved in writing by the T/LPA. In no event shall the T/LPA approve the use of a Surety with an A.M. Best Company financial strength rating level of B or worse.

103.7 FAILURE TO EXECUTE CONTRACT

Failure by the Lowest Responsible Bidder to return the signed Contract, Contract Bonds and other documents required by the Notice of Preliminary Award letter within 15 Days of receiving the letter shall constitute just cause for rescinding the Notice of Preliminary Award of Contract and the forfeiture of the Bid Guaranty which shall become the property of the T/LPA, not as a penalty but as liquidation of reasonable damages sustained. The Bid Guaranty remains in effect until the T/LPA has fully executed the Contract. The T/LPA may then issue the Notice of Preliminary Award of the Contract to the next Lowest Responsible Bidder or take other actions as the T/LPA may decide.

103.8 EXECUTION OF CONTRACT

If the T/LPA fails to execute the Contract within 30 Days of receiving the signed Contract, Contract Bonds, and other documents required by the Notice of Preliminary Award Letter from the successful Bidder, the Bidder may withdraw its Bid without penalty. No Contract shall be effective until it has been fully executed by the T/LPA and the Contractor. In no event shall the Contractor commence Work until after execution of the Contract by all parties.

SECTION 104: SCOPE OF WORK

104.1 INTENT OF THE CONTRACT

The intent of the Contract is to provide for the construction and completion of the Work to the satisfaction of the T/LPA. The Contractor shall furnish experienced supervision and labor and all Materials, Equipment, tools, transportation and supplies required to complete the Work in accordance with the Plans, Specifications and terms of the Contract.

Unless otherwise specified in the Contract, the Contractor is vested with the discretion and is wholly and solely responsible for selecting and managing the means and methods for performing the Work.

104.1.1 Contract Modifications

No modifications, limitations, waivers or discharge of the Contract or any of its terms shall bind the T/LPA unless made in a written Change Order signed by the Project Manager. A course of performance or course of dealing on this Contract or any other contract between the T/LPA and a Contractor shall not constitute a modification or waiver of the Contract and shall not give rise to any Claim including any cause of action based upon promissory estoppel, estoppel, waiver, or detrimental reliance.

104.2 EXTRA WORK

The T/LPA reserves the right to modify the Contract at any time. Such revisions shall neither invalidate the Contract nor release the Surety. The Contractor agrees to complete the Contract as revised. The Contractor shall perform Work at the T/LPA's written direction defining the scope of the Work and in accordance with the Specifications.

The Contractor shall provide to the Project Manager its proposal associated with the Work before starting the Work. The submission of the proposal shall not be considered Accepted by the T/LPA until the Acceptance of the cost proposal is in writing from the T/LPA. If the proposal is Accepted by the T/LPA, then the T/LPA will issue a Change Order and allow the Contractor three (3) Days to review and sign the Change Order. If, after the expiration of three (3) Days, the Contractor has failed to sign the Change Order the T/LPA may process the Change Order unilaterally.

104.2.1 Significant Changes in the Character of the Work

The Project Manager reserves the right to make, in writing, at any time during the Work, modifications in quantity and alterations to the Work as are necessary to satisfactorily complete the Project. "Significant change" applies only to modifications or alterations that:

1. Materially changes, in kind or nature, the character of the Work including the Critical Path from that which was previously involved or included in the original proposed

construction. When the character of the Work is materially changed in kind or nature then the Project Manager and the Contractor shall agree upon the adjustment prior to the Contractor's performance of the Work. If an agreement is reached, the Project Manager will make an adjustment to the Contract which excludes anticipated profit. If an agreement is not reached, the Project Manager will direct the Contractor to perform the Work. The Project Manager and the Contractor will track the costs in accordance with 109.6, "Force Account."

2. A Major Item of Work, as defined elsewhere in the Contract, has increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. The Project Manager and the Contractor may negotiate adjustments to the Contract when it is discovered that a Major Contract Item of Work, as defined elsewhere in the Contract, has increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original Contract Item quantity. In the case of a decrease below 75 percent, the allowance will apply to the actual amount of work performed. For quantities below 75 percent, before an adjustment is made, the Contractor shall provide documents, including invoices, to the Project Manager justifying the requested adjustment price. If the final quantities are reestablished to be within the thresholds of 75% to 125% of the original item quantity then the original Bid Item Price applies.
3. Affects Work performed under a Subcontract, as solely determined by the Project Manager. The Project Manager will make adjustments if the Contractor demonstrates that the change adversely affects the Subcontractor's Work.

The T/LPA shall not consider customary increases or decreases in quantities necessary to complete the Work changed by the Contractor's schedule of operations, the Contractor's planning of the Work, or unscheduled mobilizations.

104.2.2 Differing Site Conditions

The Contractor shall carefully study and compare the foundation reports and geotechnical reports and Contract documents and shall immediately report to the Project Manager any error, inconsistency, or omission that it discovers. If the Contractor does not understand information in the foundation report and geotechnical report, it shall immediately seek clarification from the Project Manager. The Contractor and the Project Manager shall provide, immediately upon discovery written notice of the following conditions encountered on the Project during the progress of the Work:

1. Present but not visible physical conditions differing materially from those shown in the Contract; or,
2. Unknown conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the Work.

The Project Manager will decide, within a, two (2) Working Days, after written notification, whether the conditions materially differ and cause an increase or decrease in the cost or time required to perform the Work.

The Project Manager will notify the Contractor of this decision and the Contractor shall not proceed with Extra Work until the Project Manager provides direction.

The Project Manager will adjust the Contract for differing site conditions in accordance with Section 109.5, “Payment for Extra Work,” and will include the costs of Delays but exclude anticipated profit in accordance with Section 109.11, “Compensation for Claims.” Conditioned upon obtaining District Engineer approval with concurrence from the CLE, the T/LPA may grant time extensions only to the extent that the activities on the Critical Path of the Baseline Schedule in effect at the time of the Delay are impacted. No Contract adjustment which results in a benefit to the Contractor will be allowed if a differing site condition could have been discovered or anticipated by the Contractor through the exercise of Pre-Bid Due Diligence.

104.2.3 T/LPA Ordered Work

The T/LPA shall pay for T/LPA ordered Work in accordance with Section109.5, “Payment for Extra Work.”

Conditioned upon obtaining District Engineer prior approval and concurrence from the CLE, the T/LPA may grant time extensions only to the extent that the activities on the Critical Path of the Baseline Schedule in effect at the time of the Delay are impacted.

104.3 RESERVED

104.4 RESERVED

104.5 MAINTENANCE OF TRAFFIC

The Contractor shall furnish traffic control devices, take protective and safety measures, and complete the Work. If the Contractor fails to do so, the Project Manager will notify the Contractor in writing of the deficiency and the Contractor shall take corrective action within the time frame specified by the Project Manager. Failure by the Contractor to take the corrective action as directed by the Project Manager shall result in the T/LPA assessing to the Contractor the incurred costs for the corrections plus an additional 10% for administrative costs.

The Contractor shall not endanger the traveling public when moving Equipment on or across the ROW and Roadway. The Contractor’s Equipment shall enter and leave the ROW and Roadway in the direction of the Traveled Way, except with the written approval of the Project Manager.

The Project Manager may direct the Contractor to maintain the pavement surface. The T/LPA will pay for this Work in accordance with Section 109.5, “Payment for Extra Work.”

The T/LPA is responsible for snow removal on sections of Roadway open to the traveling public unless some other agency has responsibility for its removal. The Project Manager will coordinate snow removal with the Contractor and the maintenance patrol.

The Contractor shall furnish warning devices, take protective and safety measures, and complete Shoulder Work, drainage Structures, or other features of the Work. If the Contractor fails to do so, the Project Manager will notify the Contractor in writing of the deficiency and the Contractor shall take corrective action within the time frame specified by the Project Manager.

The Contractor shall provide reasonable vehicular and pedestrian ingress and egress to adjoining properties during the duration of the Contract. The Contractor shall advise and schedule access modifications with local business owners and residences and the Project Manager at least 24 hours in advance.

The Contractor shall not open partially completed sections of the Traveled Way unless directed or approved by the Project Manager. If the Traveled Way is opened at the Contractor’s request, the Contractor remains liable for costs associated with the opening until Final Acceptance of the Project. The Project Manager will provide written instructions approving any sections which are to be opened. Such an opening shall not constitute a full or partial Acceptance of the Work or a waiver of any Contract provisions.

104.6 RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK

The Contractor may use Materials found in the excavation for completing Pay Items other than the Work in Standard Specification Section 203. Payment will be made for both the excavation of such Materials at the corresponding Contract Unit Price and for the Pay Item for which the excavated Material is used.

If the excavated Material would have been used to construct Embankments or Bridge approaches or for other purposes, any of which would have been required to complete the Contract, the Contractor shall replace the excavated Material with Acceptable Material at no additional cost to the T/LPA. The T/LPA will not charge the Contractor for the use of the excavated Material. The Contractor shall obtain written authorization from the Project Manager before excavating Material that is within the Right of Way but outside the grading limits, as shown by the slope and grade lines. Prior to granting approval, the Project Manager will verify that the requirements of Section 107, “Legal Relations, Environmental Requirements, and Responsibility to the Public,” have been met. If not previously cleared environmentally, meeting these requirements will be the responsibility of the Contractor.

Unless otherwise provided, the Contractor may temporarily use the Material from existing Structures in the erection of a new Structure but shall not, without the approval of the Project Manager, cut or otherwise damage such Materials.

104.7 FINAL CLEANUP

Pits located on State or federal land are governed by the appropriate requirements of their agency. The requirements of this Section do not apply to a commercial source.

Before Final Acceptance all areas occupied by the Contractor or in connection with the Work shall be cleaned of all Deleterious Material, rubbish, excess Materials, temporary Structures and Equipment, and all parts of the Work shall be left in a condition Acceptable to the Project Manager or otherwise required by the Contract. To avoid the requirement of removal of Equipment from private property before Final Acceptance, the Contractor shall make appropriate arrangements with private property owners and provide documentation of the arrangement to the Project Manager.

The Contractor shall not allow Borrow Pits and Surfacing Pits to change the general pattern of existing drainage. Unless Borrow Pits or Surfacing Pits are suitable to develop as ponds or lakes and the property owner has notified the T/LPA in writing that such development is planned, the Contractor shall where practicable leave all pits well drained.

The Contractor shall, when excavation is complete, contour grade pits, except quarry pits, to blend with the natural topography of the surrounding area or in accordance with the Contract or agreements with the property owners.

104.8 VALUE ENGINEERING COST PROPOSAL (VECP)

The T/LPA under no circumstances will reimburse the Contractor for the costs of developing the VECP that is rejected or is not Accepted by the T/LPA. The Contractor shall submit its VECP on the T/LPA provided form only. Exempted from Value Engineering Cost Proposals are mix designs and traffic control. Any decision about whether to Accept a VECP shall be in the sole discretion of the T/LPA. A VECP shall not be considered Accepted until the T/LPA approves a Change Order implementing the VECP. VECPs are reviewed on a case by case basis and apply only to the ongoing Contracts referenced in the VECP proposal and become the property of the T/LPA upon approval of the Change Order. VECPs shall contain no restrictions imposed by the Contractor on their use or disclosure. The T/LPA has the right to use, duplicate and disclose in whole or in part any data necessary for the utilization of the VECP. The T/LPA retains the right to utilize any Accepted proposal or part thereof on other Projects without obligation or compensation to the Contractor.

The Contractor’s share of the VECP is fifty percent (50%) of the net savings. In no event shall the Contractor be entitled to an extension of Contract Time for the T/LPA’s consideration a VECP, the refusal to Accept or approve such a proposal, or any other matter connected with a VECP.

The T/LPA will rely exclusively upon the accuracy of the engineering data upon which the VECP is based and will not be required to perform additional investigations, crosschecks, or site examinations. The T/LPA's Acceptance or adoption of a VECP shall not be construed to alleviate or reduce the Contractor's full and absolute liability if the implementation of the proposal fails to satisfactorily perform.

SECTION 105: CONTROL OF WORK

105.1 RESPONSIBILITY AND AUTHORITY OF THE T/LPA

105.1.1 T/LPA Authority

The T/LPA has the authority to:

1. Administer the Contract;
2. Alter the Contract;
3. Enforce and terminate the Contract as expressly provided in other Sections of the Standard Specifications;
4. Wholly or Partially Suspend the Work for cause; and
5. Take actions as determined to be in the public's best interest.

If the Work is suspended by the Project Manager in writing for an unreasonable time (not originally anticipated, customary, or inherent to the construction industry), the Contractor may submit to the Project Manager a Notice of Intent to Claim in accordance with Section 105.19, "Notice of Intent to Claim," which must be accompanied by a proposed revised schedule pursuant to Section 108.3, "Schedule."

105.1.2 Contractor Convenience

The Contractor shall be wholly responsible and liable for any costs or time associated with any requests made for the Contractor's convenience and approved by the T/LPA.

105.2 PLANS, WORKING DRAWINGS

The Plans may be supplemented by Working Drawings as are necessary for the Work. The Contractor shall have the sole responsibility for verifying pertinent dimensions in the field before submitting such Working Drawings to the Project Manager. Working Drawings shall be submitted by the Contractor and Accepted by the Project Manager before beginning Work covered by the drawings. The Project Manager will review the Working Drawings although the Project Manager's review does not relieve the Contractor of the responsibility for the satisfactory completion of the Work or compliance with the Contract. The Contractor shall not alter or amend such drawings without the prior written approval of the Project Manager. The furnishing of all Working Drawings is Incidental.

The Contractor's Baseline Schedule of Work shall show the submittal of any Working Drawing as a milestone thirty (30) Days before the commencement of Work covered by the drawings. Unless otherwise indicated in the Contract, or approved by the Project Manager in writing, the Project Manager will have no longer than thirty (30) Days for Acceptance of the Working Drawings. If the Working Drawings are not Acceptable, the Working Drawings shall be resubmitted by the Contractor and the timeframe for Acceptance starts over. All time required for review of Working

Drawings and other Contractor submittals shall be Incidental and shall not be the basis for any Claim for Contract Time extension or additional compensation.

105.2.1 Submittals

Anything that requires approval is considered a submittal by the T/LPA. Any submittal required, other than the Critical Path Method or Bar Graph Schedules, shall be submitted to the T/LPA thirty (30) Days before the Work related to the submittal is performed. The Project Manager will have no longer than thirty (30) Days for Acceptance of the submittal, unless otherwise specified in the Contract.

105.3 COMPLIANCE WITH PLANS AND SPECIFICATIONS

The Contractor shall perform the Work and provide the Materials in substantial compliance with the lines, grades, cross sections, dimensions, and Material requirements as specified by the Contract. The T/LPA's failure to discover or reject Work or Materials not in substantial compliance with the Contract during the Work shall not be considered an Acceptance of the Work or Materials, or a waiver of defects. The T/LPA’s failure to properly perform inspections or tests shall not relieve the Contractor from its obligation to perform the Work and provide Materials in substantial compliance with the Contract and shall not be considered the T/LPA’s Acceptance of the Work or Materials.

If the Project Manager determines that Work or Materials are unacceptable, the Contractor shall remove, replace and correct the Work or Materials at no additional cost to the T/LPA. The Project Manager’s determination that the Work or Materials are unacceptable shall not form the basis of a Claim for additional Contract Time or additional compensation.

If Work does not comply or substantially comply with the Contract, the T/LPA may determine the Work is nonetheless Acceptable. Such a determination is subject to the approval of the District Coordinator. If Accepted the Project Manager will, by Change Order, provide an adjustment for Work or Materials.

105.4 COORDINATION OF CONTRACT DOCUMENTS

In case of a discrepancy, the Contract documents will govern in the following order of importance:

1. Addenda;
2. Required Documents for Bid Submittal;
3. Notices to Contractors;
4. Advertisement;
5. Special Provisions;
6. Plans;
7. Supplemental Specifications;
8. Standard Specifications; and,

9. Standard Drawings.

Dimensions given on the Plans or that can be calculated govern over scaled dimensions.

If a Contract discrepancy is discovered after the Award of the Project, the Contractor shall, upon discovery, promptly notify in writing the Project Manager. The Contractor shall take no advantage of any discrepancy or errors or omissions in the Contract. The Project Manager will resolve the discrepancy in writing before the Contractor proceeds further with performance of the affected Work.

105.5 CONTRACTOR RESPONSIBILITIES

The Contractor shall monitor the Work at all times, select and manage the means and methods for performing the Work.

105.5.1 Duties of Superintendent

The Contractor shall have on the Project at all times during the course of the Work, a competent and qualified Superintendent who:

1. Reads and understands the Contract documents; and
2. Possesses substantial experience in the type of Work being performed.

The Contractor and its Superintendent shall communicate with the Project Manager as the T/LPA's contact for all matters relating to the Project and promptly submit all documentation or notice required by the Contract to the Project Manager.

105.6 COOPERATION WITH UTILITIES

The Contractor shall comply with the Notice to Contractors regarding Cooperation with Utilities for relocations, adjustments, and installations of utilities. The Contractor's responsibility is to adequately coordinate, notify, or comply with the Contract and failure to do so shall not form the basis for an extension of Contract Time or additional compensation.

The Contractor shall copy the Project Manager on all communications with utilities. For telephonic communications a summary of the communication shall be provided to the Project Manager monthly.

The Contractor shall be responsible for complying with the New Mexico Excavation Law, NMSA 1978, Section 62-14-1 through -10 which provides the procedures and requirements related to the performance of Project excavation Work.

Failure by the utility owner to relocate, adjust, or install the utility in accordance with the Contract may result in the Project Manager issuing written direction to the Contractor directing that the Contractor shall relocate, adjust, or install the utility per Section 104.2, "Extra Work."

The Contractor shall terminate operations in the immediate area of a utility conflict not identified in the Contract and encountered during the Work. The Contractor shall immediately provide written notice to the Project Manager of the conflict. The Contractor shall continue Work in other areas. The Project Manager shall provide written notification to the Contractor when Work may commence in the area of terminated operations. The Contractor shall make requests for additional Contract Time or compensation per Section 104.2.2, “Differing Site Condition.” Where utility conflicts not identified in the Contract are present, the Contractor shall provide the Project Manager, on a weekly basis, evidence of adequate coordination and cooperation with utilities. Neither additional Contract Time nor compensation will be provided where the Contractor fails to provide the Project Manager, on a weekly basis, evidence including a telephonic log of communications concerning the Contractor’s continued cooperation and coordination activities with utilities.

105.7 COOPERATION BETWEEN CONTRACTORS

The T/LPA reserves the right at any time to Contract for and have performed other Work on or near the Project.

When separate Contracts are let within the limits of any one Project, each Contractor shall conduct the Work without interfering or hindering the progress or completion of the Work being performed by other Contractors. Contractors working on the same Project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with the Contract and shall protect and hold harmless the T/LPA for all damages or Claims as per Section 107.19, “Responsibility for Third Party Claims and Duty to Defend.”

If the Contractor and one (1) or more other Contractors are unable to agree upon the sequence of Work or other matters, the Contractor(s) shall request that the Project Manager provide a written decision on the issue. The Project Manager will allow a reasonable time for all parties to respond and, after reviewing the information received, will issue a decision binding on all parties within seven (7) Days of receiving such information.

105.8 AUTHORITY AND DUTIES OF THE PROJECT MANAGER

105.8.1 Project Manager Authority

The Project Manager is a designee of the T/LPA and has the following responsibilities:

1. Interpretation and administration of the Contract;
2. Immediate charge of the details of the Project;
3. Authority to reject Work and Material;

4. Authority to wholly or Partially Suspend the Work for reasons beyond the control of the Contractor or not connected to the construction of the Project when the Project Manager deems such a suspension to be in the best interests of the public and the T/LPA; and,
5. Authority to concur with the Contractor's request to Partially Suspend or wholly suspend the Work.

At no cost to the T/LPA, the Project Manager may also wholly or Partially Suspend the Work for cause, including but not limited to, the Contractor's failure to:

a. Correct unsafe conditions;
b. Comply with any term or condition of the Contract;
c. Observe and comply with any Federal or State law or regulation;
d. Carry out directions of the Project Manager;
e. Manage its personnel and Subcontractor and its personnel; or,
f. Perform satisfactory Work.

105.8.2 Contractor Inquiries to Project Manager

The Contractor shall submit all correspondence to the Project Manager. The Contractor shall submit in writing a request for information for any Project issues, including but not limited to discrepancies in the Contract, to the Project Manager who will resolve the issues.

The determination of the Project Manager will be in writing and delivered to the Contractor's Superintendent as soon as reasonably practicable.

105.9 DUTIES OF THE INSPECTOR

105.9.1 Inspector Authority

The T/LPA authorizes its Inspectors to:

1. Inspect the Work;
2. Inspect the preparation, fabrication or manufacture of Materials; and,
3. Notify the Contractor of non-conforming Work, reject non-conforming Materials, and suspend portions of the Work for safety reasons only.

The Contractor shall refer questions at issue to the Project Manager for a decision.

105.9.2 Inspector Authority Limitations

The T/LPA does not authorize its Inspectors to:

1. Alter or waive any provision of the Contract;
2. Issue instructions contrary to the Contract; or
3. Provide direction, superintendence or guidance to the Contractor, Subcontractors or Suppliers;

Any action or inaction of the Inspector does not waive the T/LPA's right to pursue any and all legal remedies for defective Work or Work performed by the Contractor in an unworkmanlike manner.

105.10 INSPECTION OF WORK

The Contractor shall provide the Project Manager with 48 hour notice for inspection of the Work. Failure by the Contractor to provide the proper notice may result in the T/LPA directing the Work performed without inspection to be removed at no cost to the T/LPA.

The Contractor shall provide the T/LPA or its representative access to the Work and provide all information, Equipment, and assistance requested or required to make a complete and detailed inspection of the Work. All Materials and each part or detail of the Work shall be subject to inspection by the T/LPA.

The Project Manager may direct the Contractor to remove or uncover portions of the finished Work, at any time before Final Acceptance of the Work. The Contractor shall restore the portions of the Work to the standard required by the Contract after the Project Manager's examination. If the examined Work is Acceptable, the T/LPA will pay for the removal and restoration as Extra Work under Section 104, "Scope of Work," and Section 109.5, "Payment for Extra Work." However, if the examined Work is unacceptable, the Contractor shall remove and restore the Work at no additional cost to the T/LPA.

Action or inaction by a T/LPA Inspector shall not relieve the Contractor from any responsibility under the Contract for Acceptable Work in conformity with the Contract. The failure to properly perform inspections, tests or approvals by the T/LPA shall not relieve the Contractor from its obligation to perform the Work in strict conformance with the Contract.

105.11 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK

Work that does not conform to the requirements of the Contract shall be unacceptable, unless it is determined by the Project Manager to be Acceptable under the provisions of Section 105.3, "Compliance with Plans and Specifications."

Should any defective Work or Material be discovered, before Final Acceptance, the T/LPA will issue a Non-Conformance in accordance with Section 109.8.2, "Non-Conformance."

Prior to T/LPA Acceptance, the Contractor shall replace or repair Materials damaged in transit or during handling at no additional cost to the T/LPA.

The Contractor shall remove unacceptable Work resulting from causes existing before the Final Acceptance of the Work and replace in an Acceptable manner at no additional cost to the T/LPA. The Project Manager will set the time limit for the replacement Work.

The T/LPA shall not pay for the following under the provisions of the Contract:

1. Work performed contrary to the Project Manager's direction or as provided in the Contract;
2. Work performed beyond the lines and grades on the Plans; or,
3. Work performed without authority.

Upon failure of the Contractor to comply with the removal and replacement of unacceptable or unauthorized Work within the time specified by the Project Manager, the Project Manager shall have authority to cause unacceptable Work to be removed and replaced. The Project Manager will then deduct from the monies due or that become due to the Contractor the cost of removing or replacing the unacceptable or unauthorized Work.

105.12 LOAD RESTRICTIONS

The Contractor shall observe legal load restrictions when hauling Equipment or Material on public Roads outside of the Project or on Roadways within the Project. The Project Manager may approve exceptions, in writing, provided the Contractor has obtained the proper oversize and overweight permits. The Contractor is liable for damage that may result from moving Equipment, even with the issuance of a special permit.

The Contractor shall not use Equipment or haul loads that will cause damage to Structures, Roadway, or any other construction, regardless of legal load allowances.

If the Project Manager determines that anticipated hauling operations may cause damage to existing Roadways or Structures, the Project Manager will issue a written notice to the Contractor. Within seventy two (72) hours of the notice, the Project Manager will elect one (1) or more of the following solutions:

1. Change the haul route; or
2. Reduce the allowable load limit.

If the Project Manager determines that hauling operations are causing damage to existing Roadways or Structures, the Project Manager will issue a written notice to stop operations causing the damage. Within seventy two (72) hours of the notice, the Project Manager will issue written direction to the Contractor to repair the damage or the Project Manager will elect one(1) or more of the following solutions:

1. Change the haul route;
2. Reduce the allowable load limit;
3. Allow the operations to continue with the requirement that the Contractor repair all damaged areas at ½ Unit Bid prices. In the absence of a Unit Bid price, the current published average unit Bid prices shall be used.

105.12.1 Corrective Actions and Methods of Payment

105.12.1.1 Change in Haul Route

If the Project Manager changes the haul route, the T/LPA will modify the Contractor's payment per the following equation:

$$P = R \times t \times (d_1 - d_0) \qquad (1)$$

Where,

P is the payment modification (in dollars)

R is the rate (in dollars per ton mile determined in accordance with Section 109, "Measurement and Payment.")

t is the weight of Material hauled from the new stockpile area (in tons)

d_0 is the original haul distance measured from the Roadway access point to the original stockpile area

d_1 is the new haul distance measured from the Roadway access point to the new stockpile area

105.12.1.2 Change in Allowable Load Limit

If the Project Manager reduces the allowable load limit, the T/LPA will pay the Contractor in accordance with the following equation:

$$P = \frac{QF \times R \times d \times (LA - LR)}{LA} \qquad (2)$$

Where,

P is the additional payment (in dollars)

R is the rate (in dollars per ton mile determined in accordance with Section 109, "Measurement and Payment.")

QF is the total quantity of Material hauled at the reduced load limit (in tons)

LA is the allowable load limit (in tons)

LR is the reduced load limit (in tons)

d is the haul distance (in miles)

If the Project Manager allows operations to continue or because of damage to an existing Roadways or Structures, the T/LPA will pay the Contractor for the Material used to make the repairs at the ½ of the Bid Item Unit Price, or in accordance with Section 109, "Measurement and Payment." If an item is not part of the Contract, the T/LPA will negotiate a new unit price. If a Structure or existing Roadway must be repaired, the T/LPA may pay the Contractor for hauling repair Materials using a rate requested and justified by the Contractor and approved by the Project Manager.

105.13 RESERVED

105.14 RESERVED

105.15 MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the Work during construction and until the T/LPA Accepts the Work, except as otherwise provided in Section 104.5, “Maintenance of Traffic,” and Section 105.18, “Acceptance.” This maintenance shall consist of continuous, daily Work with adequate Equipment and forces so that the Roadway and Structures are kept in satisfactory condition. The Contractor shall be responsible for maintaining the Project free and clear of Deleterious Materials including debris, weather related remnants, snow, loose Materials and trash. The T/LPA will be responsible for snow removal operations on travel lanes open and utilized by the public unless some other entity is responsible for its removal.

The Contractor shall maintain the previous course and Subgrade when the Plans require the Contractor to place traffic on the unfinished Roadway.

All maintenance Work during construction and before the Project is Accepted shall be Incidental. The T/LPA shall not pay the Contractor an additional amount for this Work except in accordance with Section 104.5, “Maintenance of Traffic,” and Section 105.18, “Acceptance.”

105.16 FAILURE TO MAINTAIN ROADWAY OR STRUCTURE

If the Contractor fails to maintain the Project in accordance with Section 105.15, “Maintenance During Construction,” the Project Manager shall notify the Contractor in writing of the failure. If the Contractor does not take corrective action in timeframe specified by the Project Manager, the Project Manager may issue a written notice per 109.8.2 “Non-Conformance” or notice of the Contractor’s apparent default per Section 108.9, “Default of Contract.”

If the Contractor does not begin maintenance after notice from the Project Manager, the Project Manager may begin maintenance of the Project. For corrective actions implemented by the Project Manger the Contractor shall reimburse the T/LPA for T/LPA incurred costs of such maintenance plus an additional ten percent (10%) for administrative costs.

105.17 RESERVED

105.18 ACCEPTANCE

105.18.1 Partial Acceptance

The Contractor may request in writing that the Project Manager inspect a portion of the Project (e.g., a Structure, a section of Road, etc.) at any time during the Work. If the Project Manager finds that portion to be in accordance with the Contract, subject to the concurrence of the District Coordinator, the Project Manager may Accept that portion as complete, and, without waiving the provisions in Section 105.3, “Compliance with Plans and Specifications,” Section 107.26, “No Waiver of Legal Rights,” and Section 109.10, “Project Closure,” the Contractor may be relieved of further responsibility for that portion unless the T/LPA discovers latent defects before Final Acceptance of the Work. Such partial Acceptance does not void or alter the Contract.

The T/LPA will Accept permanent traffic safety and control devices installed in accordance with the Contract (with all ancillary components) and being used by the public upon installation but before completion of the remaining Work.

Permanently installed items Accepted on this basis are limited to the following:

1. Guardrail;
2. Impact attenuators;
3. Traffic Signals;
4. Signs;
5. Lighting;
6. Raised pavement markers;
7. CWB;
8. Concrete Bridge parapet;
9. Bridge railing;
10. Post and cable barrier ;
11. Guardrail anchorages;
12. Permanent pavement markings; and
13. Fence.

All required performance tests and guarantees shall remain applicable.

The Contractor shall repair or replace any damage, theft, or vandalism to these items after Acceptance in accordance with Section 104.2, “Extra Work.” The Contractor shall repair or replace items damaged due to the Contractor’s negligence or as a result of the Contractor’s failure to protect the Work per Section 107.20, “Contractor’s Responsibility to Protect the Work,” at no additional cost to the T/LPA.

The Contractor shall erect these items in a logical construction sequence. The T/LPA shall not Accept prematurely constructed items until they may be used for their intended purposes.

105.18.2 Final Acceptance

The T/LPA will make the Final Acceptance in accordance with 109.10.8 “Physical Completion, Final Payment and Final Acceptance.”

105.19 NOTICE OF INTENT TO CLAIM

Notice of intent to Claim shall be given in order that the T/LPA can assess the situation, make an initial determination as to the causes of the intent to Claim, institute appropriate changes or procedures to resolve the matter, document issues related to the intent to Claim, track costs and possible Delay, and facilitate resolution of the intent to Claim. The failure of the Contractor to provide a timely and complete Notice of Intent to Claim form, a contemporaneous statement of estimated damages or Delay, and to comply with the other requirements of this Section shall constitute a waiver or abandonment of the Claim.

The Contractor's submission of the Notice of Intent to Claim form and the Project Manager's actions related to the Notice of Intent to Claim shall not be construed to prove or validate the Claim or be construed as an admission of liability.

1. Unless otherwise specified by the Contract, the Contractor shall only make Claims in accordance with the exclusive administrative remedy and procedures set forth in this Section and Section 105.20, "Administrative Remedy."
2. The Contractor shall submit to the Project Manager its notice of intent to Claim on the T/LPA's current Notice of Intent to Claim form. The Notice of Intent to Claim form and documents or information submitted with the same shall constitute the Contractors intent to make a Claim. The notice of intent to Claim shall provide a contemporaneous statement of estimated damages or Delay before beginning the Work on which the Claim is based, but, in no event shall notice be given later than seven (7) Days of the Contractor discovering the condition or issue giving rise to the Claim, or within seven (7) Days of receipt of a notice of a differing site condition from the Project Manager. A notice of intent to Claim shall include, when relevant to the intended Claim (e.g., when the Contractor intends to seek a Contract adjustment for time, Delay damages, or reduction in Liquidated Damages, etc.), a revised schedule that identifies the impacts pursuant to Section 108.3.2, "Schedule Format;" failure to include a revised schedule shall render the notice of intent to Claim incomplete. This Section and the deadlines stated herein do not modify any of the deadlines for submitting revised schedules as provided in Section 108.3, "Schedule."
3. If the Contractor submits a timely Notice of Intent to Claim Form the Project Manager may, without admitting liability for the Claim, direct the Contractor to keep a complete and accurate account, in detail, of the cost of doing the Work on a Force Account basis per Section 109.6, "Force Account." Failure to maintain records on a Force Account basis when so directed by the Project Manager shall waive any associated Claim by the Contractor.
4. The Contractor shall provide the Project Manager proper facilities to keep account of the actual cost associated with the notice of intent to Claim; the Contractor waives the right to assert a Claim if the Project Manager is not afforded proper facilities to keep account of actual cost. The Project Manager may, in the Project Manager's discretion, in writing, waive this requirement to keep account of actual cost upon a showing of adequate justification by the Contractor.
5. If the Project Manager finds that the notice of intent to Claim is justified the Project Manager will process a Supplemental Agreement to resolve the notice of intent to Claim.
6. If the notice of intent to Claim is unresolved then the Contractor shall comply with Section 105.20, "Administrative Remedy."

105.20 ADMINISTRATIVE REMEDY

This Section governs the administrative remedy procedure to resolve all Claims, unless otherwise specified in the Contract. The administrative remedy procedure is the sole Contractual

procedure to resolve Claims. No Claim shall be accorded any level of review unless the procedure below is followed sequentially. The sequential steps of the process are as follows:

Step I. Notice of Intent to Claim;
Step II. Submittal of the Claim to the Project Manager;
Step III. T/LPA's review, which may include referral to Claims Board for an informal hearing, and T/LPA's decision;
Step IV. Service of Request for Arbitration or Service of Summons and Complaint in State District Court.

The Contractor shall not proceed to the subsequent step without a written determination from the preceding step.

The complete terms of a resolved Claim, regardless of the level of the administrative remedy, shall be documented and memorialized via a Change Order executed by the Contractor and the T/LPA. The executed Change Order shall represent a final agreement to the total additional compensation and time due for any and all Work and items pertaining to the Work associated with the Change Order. Unless otherwise provided in the terms of the Change Order, the executed Change Order shall operate as an accord and satisfaction of the Claim and shall operate as a bar to any further Claim by the Contractor. Each party shall bear its own attorneys' fees, costs, and expert fees.

Step I. Notice of Intent to Claim, See Section 105.19, "Notice of Intent to Claim."

The T/LPA shall dismiss a Contractor's Claim for failure to comply with the time limitations, requirements and procedures set forth in this Section and Section 105.19, "Notice of Intent to Claim."

105.20.1 Submittal of the Claim to the Project Manager

Step II. Submittal of the Claim to the Project Manager

The Contractor shall submit its Claim on the T/LPA's Claim Form. The Project Manager retains the right to request additional information and documents from the Contractor to support the Claim. The Contractor shall provide the requested additional information and documents.

1. A Claim shall be rejected and it shall constitute a waiver or abandonment of the Claim and a failure to exhaust its administrative remedy for the Contractor's failure to comply with the following conditions:
   a. The Claim shall be in writing;
   b. The Claim shall be submitted on the T/LPA's Claim Form;
   c. The Claim shall be submitted within 30 Days of the date that the Work associated with the Claim has been completed;
   d. The Claim shall be submitted only once;
   e. The Claim shall include all required supporting documentation and information; and

f. A Contractor's, Subcontractor's or Supplier pass-through Claim shall be certified by the Contractor as the Contractor's Claim on the T/LPA's current approved forms.

2. The Contractor has the burden of fully justifying and documenting the Claim and shall provide to the Project Manager the following supporting documentation and information in support of the Claim. The following supporting documentation shall also be updated from those documents submitted with the Notice of Intent to Claim:
   a. Description of the issue upon which the Claim is based;
   b. Location where the issue arose;
   c. The dates impacted including the time and date the issue arose;
   d. Clear explanation of why the issue requires additional compensation or time or a change to the Contract, including references to the relevant portions of the Contract;
   e. Copies of all written communications including correspondence and emails related to the issue;
   f. A detailed compilation of the amount of additional compensation sought and a breakdown of the amount sought as follows: documented additional job site labor expenses; documented additional cost of Materials and supplies; a list of additional Equipment costs claimed, including each piece of Equipment and the Blue Book rental rate claimed for each; any other additional direct costs or damages and the documents in support thereof;
   g. Where a Claim seeks additional time, time and compensation for Delay, adjustment of Contract Time, or the reduction or elimination of liquidated damages, previously submitted Baseline Schedule and revised schedules that comply with the requirements of Section 108.3, "Schedule;"
   h. Invoices identifying the labor, Materials, and Equipment used or proposed to be used;
   i. Project Cost Reports. If the amount claimed by the Contractor exceeds $100,000.00, Project cost reports for the time periods relevant to the Contract and the performance of the Work;
   j. Bid Documents. If the amount claimed by the Contractor exceeds $100,000.00, or if required by the Contract the Contractor shall make the Contractor's documents available for inspection by the Project Manager at the Contractor's project office. This includes information and calculations used to prepare and determine its Bid for the Contract prior to submission of the Bid. The required Bid preparation documents, as maintained by the Contractor, to be produced shall include: clear itemization of the costs for each Pay Item broken down into components sufficient to allow a detailed cost estimate; the costs allocated to each component broken down into the Contractor's usual estimate categories such as direct labor, Equipment, Materials, and Subcontractor cost; indirect costs, including the indirect cost allocations made to each Bid Item; quantity takeoffs; the construction and progress schedule and any conceptual schedules upon which the Bid was based; rates of production and progress; marked up Plans, sheets and Working Drawings ; calculations, copies and quotes from Subcontractors and Suppliers; memoranda, narratives, and all other information used by the Contractor to arrive at all of the prices contained in the Bid. The Project Manager may waive this requirement;
   k. Total amount of the Claim in terms of time and compensation; and

l. Certification of Claim. The Contractor shall submit a Certification of Claim form with the Claim.

105.20.2 T/LPA Review

Step III: T/LPA Review and Decision

The T/LPA has 30 Days from the date the Claim is received by the Project Manager, or additional time if agreed upon by both parties in writing, to review and render a decision. If the T/LPA does not make a written decision within the 30 Days, or the agreed upon additional time, the Claim is deemed denied by the T/LPA. The parties may engage in informal mediation to resolve the Claim prior to the expiration of the time in which the T/LPA may render a decision.

Once a Claim is submitted to the Project Manager, nothing in this Section shall be construed as permitting the Contractor to revive, modify, supplement, enlarge, or amend the Claim or the basis of entitlement other than providing additional documents and information in support of the Claim. All further proceedings shall be limited solely to the bases of entitlement and the amount of any compensation or time stated for any and all issues Claimed in the Contractor's written Claim submitted.

Additional Information. The T/LPA retains the right to request additional information from the Contractor to support the Claim, regardless of the Project Manager's previous waiver.

105.20.3 Arbitration

Step IV: Service of Request for Arbitration or Service of Summons and Complaint in State District Court

1. The Contractor and T/LPA may agree to arbitrate the Claim instead of proceeding to litigation in State District Court. Arbitration may only be had at the mutual agreement of the Contractor and the T/LPA. Arbitration shall be conducted in accordance with the New Mexico Uniform Arbitration Act (NMSA 1978, § 44-7A-1, et seq.) and this Section.
2. Service of the request to arbitrate the Claim by the Contractor shall only be made in the request for reconsideration. The T/LPA will issue a decision denying or agreeing to the request for arbitration in writing within ten (10) Days of the receipt of the request to arbitrate. If the T/LPA does not respond to the request to arbitrate then the request is deemed denied.
3. By the parties agreeing to arbitration, the Contractor waives the right to redress through litigation filed in State District Court. The Contractor's proceeding with arbitration shall operate as a waiver by the Contractor of recovery under any written decision issued by the T/LPA.
4. If the Contractor and T/LPA agree to arbitrate the Claim the arbitration panel shall consist of three (3) members.

5. Within 15 Days of the agreement to arbitrate the Claim, the Contractor shall submit the name of a panelist. The Contractor's panelist shall:
   a. Not be an employee of the Contractor;
   b. Have 15 years' experience in Highway construction management, methods, techniques, or law; or have an active professional license with the State of New Mexico as an Engineer, Surveyor or Attorney with ten (10) years' experience in Highway construction management, methods, techniques, or law;
   c. Be either a resident of the State of New Mexico or identify New Mexico as the panelist's principal place of business; and,
   d. Agree to serve on the panel;
6. Within 15 Days of receiving notice of the Contractor's panelist, the T/LPA shall submit the name of a panelist. The T/LPA's panelist shall:
   a. Not be an employee of the T/LPA, but may include individuals contracted to provide services to the T/LPA;
   b. Have 15 years' experience in Highway construction management, methods, techniques, or law; or have an active professional license with the State of New Mexico as an Engineer, Surveyor or Attorney with ten (10) years' experience in Highway construction management, methods, techniques, or law;
   c. Be either a resident of the State of New Mexico or identify New Mexico as the panelist's principal place of business; and,
   d. Agree to serve on the panel;
7. Within 30 Days after the T/LPA's panel appointment, the two (2) panelists will choose a third panelist. The third panelist shall:
   a. Be a professional arbitrator who is a member or diplomat of a nationally recognized professional arbitration organization, such as the National Academy of Arbitrators or the American Arbitration Association; or is a retired federal or New Mexico District or appellate judge; or be a former employee of FHWA;
   b. Not be an employee or a contractor of either the T/LPA or the Contractor; and
   c. Agree to serve on the panel;
8. If the two (2) panelists are unable to agree, a District judge from the Judicial District where the Project is located shall choose the third panelist from a list of four (4) prospective panelists who meet the requirements of the preceding paragraph, two (2) each provided by the T/LPA and the Contractor. Application to the court for this appointment shall be made by either or both parties within 15 Days of the impasse; the parties may agree in writing to extend this deadline.
9. The panel shall hold the arbitration hearing in the County where the Project is located, unless otherwise approved by the T/LPA, no later than 90 Days after the panel is selected. If the panel fails to meet this deadline or if the parties agree to extend the deadline, the panel retains jurisdiction to hear and resolve the issues in dispute.
10. Each party will pay the expenses and fees of its chosen panelist and attorney. Both parties will share equally the expenses and fees of the third panelist. If both parties agree, they will share court reporter costs. If not, the party requesting the transcription will pay the full cost.

11. The proceedings and the decision of the panel will be in accordance with the New Mexico Uniform Arbitration Act, NMSA 1978, § 44-7A-1 et seq. The decision is final and binding and may be vacated, confirmed, or appealed only in accordance with the New Mexico Uniform Arbitration Act (NMSA 1978, § 44-7A-1 et seq.).

105.20.4 Litigation

If the Contractor does not Accept the T/LPA's decision the Contractor shall issue its notice of Public Works Mediation within three (3) Days of the T/LPA's decision. The Contractor shall provide no less than seven (7) Days' notice of the convening of a mediation session. The Public Works Mediation shall be conducted in accordance with of the New Mexico Public Works Mediation Act (NMSA 1978, § 13-4C-1, et seq.). The Contractor shall exhaust the mandatory mediation procedures of the New Mexico Public Works Mediation Act before seeking judicial relief in State District Court. Failure to timely notice and convene a mediation session and to timely file and serve a summons and complaint shall operate as a waiver and abandonment of Contractor's Claim, shall act as an Acceptance of the T/LPA's decision, and shall bar the Contractor from proceeding to litigate the Claim. The T/LPA may process a unilateral Change Order implementing the T/LPA's decision based on the Contractor's abandonment or waiver of its Claim.

SECTION 106: CONTROL OF MATERIALS

106.1 CONTRACTOR-FURNISHED AGGREGATE AND BORROW SOURCES

Exploration and development of Material sources by the Contractor including related GRT and Tribal Taxes shall be Incidental.

The Contractor shall notify the Project Manager in writing of the Materials source prior to delivery of aggregate or borrow Materials to the Project. The Contractor shall provide Acceptable Materials and shall provide the following documentation to the Project Manager:

1. Location of source;
2. Copies of lease agreements, purchase orders, or Pit Agreements the Contractor has made with the pit owner or Supplier.
3. Evidence of environmental acceptability, which includes the completed environmental and Cultural Resource requirements of Section 107.14.1, “Environmental and Cultural Resource Studies and Approvals.” Such evidence shall, where appropriate include the completed and T/LPA Accepted recommendations for environmental and Cultural Resource management. Plans for restoration, including contouring and re-vegetation if necessary; and,
4. Testing results from a NMDOT Approved Testing Laboratory. http://dot.state.nm.us/content/dam/nmdot/Construction/Approved_Private_Testing_Laboratories.pdf

Upon request in writing from the Contractor, the Project Manager may approve Materials at the source prior to delivery. The Project Manager may reject sources, or specific areas within sources, due to failure to provide Acceptable Materials or due to environmental, social, or cultural concerns. If the Project Manager determines that the sources of previously Acceptable Materials do not produce Acceptable Materials, the Contractor shall provide Acceptable Materials from other sources, or make changes to the existing source to provide Acceptable Materials. No additional compensation or time shall be provided to the Contractor for unacceptable Materials or for developing alternate source locations.

The Project Manager will notify the Contractor in writing within ten (10) Days if its Material source is Acceptable.

106.2 SUPPLIER PLANT INSPECTION

The T/LPA may inspect Materials at the Supplier's plant. In this event, the Contractor shall:

1. Cooperate and ensure the cooperation of its Materials Supplier;
2. Guarantee unrestricted entry (at reasonable times) to areas where the relevant Material is being manufactured or produced;
3. Arrange for the necessary facilities to be adequately inspected for the production or fabrication of the Material; and,
4. Ensure adequate safety measures are implemented for the inspection.

The T/LPA may retest Materials, before or during use in the Work, and reject Materials that, when retested, do not meet the requirements of the Contract, even if the Materials were tested and Accepted at the plant.

106.3 SAMPLES, TESTS, AND CITED SPECIFICATIONS

The T/LPA will perform tests in accordance with standards, methods, or Specifications, of the Project's Contract. Unless otherwise specified in the Contract, the T/LPA will take samples and perform tests at its own expense. Unless otherwise specified in the Contract, the T/LPA will provide test results to the Contractor.

106.4 CERTIFICATES OF COMPLIANCE

The Contractor shall submit a Certificate of Compliance to the Project Manager before installing or incorporating Material in the Work using the NMDOT's current approved Certificate of Compliance form. Any additional documentation required to verify the information required by the Certificate of Compliance form shall be submitted contemporaneously with the completed Certificate of Compliance form.

The Contractor may provide Material purchased in bulk or left over from previous Projects by submitting Certificates of Compliance forms for those Materials.

Unless otherwise stated in the Contract, Materials not permanently incorporated into the Work will not require a Certificate of Compliance form.

Unless requested in writing by the Project Manager, electric items meeting UL approval and underground utility Materials meeting ASTM or AWWA Specifications that are so certified or stamped will not require a Certificate of Compliance form.

106.5 FOREIGN MATERIALS

Unless otherwise specified in the Contract, the Contractor shall deliver Materials manufactured outside the United States to approved locations within the State, where they shall remain until sampling and testing are complete. The Contractor shall arrange for testing that the T/LPA is not able to perform, at no additional cost to the T/LPA, and shall test foreign Materials within the State in the presence of the T/LPA.

The Contractor shall provide a Certificate of Compliance for each lot of foreign Material in accordance with Section 106.4, "Certificates of Compliance;" and, if required, provide with the Certificate of Compliance, certified MTRs for each lot, and clearly identify to which lot they apply.

For structural Material, the T/LPA will only Accept Material from foreign and domestic manufacturers that have established adequate in-plant Quality Control to the satisfaction of the

Project Manager. The T/LPA will not Accept structural Materials that do not have Certificates of Compliance and MTRs.

The Project Manager may inspect the plant or require the Contractor to submit detailed written proof of adequate Quality Control.

106.6 STORAGE OF MATERIALS

The Contractor shall request from the Project Manager written approval to store Equipment or Materials within the ROW for the adequate execution of the Work. The Contractor shall store Equipment and Materials to preserve quality and fitness, to protect against vandalism or theft, and to facilitate inspection. The Contractor shall be responsible for the replacement or repair of Materials affected by inadequate protection.

106.7 HANDLING AND TRANSPORTING MATERIALS

The Contractor shall handle Materials in a manner that preserves the Acceptability for the Work. The Contractor shall ensure the transportation of Materials is in accordance with State and federal regulations, and prevent leakage of, scattering of, or damage to Materials. Materials damaged or lost in transportation shall be deemed unacceptable and are not subject to payment by the T/LPA.

106.8 T/LPA-PROVIDED MATERIALS

Material provided by the T/LPA will be made available to the Contractor as specified in the Contract. The Contractor will be held responsible for all T/LPA supplied Material when it takes physical possession of the Materials and until such time that the Materials are incorporated into the Work and Accepted.

106.9 MATERIALS DESIGNATED BY TRADE NAME

The Contract may require Materials or Equipment by trade or manufacturers' names. The T/LPA will not Accept the substitution of Materials or Equipment when the Contract requires Materials or Equipment of specific trade or manufacturers' names.

106.10 EQUIPMENT AND MATERIAL GUARANTEES AND WARRANTIES

Obtain and assign to the T/LPA manufacturer and producer guarantees or warranties for Materials and Equipment. Warrant, for six (6) months after Material or Equipment is installed and operational, that mechanical and electrical Equipment without a manufacturer or producer guarantee are free from defects or imperfections in workmanship and Materials. Repair malfunctions or defects that develop during the six-month period.

Supply manuals for Equipment incorporated in the Work providing the following

information:

1. Operational procedures;
2. Complete nomenclature;
3. Wiring diagrams;
4. Schematics showing test voltage and procedural methods;
5. Functional description of circuits;
6. Parts lists;
7. Cross-references to standard part numbers;
8. Names and addresses of sources for testing procedures where appropriate
9. Flow diagrams; and
10. Other relevant data.

106.11 SAFETY DATA SHEETS (SDS)

The Contractor shall submit to the Project Manager the most current SDSs for all Materials that require SDSs upon delivery of the Materials to the Project. The SDS shall conform to current Federal requirements in 29 C.F.R. § 1910.1200 (g).

106.12 BUY AMERICA REQUIREMENTS

The Contractor shall provide Materials in accordance with the Buy America Requirements in 23 C.F.R. § 635.410 on federal-aid Projects.

The Contractor shall bear the burden of proof and the cost to show the origin and place of manufacture of iron and steel products and Materials.

SECTION 107: LEGAL RELATIONS, ENVIRONMENTAL REQUIREMENTS, AND RESPONSIBILITY TO THE PUBLIC

107.1 LAWS TO BE OBSERVED

Before the start of Work, the Contractor shall be fully informed and make the necessary contacts with local governments and State agencies concerning obligations related to all applicable federal and State laws, all local laws, ordinances and regulations, and all orders and decrees of bodies or tribunals having jurisdiction or authority. The Contractor, Subcontractors, and Suppliers shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and protect and indemnify the T/LPA and its officers, employees and agents against all Claims or liability arising from or based on the violation of such laws, ordinances, regulations, orders, or decrees, by the Contractor, its officers, employees or agents, Subcontractors or Suppliers.

107.2 PERMITS, LICENSES, AND TAXES

The Contractor shall procure all permits and licenses; pay charges, fees, royalties, and appropriate taxes; and give notices necessary and incidental to the lawful performance of the Contract.

Prior to beginning Work the Contractor shall furnish to the T/LPA a written list of all permits required for the proper completion of the Contract. The list shall clearly identify the type of permit or permits that must be obtained before Work can be started. Copies of fully executed permits shall be furnished to the T/LPA upon request.

107.2.1 Compliance with Payment of Taxes

The Contractor shall pay all lawful taxes imposed by the State of New Mexico or other political entities.

The successful Bidder, after receiving the Notice of Preliminary Award of Contract, shall provide to the T/LPA both the Bidder's Taxation and Revenue Department tax identification number and the Bidder's Motor Transportation Division account number. If either of these numbers is unavailable, the Contractor shall submit a letter of explanation. A Notice to Proceed will not be issued until the Contractor submits both numbers or a satisfactory letter of explanation.

107.2.2 Gross Receipts, Indian Business Activity, and Tribal Employment Rights Organization Taxes

107.2.2.1 New Mexico Gross Receipts Tax

The T/LPA will pay the Contractor for applicable New Mexico GRT and local option tax (including tax increases or decreases effective after the Contract date), and the Contractor shall

pay applicable taxes to New Mexico Taxation and Revenue Department. The Contractor shall show the GRT and local option tax as a separate amount added to each request for payment.

The T/LPA shall be promptly reimbursed or repaid for any tax, including GRT, that is refunded to the Contractor, including any refund received by the Contractor after final payment, to the extent such tax was paid by the T/LPA to the Contractor. The Contractor shall keep and maintain all documents, applications for tax refund, and forms filed with, submitted to, received from, or required by the New Mexico Taxation and Revenue Department which relate to the payment or refunding of any tax paid pursuant to this Section for five (5) years following final payment. All of the above material shall be made available to the T/LPA, the NMDOT or FHWA for review, audit, inspection, and copying and shall be produced, upon request, at the address directed by the T/LPA.

107.2.2.2 Tribal Taxes

All Bids submitted shall exclude any tribal business tax, TERO tax, and other tax imposed by a tribal government. The T/LPA will either pay the tax or may challenge the tribal government's authority to impose the tax. If the T/LPA to challenges the tribal government's authority to impose the tax, the T/LPA will reimburse the Contractor for such tax only if a court of competent jurisdiction rules the tribe has authority to impose the tax. The T/LPA will be subrogated to the rights of the Contractor to Claim a refund of, or to contest, any such tax imposed on the Work to the extent any alleged obligation of the Contractor or the T/LPA to pay such tax arises under this Section or through the Contractor's performance of this Contract.

The T/LPA will reimburse the Contractor for payment of any Tribal Tax directly related to the performance of the Work within the Project imposed by a tribe upon tribal verification that the tax was paid by the Contractor.

107.3 RESERVED

107.4 RESERVED

107.5 PATENTED DEVICES, MATERIALS, AND PROCESSES

The Contractor's Bid Item Unit Price shall include the cost of all royalties and costs from patents, trademarks and copyrights needed to complete the Work.

If the Contractor employs any design, device, Material, or process covered by letters of patent, copyright or trademark, the Contractor shall secure approval for its use from the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the T/LPA from all Claims (including costs, expenses, and damages the T/LPA may be obligated to pay) for infringement by reason of its use. The Contractor and Surety shall also indemnify and save harmless any affected third party and any political subdivision from all Claims for infringement by reason of its use.

107.6 RESTORATION OF SURFACES OPENED BY UTILITY PROVIDERS

The T/LPA reserves the right to allow utility service providers with valid utility permit or an easement to enter the Project and perform utility Work.

When directed by the T/LPA the Contractor shall make all necessary repairs. If directed by the T/LPA, the repairs will be subject to the same requirements as the original Work performed. The T/LPA will pay for such repairs in accordance with Section 109.5, “Payment for Extra Work.”

The T/LPA will address time extension requests due to Work by utility service providers in accordance with Section 108.6, “Determination and Extension of Contract Time.”

107.7 FEDERAL AID PROVISIONS

When the FHWA or other federal agency will be reimbursing the costs for all or any portion of the cost of a Project, the Contractor shall observe and be subject to federal law applicable to such reimbursement. In such situations, federal requirements supersede conflicting provisions of State and local laws, rules, or regulations. The Work shall be subject to inspection and oversight by the appropriate federal agency. Such inspection or oversight shall not make the U.S. Government a party to this Contract, nor shall the U.S. Government interfere with the rights of the Contract parties.

107.8 SANITARY, HEALTH, AND SAFETY PROVISIONS

The Contractor shall provide and maintain sanitary accommodations for use by Contractor and T/LPA employees, in accordance with State and local boards of health, or other legal entity with jurisdiction.

The Contractor shall admit to the Project credentialed Inspectors from OSHA or other agencies responsible for health and safety administration.

107.8.1 State and Federal Land Managing Agencies

While working within or adjacent to State or federal lands and forests, the Contractor shall comply with all regulations of the State or federal authority having jurisdiction governing the protection of these areas, and observe all sanitary laws and regulations. The Contractor shall keep the areas in an orderly condition, dispose of all refuse, and obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other Structures in accordance with applicable federal or State regulations.

107.9 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall provide for the convenience and safety of the general public, for reasonable access by local residents and businesses, and for the protection of persons and property, in accordance with Section 104.5, “Maintenance of Traffic.”

107.10 RAILROADS

If the Project affects railroad lines, the Contractor shall observe the requirements of the following Sections and the insurance requirements in accordance with Section 107.25, “Insurance Requirements.”

For the purpose of this Section, the term “agreement” means the contract between the Contractor and railroad that defines the rights and responsibilities of both the Contractor and railroad for the Project. The term “immediate construction site” shall mean the area of the Project defined as having impacts on the railroad in the agreement.

107.10.1 Reserved

107.10.2 Notice to the Railroad

Unless otherwise stated in the Contract, the Contractor shall not begin Work in railroad-owned Right of Way before entering into an agreement with the railroad.”

107.10.3 Cooperation with Owner of Railroad Right of Way

The T/LPA is not liable for any additional costs or expenses of the Project resulting from the railroad’s reallocation of its labor forces assigned to complete railroad Work in the event of an emergency when the owner of the railroad ROW believes such reallocation is necessary to provide for the immediate restoration of the railroad operations or to protect persons or property on or near any other property owned by the railroad.

107.10.4 Reserved

107.10.5 Reserved

107.10.6 Reserved

107.10.7 Reserved

107.11 ENVIRONMENTAL AND CULTURAL RESOURCES APPROVAL, HAZARDOUS MATERIALS

The T/LPA will obtain the environmental and Cultural Resource approvals for the Project before construction. The T/LPA will describe in the Contract any environmental and Cultural Resource requirements developed to protect resources.

The T/LPA will describe in the Contract any Hazardous Materials identified and the Contractor shall observe the requirements of Sections 107.1, 107.2, 107.8 and the applicable paragraphs of 107.14.

107.12 ENVIRONMENTAL, CULTURAL RESOURCE AND HAZARDOUS MATERIALS DISCOVERIES

The Contractor shall terminate operations and provide written notification per Section 104.2.2, "Differing Site Conditions," when it discovers environmental, Cultural Resources or Hazardous Materials not identified in the Contract. The T/LPA will coordinate with appropriate regulatory authorities during this time, the Contractor shall continue Work in other unaffected areas. The Project Manager shall provide written notification to the Contractor when Work may commence in the area of terminated operations.

107.13 CONTRACTOR'S RESPONSIBILITY FOR DAMAGE TO ENVIRONMENTAL AND CULTURAL RESOURCES

The Contractor shall restore or mitigate all damage to environmental or Cultural Resources caused by the Contractor's failure to abide by requirements included in the Contract as well as those areas covered under Section 107.14, "Contractor's Responsibility for Environmental and Cultural Resource Protection," at no additional cost to the T/LPA. The T/LPA, in coordination with regulatory authorities, will determine the extent of restoration or mitigation. The Contractor shall pay any fine imposed on the T/LPA by a regulatory agency for a regulatory violation caused by the Contractor. The Project Manager may suspend the Work in areas where environmental or Cultural Resource violations occur.

107.14 CONTRACTOR'S RESPONSIBILITY FOR ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION

107.14.1 Environmental and Cultural Resource Studies and Approvals

The Contractor shall obtain new certifications for any Contractor located activity outside the Project Limits or for expansions or additions to existing previously certified areas. If the Contractor purchases Material from a Material source established for another Project by another Contractor working under Contract to the T/LPA, and if the Material source must be expanded beyond the area where environmental and Cultural Resource approvals have previously been obtained pursuant to Section 107.14.1, "Environmental and Cultural Resource Studies and Approvals," then the requirements for environmental acceptability shall apply to the additional area and requirements of Section 107.14.1, "Environmental and Cultural Resource Studies and Approvals," must be completed by the Contractor.

Before beginning soil-disturbing activities (in accordance with Section 106.1, "Contractor-Furnished Aggregate and Borrow Sources"), the Contractor shall notify the Project Manager in

writing of the proposed studies to be performed. After the Project Manager's concurrence with the Contractor's studies the Contractor shall employ an Environmental Specialist and a Cultural Resource Professional to conduct the approved studies. The Contractor shall ensure that the studies meet the standards of the NMDOT, the State historic preservation officer, and any State, tribal, or federal land-managing agency or entity with jurisdiction. The Contractor shall ensure that the resource studies are in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. § 4321 et seq.), the National Historic Preservation Act (16 U.S.C. § 470 et seq.), and the New Mexico Cultural Properties Act (NMSA 1978, § 18-6-1 to 18-6-17), or any other successor statutes. The studies may extend, but are not limited to, the following locations:

1. Camp sites;
2. Plant sites;
3. Crusher sites;
4. Stockpile sites;
5. Equipment yards;
6. Borrow Pits;
7. Surfacing Pits; and,
8. Water sources.

The Contractor shall obtain the environmental and Cultural Resource approvals regardless of land ownership. For the environmental approval, the Contractor shall use the NMDOT -furnished checklist Categorical Exclusion form (or equivalent form furnished by the NMDOT), which shall be signed by the Contractor and the Environmental Specialist.

For Cultural Resource reports, use the standard site investigation forms approved by the New Mexico Historic Preservation Division and the New Mexico Cultural Properties Review Committee.

The Contractor may use previously-completed environmental and Cultural Resource studies, provided all other requirements of this Section are met.

The Contractor shall submit the documentation prepared for the environmental and Cultural Resource approvals to the Project Manager. Contractor located activities on State land, or privately owned land, may take 45 Days or more for approval after the Contractor delivers the resource studies to the Project Manager. Contractor located activities on federal land have no defined period for approval. The T/LPA will not approve requests for additional Contract Time or compensation related to Contractor Located Activities.

The Contractor shall comply with all conditions and commitments for protection of resources contained in resource agency requirements and in the environmental and Cultural Resource approvals. The environmental approval is the FHWA-approved checklist categorical exclusion, or its equivalent. The Cultural Resource approval is the concurrence letter signed by the State historic preservation officer, or its equivalent.

The Contractor shall repair at the Contractor's expense all damage to environmental or Cultural Resources caused by the Contractor's failure to meet the requirements for environmental

acceptability or abide by T/LPA directives issued to protect resources identified during the environmental and Cultural Resource evaluation. The nature and extent of such repairs shall be determined after consultations between the Contractor, T/LPA and NMDOT representatives, and the regulatory authorities with management jurisdiction over the subject resources.

107.14.1.1 Commercial Material Sources

Environmental acceptability requirements do not apply to Commercial Material Sources. Upon request of the Project Manager, the Contractor shall submit copies of its Commercial Sources Air Quality Permit, Groundwater Permits, and Business License.

107.14.2 Parking and Cleaning of Equipment

For Projects that have received environmental and Cultural Resource approvals through programmatic categorical exclusions (e.g., pavement preservation and rehabilitation, guardrail replacements, Bridge deck replacements, signalization upgrades, etc.), environmental and Cultural Resource studies will not have been completed outside the existing paved areas by the T/LPA. These Projects will be noted as such in the Contract. For these Projects, the Contractor shall take special care when parking and cleaning Equipment, as outlined in the following requirement.

The intent of the following requirement is to ensure the protection of sensitive environmental and Cultural Resources that may be present within the Right of Way and to encourage the Contractor to avoid damaging these resources when parking and cleaning Equipment. The Contractor shall ensure that parking and cleaning of Equipment within the Right of Way does not damage environmental and Cultural Resources, in one (1) or a combination of the following manners:

1. Park and clean Equipment in previously disturbed areas only;
2. Identify all parking and cleaning locations in previously undisturbed areas, prior to construction, and complete the environmental and Cultural Resource approvals as described in Section 107.14.1, “Environmental and Cultural Resource Studies and Approvals;” or
3. Park and clean Equipment in previously undisturbed areas without completing the environmental and Cultural Resource approvals as described in Section 107.14.1, “Environmental and Cultural Resource Studies and Approvals,” and assume all risk and liability for any damage to environmental or Cultural Resources resulting from these actions.

107.14.3 Clean Water Act

The Contractor shall comply with the New Mexico Water Quality Act (NMSA 1978, § 74-6-1 et seq.) and applicable permits and regulations in accordance with the federal Clean Water Act (33 USC § 1251 et seq.).

The T/LPA will apply for and obtain permits and certifications required for construction involving “waters of the United States” as defined by the U.S. Army Corps of Engineers. The Contractor shall comply with the terms of the permit obtained and shall be fully liable for consequences resulting from its failure to comply. The T/LPA will provide a copy of the permits and certifications in the Contract.

107.14.4 Minimization of Soil Disturbance

The Contractor shall minimize damage to or removal of vegetation and trees, except as approved in Section 104.6, “Rights in and Use of Materials Found on the Work.” The Contractor shall not clear, grub, disturb, or excavate land beyond what is authorized by the Contract. The Contractor shall remediate or replace vegetation due to an unauthorized clearing or damage, at no additional cost to the T/LPA.

107.14.5 Air Quality Requirements and Dust Abatement

The Contractor shall perform dust abatement on the Project and as directed by the Project Manager. The Contractor shall ensure any operations which produce particulate matter comply with State and federal air quality regulations, as administered by the Air Pollution Control Bureau of the NMED, applicable local air quality regulations, and the federal Clean Air Act (42 USC § 7401 et seq.).

107.14.6 Noise Abatement

The Contractor shall not operate Equipment that emits noise above 70 dbA, measured at a distance of 50 ft, in urban or populated rural areas during the hours specified in the Contract, and shall comply with County or municipal ordinances if they are more stringent than the requirements in the Contract.

107.14.7 Disposal of Materials

Unless otherwise specified in the Contract, the Contractor shall be solely responsible for disposal of Materials. In the disposal of Material the Contractor shall comply with all federal, State and local regulations. The Contractor shall not dispose of Material within the Project Limits without written approval from the Project Manager.

107.14.8 Disposal of Other Materials and Debris

The Contractor shall move items designated for removal without salvage, unsuitable construction Materials, and debris from clearing and grubbing to an environmentally suitable disposal site secured and coordinated with the appropriate regulatory agencies. The Contractor shall not place any items in wetland areas or areas that may impact endangered species or Cultural Resources. The Contractor shall obtain an environmental and Cultural Resource

approval in accordance with Section 107.14.1, “Environmental and Cultural Resource Studies and Approvals.”

107.14.9 Prime Coat, Tack Coat, and Soil Sterilants

The Contractor shall not contaminate soils outside the Roadway Prism when applying prime coat, tack coat and soil sterilants. The Contractor shall not contaminate arroyos, irrigation supplies (acequias and ditches), wetlands, water impoundments, and live streams.

107.14.10 Noxious Weed Prevention

To avoid the spread of noxious weeds, all prime and Subcontractor construction Equipment (including but not limited to trucks, excavators, bulldozers, loaders, scrapers, backhoes, trailers, tractors, hydro-seeders, drill-seeders, straw-blasters, compost-spreaders, bobcats, and disks) shall be pressure-washed to remove all visible mud, soil, and debris prior to entering the Project Limits.

107.15 HAZARDOUS MATERIALS

The T/LPA will describe in the Contract, all known Hazardous Materials within the Project Limits.

107.15.1 Hazardous Material Discoveries

During construction, should Material be encountered which is or the Contractor believes to be hazardous or contaminated, the Contractor shall immediately: terminate operations in the immediate area, notify the Project Manager in writing per Section 104.2.2, “Differing Site Conditions,” and the appropriate regulatory authority, and continue Work in other areas. The Project Manager, District Coordinator, Environmental Geology Bureau Manager, and environmental regulatory authorities shall investigate to determine the nature and extent of the Hazardous Material or contamination within the Right of Way. If the Contractor is not qualified, as determined by experience and/or licensure, to undertake a clean-up action, the Contractor shall retain the services of a qualified firm. Any adjustments shall be made in accordance with Section 109.5, “Payment for Extra Work.”

Should the Contractor fail to notify the Project Manager of Hazardous Material discoveries and/or fail to respond in accordance with all applicable environmental regulations or any part of these Specifications, the Contractor shall pay, at no cost to the T/LPA, any fine or penalty imposed for regulatory violations.

107.16 PREVENTION OF FOREST AND GRASS FIRES

The Contractor shall prevent forest and grass fires. The Contractor shall notify appropriate officials at the earliest possible moment of the location and extent of any fire. The Contractor shall

comply with fire regulations applicable to the area of Work, and furnish and maintain firefighting Equipment and tools required in the Contract. The Contractor shall suspend fire-hazardous operations when necessary at the direction of the Project Manager.

If performing Work within or adjacent to State or National Forests, the Contractor shall comply with all regulations of the USDA Forest Service, State Forestry Division, New Mexico Department of Energy, Minerals and Natural Resources, or other authority having jurisdiction, governing the protection of forests and the performance of Work within forests. The Contractor shall keep the areas in an orderly condition, dispose of all refuse, and obtain permits for the construction of field offices and other Structures in accordance with the requirements of the Forest Supervisor.

The Contractor shall take all reasonable precautions to prevent and suppress forest fires and shall require employees and Subcontractors to take all reasonable measures within their power to prevent and suppress forest fires. The Contractor shall make every possible effort to notify a Forest official at the earliest possible moment of the location and extent of a fire.

107.17 USE OF EXPLOSIVES

The Contractor shall exercise extreme care when use of explosives is necessary for the prosecution of the Work. The Contractor shall be responsible for all damage resulting from the use of explosives. The Contractor shall not endanger life or property, including new Work. The Contractor shall use, handle, load, transport, and store explosives and blasting agents in accordance with applicable laws and ordinances, as well as title 29 CFR Part 1926 Safety and Health Regulations for Construction (OSHA) and 30 CFR Part 15.32 whichever is more restrictive. The Contractor shall clearly mark explosives and store them securely. If no local laws or ordinances apply, the Contractor shall store explosives not closer than 600 feet from Roads, buildings, camping areas, or places of human occupancy. Unless otherwise required by an agreement between the Contractor and public utility or owner of railroad ROW, the Contractor shall provide five (5) Days' notice to any public utility and owner of railroad ROW having Structures or facilities near the Project, of the intention to use explosives, so that they may take steps to protect their property before detonation.

107.18 PROTECTION AND RESTORATION OF PUBLIC AND PRIVATE PROPERTY

The Contractor shall preserve public and private property including land, governmental survey monuments, and property markers from disturbance or damage until the Project Manager has witnessed or otherwise referenced their location, and directed their removal.

The Contractor shall restore public or private property damaged and pay fines directly or indirectly caused by the Contractor through any act, omission, neglect, or misconduct in the execution of the Work, or by defective Work or Materials, or by non-prosecution of the Work. The Contractor shall return such property to a condition equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as directed by the Project Manager. The Contractor shall maintain responsibility for damage until the Work is completed and

Accepted. The contractor shall provide the T/LPA with the information to update the control sheet records once a reference mark has been reestablished by the Contractor.

107.18.1 Public and Private Reference Marks

Unless otherwise specified in the Plans, the Contractor shall not disturb or damage any public or private reference marks. If the Contractor directly or indirectly by any act, omission, neglect, or misconduct in the execution of the Work disturbs or damages public or private reference marks the Contractor shall be solely responsible for any restoration of the reference marks in accordance with Section 801, “Construction Staking by the Contractor.” If the restoration of the public or private reference mark is done improperly then the Contractor shall be solely responsible for a fine of $2,000.00 per improper reference mark. Delays, costs or impacts associated with the improper restoration of a reference mark shall be the sole responsibility of the Contractor.

107.19 RESPONSIBILITY FOR THIRD PARTY CLAIMS AND DUTY TO DEFEND

The Contractor shall indemnify and hold harmless the T/LPA and its officers, employees and agents from and against any and all Claims and suits, liability, damages, losses or expenses, including attorney fees and costs, to the extent that they arise out of or are in any way connected with any act or omission of the Contractor, or its officers, employees or agents. The Contractor agrees, at its own expense, and upon written request by the T/LPA, to defend any suit, action or demand brought against the T/LPA on any Claim or demand covered herein.

The Contractor shall establish a local contact number (with area code) for filing Claims, and clearly post the number. In addition, post the name of the Contractor and telephone number at each approach and departure to the Project. The Contractor shall ensure that construction vehicles (Contractor, Subcontractor, and privately owned) working on the Project have clean, unobstructed license plates, and shall mark vehicles legibly with the appropriate company name.

The Contractor shall assign an individual by the date of the preconstruction conference, readily available during normal working hours, to respond to Claims from the public for losses alleged to have occurred within the Project, whether arising from Contractor or Subcontractor action or inaction. The Contractor shall provide claimants with a written outline of the Contractor’s Claims procedure, along with a written copy of the Contractor’s name, address, and telephone number together with the name and title of the individual assigned to handle Claims from the public and provide a copy of the same to the Project Manager. The Contractor shall maintain a status report of Claims filed, including the name, address, and telephone number of the claimant, the nature of the Claim, pertinent findings regarding the Claim, and a statement regarding the resolution of the Claim. The Contractor shall provide the status report to the Project Manager upon request.

107.20 CONTRACTOR’S RESPONSIBILITY TO PROTECT THE WORK

Until Final Acceptance of the Project by the Project Manager, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof, by the action of the elements or from other causes, whether arising from the execution or from the non-execution of the Work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to portions of the Work occasioned by the above causes before Final Acceptance and shall bear the expense thereof except as provided in Sections 104.5, "Maintenance of Traffic," and Section 105.18.1, "Partial Acceptance."

Should the Contractor be Delayed in the prosecution or completion of the Work by Contractors on contiguous Projects, Acts of God such as fire, flood, earthquake, tornado, or other cataclysmic phenomena of nature, epidemic, quarantine restriction, strike, freight embargo, acts of public enemy, acts of governmental authorities or railroads other than the T/LPA, or documented national unavailability of construction Material, for which the Contractor is in no way responsible, then the Contractor may be entitled to an extension of Contract Time per Section 108.6, "Determination and Extension of Contract Time," but is not entitled to additional compensation or damages for such Delay. For physical damage to the Work resulting from the above unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, the Contractor may be paid pursuant to Section 109, "Measurement and Payment." The Contractor shall not be entitled to non-allowable damages per Section 109.11, "Compensation for Claims."

In case of suspension of Work per Section 105.8.1, "Project Manager Authority," the Contractor shall be responsible, subject to the provisions of Section 104.5, "Maintenance of Traffic," for the Project and shall take such precautions as may be necessary to prevent damage to the Project.

107.21 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

The Contractor shall not begin Work in areas close to railroad, telecommunication, or utility company Right of Way or facilities, or other property where damage from the Work might result in expense, loss, or inconvenience to the owner, until arrangements are made with the Project Manager and the owner of the property for the protection of such property or facilities.

The Contractor shall promptly notify the Project Manager and affected utility or railroad owners of any interruption to services resulting from exposure, lack of support, or breakage. The Contractor shall provide continuous repair Work to restore water service if interrupted. The Contractor shall not perform Work near fire hydrants until provision for service has been approved by the local fire authority.

107.22 FURNISHING RIGHT OF WAY

The T/LPA will secure necessary Right of Way before construction, except as noted in the Contract.

107.23 PERSONAL LIABILITY OF PUBLIC OFFICIALS

T/LPA employees shall bear no personal liability in carrying out the provisions of the Contract or in exercising powers or authority granted to them by the Contract, it being understood that in such matters they act solely as agents and representatives of the T/LPA.

107.24 NO THIRD-PARTY LIABILITY

The T/LPA and the Contractor specifically agree that the provisions of this Contract do not make anyone, including any Subcontractor or Materials Supplier, a third-party beneficiary or authorize anyone not a party to this Contract to maintain an action for damages under this Contract.

107.25 INSURANCE REQUIREMENTS

The Contractor shall procure and maintain at no cost to the T/LPA insurance as detailed below, using an insurance company authorized to do business in New Mexico. Insurance shall cover operations under the Contract, whether performed by the Contractor, the Contractor's agents or employees, or Subcontractors. Contractor shall keep insurance in full force and effect for the entire period of the Work, up to and including Final Acceptance, and the removal of Equipment and employees, agents and Subcontractors. All insurance required in this Section shall be procured from insurance or indemnity companies with an A.M. Best Company financial strength rating level of A- or better, Class VII or better, unless otherwise approved in writing by the T/LPA. In no event shall the T/LPA approve the use of an insurance or indemnity company with an A.M. Best Company financial strength rating level of B or worse.

107.25.1 Liability Insurance

1. The Contractor shall obtain General Liability (Bodily Injury Liability and Property Damage Liability) insurance coverage applicable in full to the subject Project in the following minimum amounts:
   a. Personal and Bodily Injury Liability: $1,000,000.00 each person; $2,000,000.00 each occurrence (annual aggregate); and,
   b. Property Damage Liability: $2,000,000.00 each occurrence; (annual aggregate);
2. The insurance coverage shall be documented on a Comprehensive General Liability form or Commercial General Liability form, which must include the following:
   a. Coverage for liability arising out of the operation of independent Contractors;
   b. Completed Operations Coverage; and,
   c. Attachment of the Broad Form Comprehensive General Liability Endorsement;
3. If the Work includes the use of explosives, the Contractor's insurance must include coverage for injury to or destruction of property arising out of blasting or explosion;
4. If the Contract includes Work next to an existing building or Structure, the Contractor's insurance shall include coverage for injury to or destruction of property arising from the collapse of or structural injury to buildings or Structures due to the following:

a. Excavation, including borrowing, filling, or backfilling in connection therewith;
b. Tunneling and cofferdam or caisson Work; and,
c. Moving, shoring, underpinning, razing, or demolition of buildings or Structures, or removal or rebuilding of structural supports thereof; and,

5. Coverage must include injury to or destruction of property arising out of damage to wires, conduits, pipes, mains, sewers or other similar property or any apparatus in connection therewith below the surface of the ground, if such injury or destruction is caused by or occurs during the use of mechanical Equipment for the purpose of excavating, digging, or drilling.

107.25.2 Automobile Liability Insurance

The Contractor shall provide or ensure that all vehicles used in performance of the Contract have liability insurance. The Contractor is not responsible for liability insurance for the T/LPA or its agents. The Contractor shall provide limits of liability for automobile liability insurance in the following amounts:

1. Personal and Bodily Injury Liability: $1,000,000.00 each person; $2,000,000.00 each occurrence; (annual aggregate); and,
2. Property Damage Liability: $2,000,000.00 each occurrence; (annual aggregate).

107.25.3 Worker's Compensation Insurance

The Contractor shall carry worker's compensation insurance and otherwise fully comply with the New Mexico Worker's Compensation Act (NMSA 1978, § 52-1-1 et seq.) and the New Mexico Occupational Disease Disablement Law (NMSA 1978, § 52-3-1 et seq.).

107.25.4 T/LPA as Additional Insured

The Contactor shall name the T/LPA and any third party so designated in the Contract as an additional named insured on the comprehensive general liability form or commercial general liability form furnished by the Contractor in accordance with Section 107.25.1, "Liability Insurance." The certificate of insurance shall state that the coverage provided under the policy is primary over any other valid and collectible insurance. The additional insured endorsement shall conform to the most current version of the Insurance Services Office's CG 2010 or equivalent, Additional Insured Endorsement Form. The Contractor shall provide to the T/LPA a copy of the Contractor's standard commercial general liability policy showing the Additional Insured Endorsement before the T/LPA issues a Notice to Proceed.

107.25.5 Certificate of Insurance

The Contractor shall provide evidence of insurance coverage conforming to these Specifications with a certificate of insurance executed on the form provided by the NMDOT to be made part of the Contract. The certificate shall indicate compliance with these Specifications and shall certify that the coverage shall not be changed, canceled, or allowed to lapse without giving

the T/LPA 30 Days written notice. The Contractor shall provide a certificate of insurance to the T/LPA on renewal of a policy or policies as necessary during the term of the Contract. The T/LPA shall not issue a Notice to Proceed until the Contractor meets these requirements.

107.25.6 Umbrella Coverage

The insurance limits cited in this Section are minimum limits. The T/LPA does not intend that these Specifications define what constitutes adequate insurance coverage for the individual Contractor. The T/LPA will recognize excess coverage (Umbrella) as meeting the insurance requirements of Section 107.25.1, “Liability Insurance,” if the limits of the Umbrella coverage meet the individual requirements of this Section.

107.25.7 Optimal Insurance

If required by the Contract, Contractor shall procure and maintain form and types of bailee theft insurance such as, but not limited to, builder’s risk insurance, Contractor’s Equipment insurance, and rigger’s liability property insurance. If so required, the Contractor shall provide bailee theft insurance in an amount necessary to protect the T/LPA against Claims, losses, and expenses arising from the damage, disappearance, or destruction of property of others in the care, custody, or control of the Contractor, including property of others being worked upon by the Contractor, its agents, employees or Subcontractors.

107.25.8 Railroad Insurance

If the Work affects railroad property, in addition to the above requirements, unless otherwise specified in the Contract the Contractor shall obtain at its own cost a railroad protective liability policy in the name of the owner of the railroad Right of Way or railroad facilities involved. In addition, on those rails used by the National Railroad Passenger Corporation (NRPC), the Contractor shall obtain a railroad protective liability policy in the name of the NRPC.

Railroad liability insurance shall be in compliance with 23 CFR 646A. These limits of liability apply to the coverage as set forth in AASHTO’s Railroad Protective Liability Endorsement form, subject to the terms, conditions, and exclusions found in the form. The policy must afford coverage as provided in the standard Railroad Protective Liability Endorsement.

107.26 NO WAIVER OF LEGAL RIGHTS

Upon completion of the Work the T/LPA will pay the final payment voucher. Payment of the final payment voucher shall not preclude the T/LPA from correcting any measurement, estimate, or certificate made before or after completion of the Contract, nor from recovering from the Contractor or surety or both, overpayments sustained because the Contractor failed to fulfill the obligations under the Contract. A waiver on the part of the T/LPA of any breach of any part of the Contract shall not be held to be a waiver of any other subsequent breach.

The lack of discovery or rejection of a defect shall not preclude, nor obligate the T/LPA to Accept the defect.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the T/LPA for latent defects, fraud, or such gross mistakes as may amount to fraud, and for warranty and guaranty.

107.27 CONTRACTOR'S RESPONSIBILITY TO THE TRAVELING PUBLIC

The Contractor shall minimize hazards to the traveling public in the Construction Zone from the commencement of the Work until Final Acceptance. Minimizing hazards shall include:

1. Keep Equipment, Materials, and workers out of the travel lanes;
2. Remove hazardous construction debris deposited within the Project Limits;
3. Inspect and repair the travel lanes (Necessary repairs of damage not caused by the Contractor will be paid for in accordance with Section 109.5, "Payment for Extra Work."); and,
4. Remove obstacles deposited by the public as they transit the Project.

The Contractor shall immediately correct hazards reported by Project inspections, T/LPA employees, or the public. The Contractor shall maintain and publicly post a 24-hour contact number to initiate action quickly.

107.28 CONTRACTOR RECORDS

The Contractor, Subcontractors and all Suppliers shall keep and maintain all documents in a useable format, including communications, books, papers, records, files, accounts, tax records, cost records, reports, schedules, Bid documents with backup data, including electronic data, and all other material relating to the Contract, Project, Contract compliance, or any Claim for five (5) years following Physical Completion of the Work. Unless otherwise specified in the contract all of the above material shall be made available to the T/LPA and the NMDOT for review, audit, inspection and copying and shall be produced, upon request by an authorized representative of either party at a location designated by the requesting party. The Contractor shall insert the above requirement in each subcontract and shall also include in all subcontracts a clause requiring Subcontractors to include the above requirement in any lower-tier subcontract. The Contractor's failure to maintain and timely provide all requested documents to the T/LPA or the NMDOT waives any Claim the basis of which could have, either in whole or in part, been documented or rebutted by such documents.

Resource Loading documents, financial statements provided by the Contractor, and Escrowed Bid Documents which have been visibly marked by the Contractor as "Confidential Trade Secrets" shall be deemed confidential as trade secrets and not subject to inspection pursuant to the Inspection of Public Records Act, NMSA 1978, § 14-2-4. However, if a request is received for disclosure of data, for which the Contractor has marked as a Confidential Trade Secret, the T/LPA shall examine the requested data and make a written determination that

specifies which portions of the proposal should be disclosed. If it is determined that a Contractor's requested confidential data should be disclosed, the Contractor will receive reasonable notice in order to afford the Contractor the opportunity to take legal action to prevent the disclosure. Unless the Contractor takes legal action to prevent the disclosure, the data will be so disclosed. Such documents may be disclosed to the T/LPA and the NMDOT, including any Inspector, Project Superintendent, Project Manager, Claim consultant, investigator, or testifying or consulting expert, if necessary to perform their duties, or as otherwise required by law.

107.29 ASSIGNING OF CONTRACT

The Contractor may not assign the Contract or assign or delegate any contractual obligation or duty without the prior written consent of the T/LPA, the NMDOT, and the Surety. Contractor may not make any assignment, in connection with the Contract, including assignment of any payment due Contractor or any Claim, for the benefit of any creditor.

107.30 SEVERABILITY AND CONTRACT INTERPRETATION

If any provision of this Contract is held to be invalid or unenforceable, the remaining provisions, or the application of such provision to either party, shall remain in full force and effect and, if possible, the rights and obligations of the parties are to be construed and enforced as if the Contract did not contain that term.

If any provision of the Contract is found to be superseded by any applicable State or federal law or regulation or court order, in whole or in part, then both parties shall be relieved of all obligations under that provision only to the extent necessary to comply with the superseding law or ruling, provided however, that the remaining provisions of the Contract, or portions thereof, shall be enforced to the fullest extent permitted by law.

The Contractor agrees that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in the construction or interpretation of this Contract.

107.31 CHOICE OF LAW

This Contract is governed by and construed in accordance with the laws of the State of New Mexico.

SECTION 108: PROSECUTION AND PROGRESS

108.1 SUBCONTRACTING

Any individual, partnership, firm, corporation, or joint venture performing Work on the Project that is not an employee of the Contractor is a Subcontractor unless otherwise stated in the Contract.

A Supplier or Fabricator is not a Subcontractor unless Work is being performed within the Project Limits.

The Contractor shall perform with its own organization at least 40.0% of the Work based on the Total Bid Amount. The phrase, “its own organization” includes only workers employed and paid directly, inclusive of employees who are employed by a lease agreement Acceptable to the T/LPA and Equipment owned or rented or without operators and does not include employees or Equipment of the Subcontractor, assignee or agent of the Subcontractor. The Contractor is solely responsible and liable for the performance of all Work or any act by its Subcontractors, Truckers, and Suppliers on the Project. Liability of the Contractor and the Contractor’s Surety under the Contract and the Contract Bonds shall not be waived or diminished by subcontracting or any other assignment of interest.

The Contractor shall submit to the Project Manager a request to Subcontract on the current NMDOT approved form. The form must be concurred to by the T/LPA and the NMDOT before the subcontracted Work begins. Unless otherwise approved by the Project Manager, the request to Subcontract shall be submitted no later than two (2) Working Days before the Subcontract Work is scheduled to begin. The Contractor shall not circumvent this requirement by placing a Subcontractor’s employees on its payroll. If the Contractor does not perform at least 40.0% of the Work with its own organization requests for Subcontractor approval will be rejected. The T/LPA will treat a person or group generally operating as an independent contractor, as independent contractors for the purposes of this Section. An independent contractor is a person who is paid for Work by the Contractor who is not the Contractor’s employee and is not performing Work within the Project Limits such as the Contractor’s attorney or accountant.

The Contractor is responsible for ensuring that its Subcontractors are prequalified by the NMDOT and are also duly licensed for the Work to be performed on the Project, are registered with all of the State agencies as is required to do business in New Mexico and to perform Work on Public Works Projects including the New Mexico Taxation and Revenue Department and the New Mexico Department of Workforce Solutions or successor agencies, and are in compliance with all applicable State and federal laws and regulations including the New Mexico Public Works Minimum Wage Act. The Contractor shall comply with the New Mexico Subcontractor Fair Practices Act to the extent it is applicable to the Project. The Contractor shall update its list of Subcontractors and Suppliers submitted at the Pre-Construction Conference as the Work progresses.

A Trucker is not a Subcontractor unless the Contractor is using the Trucker to meet the DBE goal associated with the Project. A Trucker is an individual, partnership, firm, corporation, or joint venture that transports Materials to and from the Project and does not perform Work within the Project Limits. Transportation of Materials within the Project Limits is Work performed by the Contractor or a Subcontractor. Transportation of Materials on or off the Project site does not require a Subcontract.

The Contractor shall not construe the T/LPA's concurrence as an endorsement of the subcontract, the Subcontractor, or the Subcontractor's ability to complete the Work in a satisfactory manner. Subcontracting creates no Contract between the T/LPA and the Subcontractor. The Subcontractor gains no rights, and the T/LPA Accepts no responsibilities by reason of the Subcontractor's contract with the Contractor.

108.1.1 Prompt Payment

The Contractor shall promptly pay its Subcontractors and Suppliers for satisfactory performance of their contracts no later than seven (7) Days after receipt of Progress Payment for the Subcontractor's Work or Supplier's Materials by the T/LPA.

For purpose of this Section, a Subcontractor's and Supplier's portion of the Work is satisfactorily completed when the T/LPA processes a Progress Payment per Section 109.8, "Progress Payments." In no event shall the Contractor and its Subcontractors fail to promptly pay their Subcontractors and Suppliers the amounts due for undisputed Accepted Work within seven (7) Days of the Contractor receiving a Progress Payment from the T/LPA. The payment by the T/LPA to the Contractor is not a condition precedent for payment by the Contractor to any Subcontractor or Supplier. A zero dollar ($0.00) Progress Payment by the T/LPA does not relieve the Contractor from paying the Subcontractor or Supplier for Accepted Work.

The Contractor's failure to make timely or prompt Subcontractor or Supplier payment may result in the T/LPA rejecting the Contractor's future Bids in accordance with Section 102.5, "Rejection of Bids." The Contractor's repeated failure to make timely Subcontractor payment may also lead to Suspension or Debarment in accordance with Section 102.3, "Suspension and Debarment."

108.2 NOTICE TO PROCEED AND PRE-CONSTRUCTION CONFERENCE

108.2.1 Notice to Proceed

The T/LPA may issue the Notice to Proceed within 30 Days after the T/LPA's Contract execution, unless otherwise agreed to by the parties. The Notice to Proceed will identify the timeframe the Contractor shall begin Work and when Contract Time shall begin. The Contractor's shall not commence Work without a Notice to Proceed.

108.2.2 Pre-Construction Conference

After the issuance of the Notice to Proceed, the Project Manager will provide written notice to the Contractor of the date, time and location of the Pre-Construction Conference. The Pre-Construction Conference will occur during the timeframe in the Notice to Proceed. If the Contract has ramp up time, the Pre-Construction Conference shall occur before the ramp up time commences.

The Contractor shall ensure the Project Superintendent or the individual who executed the Contract attends the Pre-Construction Conference. The Contractor's shall not commence Work without a Pre-Construction Conference and the items above are Accepted by the T/LPA. Commencing Work without a Pre-Construction Conference may result in a Non-Conformance. Contract Time shall commence as indicated in the Notice to Proceed and no additional Contract Time will be granted.

The Contractor shall provide the following at a minimum of ten (10) Days before Pre-Construction Conference. The Pre-Construction Conference will not be held until the required items are provided to the T/LPA:

1. Letters of assignment (official capacity) for Project;
    a. Project Superintendent;
    b. Company and Project Safety Officer;
    c. Traffic Control Supervisor (include current certifications and copy of wallet card)
2. A list with samples of authorized signatures and assignments for Supplemental Agreements (Change Orders), Progress Payments, payrolls and related items ;
3. Baseline Schedule;
4. Additions, revisions deletions to the Traffic Control Plan;
    a. Proposed changes to the Project;
    b. Potential problems with the construction of the Project;
5. List of Subcontractors and Material Suppliers;
6. Lump Sum breakdowns;
7. Weighmasters / Deputy Weighmaster certifications (must be maintained throughout the duration of the Project);
8. Progress Payment cutoff date;
9. Company EEO policy statement;
10. Recruitments letters (attachments E-K of the EEO package);
11. Superintendent's indoctrination letter (attachment D of EEO package);
12. If applicable the on-the-job training letter (Attachment R of the EEO package);
    a. The trainee classification letter must include the number of trainees to be trained, the training program to be used, the classification of each trainee and the approximate start date;
13. The completed Civil Rights / EEO Pre-Construction Report. Complete and sign the portions that are applicable;
14. Pre-Construction safety questionnaire;
15. VECP form; and
16. Other items and any other documents required by the Contract or as directed in the Project

Manager's notice of Pre Construction.

108.3 SCHEDULE

108.3.1 Baseline Schedule

The Project shall utilize a CPM format as the Baseline Schedule unless otherwise specified in the Contract.

The Project Manager will notify the Contractor in writing within ten (10) Days of the submittal of a Baseline Schedule if the schedule is "Accepted," "Accepted as noted," or is "rejected." For Baseline Schedules that are "rejected," the Project Manager shall communicate, in writing, to the Contractor all portions of the schedule that are not in compliance with the Contract requirements. The Contractor shall, within seven (7) Days of receipt of the reasons for rejection of the schedule, provide a new Baseline Schedule and all additional information necessary for the Project Manager to "Accept" the Baseline Schedule. The Project Manager will notify the Contractor in writing within seven (7) Days of the submittal of the corrected Baseline Schedule if the schedule is "Accepted," "Accepted as noted," or is "rejected." The Contractor's failure to provide a timely and Acceptable new Baseline Schedule in response to a rejected schedule waives any Claim the basis of which would have been documented by an Acceptable Baseline Schedule.

Unless otherwise specified in the Contract, the Contractor is wholly and solely responsible for construction means, methods or techniques, therefore the Project Manager's review of the Baseline Schedule will be for compliance with the Specifications and Contract requirements. Acceptance by the Project Manager shall not relieve the Contractor of any of its responsibilities for the accuracy or feasibility of the schedule. Any Baseline Schedule which exceeds the as let Contract Time may be "Accepted as noted" and does not revise the Contract Documents, including Contract Time, unless accompanied by a related Change Order. The T/LPA's Acceptance of a Baseline Schedule that exceeds as let Contract Time shall not operate as a waiver of the T/LPA's right to assess liquidated damages. A Baseline Schedule that reflects a Completion Date before the expiration of Contract Time does not revise the as let Contract Time and will be considered float for the exclusive use and benefit of the T/LPA. The Contractor shall not commence Work until the Project Manager Accepts a Baseline Schedule.

The T/LPA will use the Baseline Schedule to measure Project performance and for evaluation of changes to the Contract. Failure by the Contractor to include any element of Work required for performance of the Contract shall not excuse the Contractor from completing all Work within the required time.

108.3.1.1 CPM Baseline Schedule

Unless otherwise specified in the Contract the Contractor shall provide a CPM Baseline Schedule which clearly describes the following:

1. Created in the most current version of the scheduling software identified in the Contract;

2. Identifies the Project's Critical Path;
3. Includes all activities required to complete the Work, including but not limited to, engineering, surveying, permitting, submittals, approvals, procurement, fabrication, deliveries, crushing, utility Work and third party Work;
4. Includes milestones, interim Completion Dates, Substantial Completion Date, Physical Completion Date, and other key dates specified in the Contract;
5. Describe activities such that the Work is readily and identifiable. The activities shall provide the station or location of the Work;
6. Identifies the scheduled early and late start and finish dates for each activity;
7. Limits activity relationships to finish to start, start to finish, and finish to finish relationships. Use of leads and lags must be explained in the narrative;
8. Use only contractual date constraints, unless otherwise approved by the Project Manager;
9. Defines the Work calendar for each activity;
10. Narrative at a minimum including the plan for sequencing the Project;
11. Defines the duration of each activity;
12. Total Float and Free Float for each activity;
13. Workdays each week;
14. Contractor designated Holidays;
15. Number of shifts and Work hours per Day;
16. Anticipated weather events, based on historical data from the last seven (7) years;
17. Resource Loading that shows production rates; and
18. Cost loading that shall include the projected Project completion, measured in dollars and time, on a monthly basis or at each Progress Payment cut-off date.

108.3.2 Schedule Format

108.3.2.1 CPM Schedule Format

The Project shall utilize a CPM format as the Baseline Schedule unless otherwise specified in the Contract.

The Contractor shall prepare and submit one (1) electronic copy and two (2) time-scaled color prints of the CPM Baseline Schedule, updated monthly schedule, and revised schedules using a Project scheduling software as directed by the T/LPA that includes the following features:

1. Ability to display the schedule as a Gantt chart;
2. Ability to clearly display the Critical Path of scheduled activities apart from the non-critical scheduled activities;
3. Ability to calculate and display Total Float and Free Float for each activity;
4. Ability to clearly display the early start, late start, early finish and late finish dates for each activity; and,
5. Ability to easily store and transfer the schedule as a file (or files) from one computer to another.

108.3.2.2 Bar Graph Baseline Schedule

If required by the Contract the Contractor shall submit the Baseline Schedule in bar graph form. The Baseline Schedule shall list Contract features or Work activities in sufficient detail to show a reasonable and workable plan to complete the Project within the Contract Time. The Contractor shall show the following on the bar graph Baseline Schedule:

1. Each Work activity as a bar;
2. Each activity's planned start and Completion Dates;
3. Each activity's estimated cost and percent of Total Bid Amount;
4. The overall Project cost;
5. The planned Project Completion Date;
6. The monthly projected percent complete in time and dollars;
7. A plot of the monthly projected percent complete (in dollars) superimposed on the bar chart; and,
8. Any approved Project suspensions and time extensions.

108.3.3 Monthly and Revised Schedules

For this Section "schedule" refers to CPM or Bar Graph as required by the Contract. The T/LPA considers an updated monthly schedule as an update to the Accepted Baseline Schedule when no changes in activities have occurred except for the progression of planned Work. The T/LPA considers a revised schedule as a schedule that modifies the Accepted Baseline Schedule. If Accepted the revised schedule becomes the current Baseline Schedule.

Each activity in a monthly or revised schedule shall contain the same information required for the Baseline Schedule. Any updated or revised schedule that exceeds the as let Contract Time may be Accepted as Noted and does not revise the Contract Documents, including Contract Time, unless accompanied by a related Change Order. The T/LPA's Acceptance of an updated or revised schedule does not operate as a waiver of the T/LPA's right to assess liquidated damages.

The contractor shall submit an updated or revised schedule in accordance with 108.3.3.1, "Monthly Schedule Update." If the contractor fails to submit an Acceptable schedule, The T/LPA may take action in accordance with Section 109.8.2, "Non-Conformance." The Contractor's repeated failure to provide Acceptable monthly or revised schedules may lead to Suspension or Debarment in accordance with Section 102.3, "Suspension and Debarment." Failure to timely provide a monthly or revised schedule waives any Claim the basis of which would have been documented by an Acceptable monthly or revised schedule.

Float generated on Critical Path activities due to the acceleration of the Contractor's performance, at the written direction of the Project Manager, shall be for the exclusive use of the T/LPA; and, Float generated on Critical Path activities due to modification, reduction or elimination of items shall be for the exclusive use of the T/LPA. The float generated by a VECP may be split equally for the mutual use of the T/LPA and the Contractor.

Conditioned upon obtaining District Engineer prior approval with concurrence by the CLE, the

T/LPA may grant time extensions only to the extent that the activities on the Critical Path of the CPM Baseline Schedule in effect at the time of the Delay are impacted.

108.3.3.1 Monthly Schedule Update

The Contractor shall submit an updated schedule monthly by the Progress Payment cut-off date.

108.3.3.2 Contractor's Independent Duty to Provide Schedule Revisions

If it becomes apparent, or should have become apparent to the Contractor that the Contractor cannot complete the Work within the Contract Time, the Contractor shall provide a revised schedule and recovery plan to the Project Manager within five (5) Days. When the Critical Path changes, and when applicable, the Contractor shall provide a revised schedule and recovery plan to the Project Manager within five (5) Days.

If the Work falls behind schedule, the Contractor shall take such steps as may be necessary to mitigate damages and improve its progress including development of a recovery plan. For an excusable Delay, noncompensable Delay, concurrent Delay, as those terms are identified in Section 109.11, "Compensation for Claims," the Contractor shall take all reasonable steps to minimize the impact of the Delay once a Delay causing event is identified. Failure to do so may result in the rejection of all or part of the Delay Claim.

If the Delay cannot be mitigated, the Contractor shall promptly submit either a written request for an extension of the Contract Time pursuant to Section 105.19, "Notice of Intent to Claim," and Section 105.20, "Administrative Remedy," or request approval of a late completion schedule and shall be liable for liquidated damages.

For an inexcusable Delay or a nonexcusable Delay, as those terms are identified in Section 109.11, "Compensation for Claims," the Contractor shall consider as a minimum the following potential schedule mitigation techniques: increase the number of shifts, begin overtime operations, work extra Days including weekends and Holidays, or supplement its construction plant and submit, as provided in this Section, a revised schedule with a proposed recovery plan, as may be deemed necessary to demonstrate the manner in which the agreed rate of progress shall be regained, all at no cost to the T/LPA.

The revised schedule shall show Contract Time, Project Completion Date and all additional information necessary for the Project Manager to "Accept" the revised schedule. The Contractor's failure to provide a timely and Acceptable revised schedule waives any Claim the basis of which would have been documented by an Acceptable revised schedule. The Project Manager will provide the Contractor with a decision in writing within five (5) Days of receiving the revised schedule. The revised schedule shall become the current Accepted Baseline Schedule.

108.3.3.3 Schedule Revisions at Request of T/LPA

If it becomes apparent to the T/LPA that the Contractor cannot meet the schedule, the Project Manager may request a schedule revision and recovery plan from the Contractor. The Contractor shall, within five (5) Days of receipt of the request, provide a revised schedule. The Project Manager will provide the Contractor with a decision in writing within five (5) Days of receiving the revised schedule. The revised schedule shall become the current Accepted Baseline Schedule. The Contractor's failure to provide a timely and Acceptable response waives any Claim the basis of which would have been documented by an Acceptable revised schedule.

108.3.3.4 Schedule Update and Revision Information

The Contractor's updated monthly and revised schedules shall conform to the requirements of Section 108.3.1, "Baseline Schedule," and shall show:

1. Actual start and finish dates of each activity;
2. Remaining duration of activities started but not yet completed;
3. Delays and changes resulting from the addition, deletion or revisions to activities due to the issuance of a Change Order, change to an activity duration, changes to relationship between activities or changes to the planned sequence of Work or the method and manner of its performance; and
4. Narrative report describing:
    a. Processes during the month;
    b. Shifts in the critical activities from the previous update;
    c. Sources of Delay;
    d. Weather Days;
    e. Traffic switches;
    f. Allocations of crews;
    g. Work completed the previous month;
    h. Potential problem areas;
    i. Work planned for the next update period; and
    j. Changes made to the schedule.
    k. The Superintendent shall sign the narrative and provide certification statement stating that the progress shown on the schedule update accurately represents Work completed through the date indicated:

108.4 UNSATISFACTORY PROGRESS OF WORK

The Project Manager will issue a notice of unsatisfactory performance to the Contractor. The notice shall be sent by certified mail and identify the unsatisfactory performance

The progress of the Work is deemed unsatisfactory when:

1. The dollars earned by the Contractor on the Project are 15% less than the estimated dollars earned, as shown on the current Accepted baseline progress schedule;
2. When the start of an activity on the Critical Path, as shown on the current Accepted progress schedule, has exceeded its late start date by seven (7) Days;

3. When an activity on the Critical Path, as shown on the current Accepted progress schedule, has exceeded its original duration by ten (10) or more Days; or,
4. When the Project Manager determines that the progress of Work is unsatisfactory.

When the progress of the Work is deemed unsatisfactory the Project Manager and the Contractor shall meet to address the schedule within five (5) Days. The Contractor shall provide a revised schedule with a narrative addressing Project progress compliance or anticipated liquidated damages. The T/LPA's approval of a late completion schedule will not operate as a waiver of the T/LPA's right to assess liquidated damages. Failure by the contractor to address the unsatisfactory progress within five (5) Days after the meeting, will result in the Project Manager issuing a Notice of Apparent Default to the Contractor per Section 108.9, "Default of Contract."

108.5 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT

108.5.1 Character of Workers

The Contractor shall provide the resources necessary to complete the Work as specified. The Contractor shall ensure workers have the experience and skills to perform assigned Work.

The Contractor shall remove employee(s) who perform the Work in an unskilled manner, is in eligible to perform the Work, or who is intemperate or disorderly. The Contractor shall allow these employees to return to the Project only with the Project Manager's written permission.
If the Contractor or its employee(s) fail to comply with these requirements the Project Manager may suspend the Work at no cost to The T/LPA.

108.5.2 Methods and Equipment

The Contractor shall use methods and Equipment capable of performing the Work specified in the Contract. The Contractor shall ensure that the Equipment does not damage the Roadway, adjacent property or other Highways, Streets, or Roads.

The Contractor shall request permission of the Project Manager in writing to use methods or Equipment other than those specified in the Contract. The Contractor shall describe the proposed methods and Equipment to be used and the reasons for the change. The Contractor shall perform Work in accordance with the original Basis of Payment and Contract Time. The Contractor shall discontinue use of alternate methods or Equipment when Work does not meet Contract requirements. The Contractor shall remove and replace unacceptable Work or repair deficient Work at no cost to The T/LPA.

108.6 DETERMINATION AND EXTENSION OF CONTRACT TIME

The T/LPA will provide the Contract Time in the Advertisement, in Working Days, Days, or Mandatory Completion Date.

For Working Day Projects, the Project Manager will provide the Contractor with a weekly statement showing the Contract Time, the number of Working Days used, the accumulated Working Days charged, and the number of Working Days remaining to complete the Work. The Contractor shall have three (3) Days after receipt of the weekly statement to object in writing to the weekly statement, setting forth the specific dates and justifications for the objection. If the Project Manager finds that the Contractor's objection is valid, or if there is an error, then the Project Manager will issue corrected weekly statement(s). If the Project Manager determines that the objection is not valid the Project Manager will notify the Contractor in writing. If the Contractor continues to object to the weekly statement then the Contractor may file a Notice of Intent to Claim. If the Contractor fails to timely object, the weekly statement is deemed Accepted by the Contractor.

The Contractor is not entitled to a Partial Suspension, at its own request, when any of the conditions below apply:

1. Projects with a Bar Graph Schedule
2. Projects with a Mandatory Completion Date;
3. Projects that are Calendar Day;
4. When performing Work on the Critical Path;
5. When the Contractor has not provided proper justification and the Project Manager has not approved the request;
6. The Work obstructs the Traveled Way; or
7. For issues for which the Contractor is responsible.

Partial Suspension shall be lifted if the Contractor works on Critical Path activities and the Project Manager shall commence the Contract Time count.

If completion of the Contract requires Extra Work that impacts the Critical Path, the Contractor shall provide the T/LPA an updated progress schedule and narrative requesting additional Contract Time associated with the Extra Work. Upon submission of adequate justification by the Contractor the District Engineer for the NMDOT District where the Project is located will determine if any adjustment in Contract Time is warranted with concurrence by the CLE.

Any request for additional Contract Time shall be made in writing to the Project Manager. If the Project Manager rejects a time extension request, the Contractor may proceed pursuant to Section 105.19, "Notice of Intent to Claim."

108.7 Reserved

108.8 LIQUIDATED DAMAGES

The T/LPA is entitled to assess liquidated damages for failure of the Contractor to complete the Work within the Contract Time. A daily charge will be made against the Contractor not as a penalty, but as liquidated damages, for each Day for any Work that remains uncompleted after the lapse of Contract Time.

In suits involving the assessment or recovery of liquidated damages, the reasonableness of daily charges will be presumed and the amount assessed will be in addition to every other remedy enforceable at law, in equity, by statute, or under the Contract.

The T/LPA does not waive its rights to assess liquidated damages under the Contract by allowing the Contractor to finish the Work after the expiration of Contract Time.

The Contractor shall complete the Work within the Contract Time. The T/LPA's Contract administrative costs, including engineering, inspection, and supervision, will be increased as the time to complete the Work increases.

The Contractor agrees that the following schedule of liquidated damages, unless otherwise specified in the Contract, represents an amount sufficient to cover estimated average daily costs incurred by the T/LPA if the Contractor does not complete the Project within the Contract Time and does not operate as a penalty to the Contractor:

Schedule of Liquidated Damages

Total Original Contract Amount ($)	Charge ($) per Day
≤100,000	500
>100,000–500,00	1,000
>500,000–1,000,000	1,500
>1,000,000–2,000,000	2,000
>2,000,000–4,000,000	2,500
>4,000,000–7,000,000	3,000
>7,000,000–10,000,000	4,000
>10,000,000	5,000

The T/LPA will deduct liquidated damages from the next Progress Payment due to the Contractor after Contract Time expires and will continue to assess liquidated damages each Progress Payment until the determination of Substantial Completion. If the T/LPA directs Extra Work after Substantial Completion, the T/LPA will rescind the determination of Substantial Completion and then assess Contract Time in accordance with Section 104.2, "Extra Work." If the amount of liquidated damages exceeds the monies due to the Contractor for that Progress Payment then the T/LPA will seek reimbursement for any liquidated damages exceeding the dollar amount withheld from the Contractor.

If the Contractor has been granted Substantial Completion, but has not satisfied the requirements of Section 109.10, "Project Closure," the T/LPA reserves the right to continue to assess liquidated damages until Physical Completion. Upon the completion of steps I through VII of Project Closure the District Coordinator shall provide a written determination of Physical

Completion to the Contractor which stops further assessment of liquidated damages.

108.9 DEFAULT OF CONTRACT

The T/LPA may declare the Contractor in default of the Contract if the Contractor:

1. Fails to perform the Work with sufficient resources (supervision, workers, Equipment, or Materials) to assure the completion of the Work;
2. Performs the Work unsuitably, or neglects or refuses to remove Materials or to correct rejected Work;
3. Fails to begin the Work within the time specified in the Notice to Proceed;
4. Discontinues the Work;
5. Fails to resume discontinued Work after the T/LPA issues a request to resume Work;
6. Becomes insolvent or is declared bankrupt, or files for reorganization under the bankruptcy code, or commits any act of bankruptcy or insolvency, either voluntarily or involuntarily;
7. Allows a final judgment, in a suit filed in connection with this Contract, to stand unsatisfied for 30 Days;
8. Makes an assignment, in connection with the Contract, for the benefit of its creditors;
9. Fails to carry on the Work in an Acceptable manner in accordance with the Contract;
10. Fails to comply with Contract requirements or willfully violates any term or condition of the Contract;
11. Fails to perform the Work or maintain the Project in compliance with Federal and New Mexico Occupational Health and Safety laws and regulations;
12. Fails to observe or comply with Federal and New Mexico laws and regulations, local laws and ordinances,
13. Is debarred or suspended in accordance with the Section 102.3, “Suspension and Debarment,” or is suspended or debarred by any federal agency;
14. Communicates that the Contractor may not perform under the Contract;
15. Fails to promptly pay a Subcontractor or Supplier for undisputed Accepted Work in accordance with Section 108.1, “Subcontracting;” or

The complete default process is sequential and consists of the following steps:

1. Notice of Apparent Default;
2. Declaration of Default and Demand for Surety to Complete the Work; and,
3. T/LPA Completion of the Work;

108.9.1 Notice of Apparent Default

The Project Manager will provide written notice to the Contractor and the Contractor’s Surety specifying the condition(s) in Section 108.9, “Default of Contract,” that the Contractor violated and the corrective measures to be taken by the Contractor. If the Contractor or Surety does not proceed with the corrective measures within ten (10) Days of the date written notice, the T/LPA, has full power and authority, without violating the Contract, to declare the Contractor in default.

108.9.2 Declaration of Default and Demand for Surety to Complete the Work

The written declaration of default is separate from the notice of apparent default and will be addressed to both the Contractor and the Surety. The declaration of default is issued after time for the Contract to take corrective measures expires in Section 108.9.1, “Notice of Apparent Default.” The declaration of default removes the corrective measures from the Contractor, and will demand compliance by the Surety of the terms, conditions, and obligations contained in the Performance Bond.

If the T/LPA determines that the Contractor is in default the Surety shall complete the Work at its own expense pursuant to the Contract and receive the balance of any funds owed to the Contractor.

108.9.3 T/LPA Completion of the Work

If the Surety fails to complete the Work, the T/LPA will complete the Work. The T/LPA will deduct costs and charges that the T/LPA incurs as a result of the default and the cost of completing the Work from Contract funds due to or which may become due to the defaulting Contractor or Surety. If the total costs for completing the Work exceeds the amount that would have been payable under the Contract, the defaulting Contractor and the Surety shall be jointly and severally liable for the excess costs.

If a default of the Contractor is later determined to be without cause, the default of the Contractor will revert to a Section 108.10, “Termination of Contract; No Fault of Contractor,” and the Contractor is not entitled to recover damages other than those allowed by that Section.

108.10 TERMINATION OF CONTRACT; NO FAULT OF CONTRACTOR

The T/LPA may terminate, by written notice and order, all or part of the Contract, after determining the following:

1. That the Contractor is prevented from proceeding with or completing the Work as originally contracted for reasons beyond the control of the Contractor; or
2. That termination would be in the public interest.

Reasons for termination may include, but are not limited to, the following:

1. Executive orders of the President of the United States;
2. Executive orders of the Governor of the State of New Mexico;;
3. An emergency that creates a serious shortage of Materials, as deemed by the T/LPA
4. Orders from duly constituted authorities relating to energy conservation;
5. Restraining orders or injunctions obtained by third party citizen actions resulting from national or local environmental protection laws or where the issuance of the order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor; or,
6. To correct any material errors or omissions or to correct any discrepancy or contradictions within the Contract discovered after execution of the Contract by both parties, the failure

of which to correct is likely to lead to Contractor Delay, a Claim for additional time, or a Claim for compensation which may exceed the costs recoverable under this Section.

108.10.1 Submittals and Procedures

When the T/LPA issues a notice and order for a Contract termination effective on a certain date the T/LPA will pay:

1. For the actual number of units or items of Work completed at the Bid Item Unit Price;
2. For items of Work started but not completed as negotiated and mutually agreed. Negotiated amount shall not exceed the Bid Item Unit Price;
3. For invoices to restock or for invoices for Material on hand for Work not yet started. Invoices shall be provided by the Contractor documenting both costs and T/LPA will make a determination on how to proceed, including delivery of the Material if needed. For the purposes of this Section, Materials on hand are Materials that are ordered and have been manufactured before the date notice and order of termination is issued.

After the Contractor receives the termination notice and order from the T/LPA, and no agreement or only a partial agreement is reached about the termination costs, then Contractor shall submit any Claim for damages or costs within 30 Days of the date of the notice and order of termination or shall waive such Claim. The Contractor shall submit the Claim in accordance with Sections 105.19, “Notice of Intent to Claim,” and 105.20, “Administrative Remedy.” The Claim shall be limited to the following cost items:

1. Actual and direct Bidding and Project investigative costs which are separate and excluded from home office overhead costs;
2. Actual and direct mobilization costs, mobilization paid by the T/LPA exceeding actual and direct mobilization costs may be subject to reimbursement by the Contractor;
3. If Work is stopped in advance of the termination date, idle Equipment time using standby-time rental rates at 50% of the Blue Book Equipment rental rate, without the operating cost;
4. If Work is stopped in advance of the termination date, idle labor costs;
5. Unpaid Supplier costs;
6. Accounting charges involved in Claim preparation;
7. Written and executed agreements for private land usage; and
8. An additional ten percent (10%) of the total of the above items 2, 3, 4, and 5 to cover home office overhead and salaried labor expenses.

The Contractor shall provide those records required by Section 105.20.1, “Submittal of the Claim to the Project Manager,” to the T/LPA to determine the validity and amount of each Claim item. The Contractor shall not be entitled to recover anticipated loss of profits or any category of damages excluded pursuant to Section 109.11, “Compensation for Claims.”

Full or partial Contract termination does not relieve the Contractor of its contractual responsibilities for the completed Work, nor will it relieve the Surety of its obligation for Claims arising out of the completed Work.

SECTION 109: MEASUREMENT AND PAYMENT

109.1 MEASUREMENT OF QUANTITY

The T/LPA will measure Pay Items in accordance with the Pay Unit listed in the Contract.

109.1.1 Pay Unit Terminology

Otherwise, the following terminology controls:

1. The distance between stations is 100 feet, measured longitudinally;
2. Longitudinal measurements are along and parallel to surfaces, not horizontal. For Pay Items measured by the square yard, the T/LPA will make no deduction for fixtures in the Work with areas less than one (1) square yard;
    a. Transverse measurements for areas of Base Course and pavements are the neat line dimensions shown on the Plans based on the average width of the installed Material along the centerline of the Roadway;
    b. Structures are measured according to the neat lines shown on the Plans or as provided by the T/LPA;
    c. For Pay Items measured by the foot, measurements are parallel to the base or foundation;
3. The volume of excavation is calculated by using the average end area method at 25 foot intervals or other Project Manager approved methods;
4. A ton equals 2,000 lb; a “sack” equals 94 lb of cement;
5. Timber and lumber (permanently incorporated in the Project) is measured by the foot, and measured on nominal widths and thickness and the length of each piece. The T/LPA will Accept lumber and timber conforming to the American Lumber Standards for rough and dressed sizes, as specified in the Contract;
6. Standard manufactured items, identified by unit weight or section dimensions, are measured using nominal weights or dimensions. The T/LPA will Accept manufacturing tolerances established by the industries involved, unless otherwise stated in the Contract.
7. Asphalt Materials are measured by the ton or as designated in the Contract. The weight is based on net certified scale weights or weights calculated from certified volumes. The certified weights or volumes are subject to inspection and adjustment at the point of delivery.
8. Materials that are measured by weight shall be measured and proportioned by weight using certified and accurate scales that are within tolerances established by State law;
    a. The Contractor shall provide scales or use commercial scales;
    b. Scales shall be certified and sealed at least once every 12 months or each time the scales are relocated, or as directed by the Project Manager;
    c. Weighmasters (including Deputy Weighmasters), provided by the Contractor and certified by the NMDA, shall operate the scales. The certified weighmasters shall perform their duties in accordance with the regulations of the New Mexico T/LPA of Agriculture statutes and regulations concerning the same. The cost of the certified

weighmasters, weighmasters' scales, scale tickets, scale house, and verification of the scale's accuracy is Incidental to the weighed Material;

d. Empty vehicles used to haul Material paid by weight shall be weighed at least twice daily, at a minimum once prior to initial Material delivery and once prior to final Material delivery. The Contractor shall ensure vehicles bear legible identification marks. On a daily basis the Contractor shall provide the Project Manager with a written list of delivery vehicles showing identification marks, number of axles, the distance between extreme axles and daily tare weights. The Contractor shall update this information before delivery of the Material and when the Contractor changes vehicles, combination vehicles, or axle length relationships;
e. The T/LPA may convert weight to volume, or volume to weight, for payment purposes. The Project Manager will determine the factor(s) for conversion using an Acceptable method;
f. The operator of each weighed vehicle shall obtain a scale ticket (certificate of correct weight) from the weighmaster and deliver the ticket to the Project Manager or designee at the point of delivery. The following information shall be included on the scale ticket:
    i. Project number;
    ii. Date;
    iii. Ticket number;
    iv. Truck / Trailer unit number;
    v. Gross weight;
    vi. Tare weight;
    vii. Net weight;
    viii. Material type;
    ix. Certified weighmaster's name;
    x. Signature of weighmaster; and
    xi. Whether the driver was on or off the scale during weighing.

109.2 APPROVED EQUIPMENT RENTAL RATES

For machinery or Equipment owned or leased directly by the Contractor or its Subcontractor at any tier, the Contractor will be paid Equipment rental rates as designated in the Contract. The T/LPA will not compensate the Contractor or its Subcontractors at any tier for owned or leased small tools. Small tools are defined as any tool which would be valued less than $2000.00 if purchased new.

The Blue Book rates shall be used for the actual time the Equipment is in operation calculated by using the Federal Highway Administration rate. The FHWA rate is equal to the monthly rate divided by 176 (hours/month) plus the hourly operating cost. The FHWA rate must also be adjusted for age and geographic region. Therefore, the "FHWA" rate in the Blue Book represents monthly rate/176 x age adjustments x regional adjustments plus hourly operating cost. The T/LPA may add a maximum of 10% only to the Equipment rental rates. The T/LPA will apply Equipment rental rates pursuant to the Blue Book and in accordance with the following criteria:

1. The manufacturer’s identification plates on the Equipment will be used to identify the Equipment and its capacities. If the Equipment does not have these plates, the Contractor shall provide written statements certifying the Equipment identification and capacity as shown on the Contractor's Equipment inventory. The Contractor shall submit the type, capacity, and horsepower of each piece of Equipment, to correlate with the Blue Book schedule. The Blue Book reflects the maximum rates for Equipment of modern design and in good-working condition;
2. The Blue Book lists common pieces of Equipment. If the Blue Book does not list a piece of Equipment the use of the Blue Book rental rate for a comparable piece of Equipment shall be used as approved by the Project Manager. If no comparable piece of Equipment is identified in the Blue Book the Project Manager may negotiate a rental rate with the Contractor at a fair market rental rate;
3. If a piece of Equipment, not available on the Project, requires hauling onto the Project, the Contractor shall include the actual transportation cost (in and out). The T/LPA will pay the transportation cost for each piece of Equipment once. Under unusual circumstances the Contractor may provide to the T/LPA written justification for additional transportation costs;
4. The Contractor shall only be paid the operating rate for those hours the Equipment is actually in use. A standby rate for Equipment required to be at the Work site but not operating may by paid by the T/LPA if agreed to in writing in advance by the Project Manager in which case the T/LPA will pay for standby Equipment using standby-time rental rates at 50% of the Blue Book Equipment rental rate, without the operating cost.
5. The regional difference percentage, as described in the Blue Book does not apply. However, the factors in the Rate Adjustment Tables of the Blue Book do apply;
6. Overtime, as described in Blue Book does not apply. The T/LPA will pay for Equipment used on Extra Work at the regular hourly rate in accordance with the rate provided in the Blue Book.

109.3 SCOPE OF PAYMENT

The Contractor shall receive and accept compensation in accordance with the Bid for performing the Work in an Acceptable manner. The compensation associated with the Bid shall include the risks, losses, damages and expenses that, when considering the nature of the Work and having exercised Pre-Bid Due Diligence, should have been reasonably expected by the Contractor in prosecuting the Work.

The Contractor shall receive and accept compensation provided for in the Contract as full payment for furnishing all Materials and for performing all Work under the Contract in a complete and Acceptable manner subject to the provisions of Section 107.26, “No Waiver of Legal Rights.” The Contractor’s Bid Item Unit Price is presumed to be based on its exercise of Pre-Bid Due Diligence and considers all risk, loss, damage, or expense of whatever character arising out of the nature of the Work.

The T/LPA will pay for the approved actual quantities of Material incorporated into the Work unless otherwise provided in the Contract.

The T/LPA will only pay for Pay Items listed in the Contract in accordance with the “Basis of Payment” provisions. Items not included in the “Basis of Payment” provisions shall be considered Incidental, unless otherwise indicated in the Contract. The T/LPA will not pay separately for Work Incidental to the completion of a Pay Item, or pay for the Incidental Work under another Pay Item; except as provided in Section 104.6, “Rights in and Use of Materials Found on the Work.”

Payment for any Pay Item shall be full compensation for all Work necessary to complete the Pay Item.

When a Contract Item Specification references another Specification(s) to complete the Work, Pay Items referenced in that Specification, the Pay Items referenced will not be measured or paid for separately. *For example, if the Specification for Contract Item “A” refers to Specification “B” the Pay Items in Specification “B” will not be paid for, unless specifically stated in the Contract. The Payment for Contract Item “A” will be full compensation for Work as described in the Specification for Contract Item “A”.*

The Contractor shall not receive payment for corrective Work. Corrective work is Work required by the T/LPA to make previously unacceptable Work Acceptable.

The T/LPA may Accept portions of the Work at an adjusted price in accordance with the relevant Pay Adjustment provisions in the Contract. The adjusted price only applies to the specific Accepted portion of Work.

109.4 COMPENSATION FOR OVERRUN / UNDERRUN QUANTITIES

When the Project Manager determines the Work is Acceptable, the T/LPA will pay the Contractor in accordance with Basis of Payment section or Change Order. If the Accepted quantities of Work vary from the quantities in the Contract, the Contractor shall accept, as payment in full, payment based on the Bid Item Unit Price for the Accepted quantity.

109.5 PAYMENT FOR EXTRA WORK

The T/LPA will pay the Contractor for Extra Work resulting from significant changes in the character of the Work, differing site conditions or T/LPA ordered Work based on the following order of priority for payment:

1. Bid Item Unit Prices;
2. Negotiated unit prices;
3. Negotiated Lump Sum; or
4. Force Account.

For Items of Work performed by the Contractor, the negotiated unit price or negotiated Lump Sum price shall include all costs associated with the Work. If Subcontractors perform Work as Extra Work under items 2, 3 or 4, the T/LPA may only compensate the Contractor up to an

additional ten percent (10%) of the total actual cost of the subcontracted Work less than or equal to $10,000.00 for indirect and administrative costs. If the total cost of the subcontracted Work is greater than $10,000.00 then the T/LPA shall only compensate the Contractor $1,000.00 plus 5% of the excess over $10,000.00.

109.6 FORCE ACCOUNT

When the order of priority for payment is exhausted and Extra Work must be paid by Force Account, the T/LPA will pay the Contractor in accordance with the following Sections.

If the total cost of the subcontracted Work by Force Account is less than or equal to $10,000.00, then the T/LPA shall only compensate the Contractor an additional ten percent (10%) of the total cost of the subcontracted Work for indirect and administrative costs. If the total cost of the subcontracted Work is greater than $10,000.00 then the T/LPA shall only compensate the Contractor $1,000.00 plus 5% of the excess over $10,000.00.

109.6.1 Labor

The T/LPA will pay the wage rate for Force Account Work actually paid by the Contractor during the pay period ending before the Force Account Work commences. Such payment shall include Work by supervisors in direct charge of the Force Account Work. If there is no wage rate for a labor classification needed to perform the type of Work required, the T/LPA and Contractor will negotiate and document a new wage rate before beginning the Force Account Work.

Labor shall also include, and the T/LPA will reimburse for, the following actual reasonable costs paid to (or on behalf of) workers:

1. Subsistence and travel allowances that do not exceed the New Mexico Per Diem and Mileage Act or other T/LPA approved per diem rates;
2. Health and welfare benefits;
3. Retirement fund benefits;
4. Vacation benefits; and
5. Other benefits required by collective bargaining agreements or other employment Contract, applicable to the class of labor.

The T/LPA will pay an amount equal to 30 percent of the sum of the direct labor costs and fringe benefits. This payment is in compensation in the following increments: field office overhead (10 percent), home office overhead (10 percent), and profit (10 percent).

109.6.2 Bond, Insurance, and Tax

The T/LPA will pay the Contractor either:

Option 1

The actual cost of the following, plus six percent (6%):

1. Property damage, liability, and worker's compensation insurance premiums;
2. Unemployment insurance premiums or contributions;
3. Applicable payroll taxes (not including gross receipts taxes); and
4. Social Security taxes.

To recover actual costs, the Contractor shall provide actual invoice costs of the rate(s) it has paid for bonds, insurance, and taxes.

Option 2

In lieu of supplying the above evidence and recovering actual costs:

1. The Contractor shall receive payment at a rate representing 30% of the labor costs for labor burden; and
2. The Contractor shall also receive payment for the additional costs to Contract Bonds supported by invoice(s).

109.6.3 Materials

The T/LPA will pay the Contractor the actual cost of Materials Accepted by the Project Manager and incorporated into the Force Account Work, including transportation charges paid by the Contractor (exclusive of Equipment rentals), plus 15% of the Material cost.

109.6.4 Equipment

For special Equipment (other than small tools as defined by the Blue Book), including fuel and lubricants and transportation costs, the T/LPA will pay rental rates as determined in accordance with Section 109.2, "Approved Equipment Rental Rates," unless otherwise agreed in writing.

109.6.5 Miscellaneous

The T/LPA will not pay for other costs not specifically addressed in Section 109.6, "Force Account."

109.6.6 Documentation

The Project Manager will use forms approved by the NMDOT to track Force Account costs. The Contractor shall compare and reconcile records with the Project Manager daily, or as otherwise directed by the Project Manager, to determine the amount of Force Account Work completed by the Contractor.

109.6.7 Statements

The T/LPA will not pay for Force Account Work until the T/LPA verifies that the Force Account Labor, Material and Equipment forms are supported by the documents below. Contractor furnishes the Project Manager with itemized statements of the cost of the Force Account Work detailed as follows:

1. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman;
2. Attachments verifying Equipment brand, year of manufacture, operating Specifications, dates of use, daily hours, total hours, current Blue Book rental rate, and rate of applicable attachment for each piece of Equipment;
3. Quantities of Materials and prices; and,
4. Transportation of Materials.

Statements shall be supported by receipted invoices for all Materials used and for transportation charges. For in-stock Materials or Materials furnished by the Contractor, the Contractor shall provide an affidavit certifying that such Materials were taken from the Contractor's stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor. This requirement does not waive the Contractor's responsibility to provide Certificates of Compliance per 106.4, "Certificates of Compliance."

The total payment made as provided above shall constitute full compensation for Force Account Work authorized in writing by the T/LPA.

109.7 ELIMINATED ITEMS

Should Pay Items contained in the Contract become unnecessary for the reasonable completion of the Work, the Project Manager may direct the Contractor, in writing, to eliminate Pay Items from the Contract. This written notification will not invalidate the Contract. The T/LPA will reimburse the Contractor for actual Work completed before the written notification at Bid Item Unit Price.

The total cost of return freight, handling and restocking for Materials associated with that eliminated Work will then be increased by 15%. If Materials cannot be returned, the T/LPA will pay for said Materials at Contractor's actual cost and take ownership.

109.8 PROGRESS PAYMENTS

The Contractor shall not construe any Progress Payment to be an Acceptance of any defective Work or improper Material.

The Acceptance of Work for the purposes of Progress Payments does not constitute Final Acceptance of the Work.

The T/LPA will make Progress Payments once each month. The Project Manager will prepare and post Progress Payments based on estimates of the value of the Work performed and

Materials complete-in-place, and in accordance with Section 109.9, “Stockpile,” and minus price reductions within five (5) Days of the estimate cut-off date.

The T/LPA will include monies associated with an Accepted and fully executed change Order when the Work is Accepted with the next Progress Payment.

The Project Manager shall process a Progress Payment on a monthly basis regardless of the dollar amount, including zero dollar ($0.00), owed the Contractor.

The T/LPA has the authority to withhold Progress Payments in part or in their entirety as part of a suspension.

109.8.1 Reserved

109.8.2 Non-Conformance

If the Contractor fails to comply with all material terms and conditions of the Contract the T/LPA may withhold an additional 25% as a Non-Conformance from each Progress Payment and subsequent Progress Payments. Release of Non-Conformance withholdings shall be processed at the next scheduled Progress Payment after the resolution of the Non-Conformance.

Nothing in this Section prevents the T/LPA from withholding application and certification for payment because of the following: unsatisfactory job progress, defective construction not remedied, disputed Work, third party Claims filed or reasonable evidence that a Claim will be filed, failure of the Contractor to make timely or prompt payments for labor, Equipment, and Materials, damage to the T/LPA, reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract,.

The Contractor is not entitled to late payment charges, including late payment charges pursuant to NMSA 1978, § 13-1-158, associated with any payment retained under this Section.

109.8.2.1 Automatic Non-Conformance

These items do not follow the Potential Non-Conformance process below. The failure to comply will automatically result in the issuance of a Non-Conformance and withholding of an additional 25% as a Non-Conformance from each Progress Payment. The following items shall be provided in the timeframes in their respective Section:

1. The Certificate of Compliance per Section 106.4, “Certificates of Compliance” for Materials that are required to be Buy America compliant per Section 106.12, “Buy America Requirements;”
2. Schedule submittals within the timeframes in Section 108.3, “Schedule;”
3. Prime Contractor’s certified payrolls complete submittal within the timeframe in the “Federal Requirements” Notice to Contractors; and,
4. The Contractor’s prompt payment to its Subcontractor for undisputed Accepted Work.

109.8.2.2 Potential Non-Conformance

For all other terms of the Contract, that the Contractor fails to comply with the T/LPA will issue a Notice of Potential Non-Conformance. The Notice of Potential Non-Conformance will be issued on a form similar to that used by the NMDOT and the Contractor shall have five (5) Days after the Progress Payment cutoff date to resolve the issues listed on the form.

If the Contractor resolves all issues on the Notice of Potential Non-Conformance within five Days after the Progress Payment cutoff date then no action to withhold the 25% Non-Conformance amount is taken by the T/LPA. If the Contractor does not resolve each issue on the Notice of Potential Non-Conformance within five Days after the Progress Payment cutoff date then the T/LPA will withhold an additional 25% as a Non-Conformance from each Progress Payment and subsequent Progress Payments until the Contractor fully complies with the Contract.

For Safety Items the T/LPA will include a timeframe to resolve the issue in the Notice of Potential Non-Conformance that may be other then five (5) Days after the Progress Payment cutoff date. If the Contractor fails resolve the safety issue in the Notice of Potential Non-Conformance in timeframe then the T/LPA will withhold an additional 25% as a Non-Conformance from each Progress Payment and subsequent Progress Payments until the Contractor fully complies with the Contract**.**

109.9 STOCKPILE

Only items identified in the Notice to Contractors titled “Stockpile” are eligible for Stockpile payment.

109.9.1 Stockpile Payment

After measurement, partial (stockpile) payments to the Contractor may be made for Items on hand not to exceed 50% of the Bid Item Price under the following conditions:

1. The Items will be incorporated in the Work;
2. The Items are delivered to the Project or to a storage place approved by the Project Manager;
3. The delivered Items meet the requirements of the Contract, including Certificates of Compliance per Section 106.4, “Certificates of Compliance;” and,
4. The Contractor submits paid invoices, certified by the Supplier or Fabricator, to the Project Manager.

109.10 PROJECT CLOSURE

Step I. Contractor Notice of Projected Substantial Completion Date
Step II. Completion Conference

Step III. Termination of Contract Time
Step IV. Project Inspection and Development of Punch List
Step V. Notice of Punch List Completion and Request of Final Inspection
Step VI. Final Inspection
Step VII. Contractor Submittal of Final Documentation
Step VIII. Physical Completion and Final Payment

109.10.1 Contractor Notice of Projected Substantial Completion Date

The Contractor shall provide written notification to the District Coordinator of the projected Substantial Completion Date. This notice shall be provided a minimum of 30 Days prior to the projected date unless otherwise approved by the Project Manager.

109.10.2 Completion Conference

Prior to the projected Substantial Completion Date, the District Coordinator and the Project Manager shall conduct a completion conference with the Contractor to review the Project and determine conformance with the Contract. The T/LPA and Contractor will address all outstanding Work needed for Substantial Completion. The T/LPA and Contractor will agree on the schedule for completion of all Work necessary for Project closure pursuant to Section 109.10, “Project Closure.”

Within five (5) Days of the completion conference or as directed by the Project Manager the Contractor shall submit for approval by the Project Manager the Contractor’s proposed updated schedule for Project closure.

109.10.3 Termination of Contract Time and Determination of Substantial Completion

After steps I and II of Project Closure are complete and the Contractor has determined it is ready to request Substantial Completion, the Contractor shall provide to the T/LPA a written request to determine Substantial Completion. Within two (2) Days of receipt of the request for Substantial Completion the T/LPA, upon obtaining NMDOT concurrence, will issue a determination of Substantial Completion, Contract Time or, if applicable, Liquidated Damages assessments will cease upon Substantial Completion.

109.10.3.1 Rescinding Substantial Completion

The T/LPA may rescind Substantial Completion by written notice when any of the conditions for Substantial Completion in the definition of Substantial Completion are no longer met. Substantial Completion may also be rescinded by the T/LPA when T/LPA Ordered Work per Section 104.2.3, “T/LPA Ordered Work,” is required.

109.10.4 Project Inspection and Development of Punch List

The Project Manager shall inspect the Project to verify that all Work is complete or develop Punch List items upon the determination of Substantial Completion. The Project Manager shall provide the Contractor written notice that all Work is complete or shall provide a Punch List. Contract Time shall resume if the Contractor fails to provide Acceptable Work associated with the Punch List within the agreed upon schedule that shall not exceed thirty (30) Days and resumed Contract Time shall continue until all Punch List Work is Accepted.

109.10.5 Notice of Punch List Completion and Request of Final Inspection

The Contractor shall provide written notification to the Project Manager that the Punch List is complete and request final inspection.

109.10.6 Final Inspection

The final inspection by the Project Manager, District Coordinator and the CLE will be scheduled and conducted within fourteen (14) Days of the Contractor written request for final inspection. If the inspection reveals unacceptable or unsatisfactory Work, the Project Manager shall give the Contractor written instructions for correction and set the time limit for the Contractor to comply with these instructions. Upon the Contractor's correction of the Work, written notification shall be provided to the Project Manager, the Project Manager shall make an additional inspection and notify the Contractor within fourteen (14) Days of the findings.

If the Project Manager, District Coordinator and the CLE are satisfied that the Work is complete and Acceptable, that inspection shall constitute the final inspection. The Project Manager shall provide written notification of the final inspection Acceptance to the Contractor within four (4) Days.

The T/LPA will Accept the Project as soon as practicable after completion and inspection of the Work. Acceptance is final and conclusive, except for the following situations:

1. Latent defects;
2. Fraud;
3. Gross mistakes that amount to fraud; or
4. The T/LPA's warranty or guaranty rights.

109.10.7 Contractor Submittal of Final Documentation

The Contractor shall submit a schedule for submittal of the following documents required by the Contract including the Final Payment Voucher, Certificate of Payment of Claims, Summary to Contractor, Pit Release Letter, additional named insured Insurance Bonding Release, Affidavit of Wages Paid and Surety Release within five (5) Days of the date of the written notice of final inspection Acceptance. For the Pit Release Acceptance by the Project Manager of a letter of intent from the landowner for future use may exempt haul Roads or other areas from their vegetation requirements.

The Contractor shall furnish a completed Certificate of Payment of Claims form from persons or firms, including the Contractor, who have filed Claims for additional compensation, for labor performed, or for Material, supplies, or services furnished to the Contractor or its Subcontractors.

The T/LPA shall withhold final payment and no late payment interest shall be due for the withheld payments until the Contractor furnishes all documents required by the Contract.

109.10.8 Physical Completion, Final Payment and Final Acceptance

Upon the completion of steps I through VII of Project Closure the T/LPA, upon obtaining NMDOT concurrence, shall provide a written determination of Physical Completion to the Contractor. The T/LPA shall not release retained amounts until Physical Completion and when the Contractor fully complies with all Contract requirements.

Until Physical Completion of the Project, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof, by the action of the elements or from other causes, whether arising from the execution or from the non-execution of the Work.

The T/LPA shall prepare an estimate summary to contractor which is used for the proposed final payment voucher. The proposed final payment voucher shall correct all prior Progress Payments. The T/LPA shall withhold from the proposed final payment voucher liquidated damages and overpayments. The Contractor shall sign, approve and return the T/LPA's duly certified final payment voucher. Upon receipt of a signed and approved final payment voucher the T/LPA shall Accept the Work and pay the balance due on the final payment voucher. The T/LPA paying the balance due on the final payment voucher constitutes Final Acceptance.

If the Contractor disputes the final payment voucher, then the Contractor shall submit the Notice of Intent to Claim form within seven (7) Days of receipt of the final payment voucher. The Contractor shall not change or modify the final payment voucher. If a clerical error on the final voucher is discovered the Contractor shall notify the Project Manager in writing before the 7 day expiration. If the Project Manger agrees that there is clerical error, the Project Manager will correct the error and reissue the final payment voucher. If the Project Manager does not agree the Project Manager shall notify the Contractor in writing and the Contractor shall have 7 Days of receipt to sign the final payment voucher or submit a Notice of Intent to Claim. If the Contractor submits a Notice of Intent to Claim form or the timeframe to submit the Notice of Intent to Claim form expires, the T/LPA shall Accept the undisputed Work, pay the undisputed balance unilaterally due on the final payment voucher. A Claim is forever barred if the Claim is not timely and properly submitted pursuant to Section 105.19, "Notice of Intent to Claim," within seven (7) Days of receipt of the T/LPA's proposed final payment voucher. The T/LPA paying the balance due on the final payment voucher constitutes Final Acceptance.

Upon Final Acceptance the T/LPA will complete its administrative process to close the Project.

109.10.9 T/LPA Requests for Reimbursement or Refund

The Contractor shall reimburse or refund the T/LPA for any overpayment in response to a request for refund of overpayment within 30 Days of the T/LPA's request. Failure by the Contractor to comply may subject the Contractor to default and to rejection of the Contractor's Bids in accordance with Section 102.5, "Rejection of Bids," until such time that Contractor complies with this Section.

109.11 COMPENSATION FOR CLAIMS

The Contractor is not entitled to late payment charges, including late payment charges pursuant to NMSA 1978, § 13-1-158, associated with any Claim or disputed construction services and Materials. The T/LPA will pay the Contractor late payment charges as authorized by NMSA 1978, § 13-1-158 for construction services and Materials not the subject of a disputed Claim. The T/LPA will pay the Contractor late payment charges on undisputed, qualified, Delayed Progress Payments for certified, approved and Accepted Work in accordance with Section 109.8, "Progress Payments," that are not the subject of a disputed Claim.

The Contractor is barred from seeking a Claim, a remedy, compensation, time, cause of action, or any damages except as provided by Section 105.19, "Notice of Intent to Claim," and Section 105.20, "Administrative Remedy," and this Section.

The Contractor shall not be entitled to any consequential, indirect, punitive, exemplary, special, or Incidental damages. When the T/LPA determines entitlement the Contractor shall only receive additional compensation and time as specifically provided by the following Sections of these Specifications: Section 104.2.1, "Significant Changes in the Character of the Work;" Section 104.2.2, "Differing Site Conditions;" Section 104.2, "Extra Work;" Section 107.10.3, "Cooperation with Owner of Railroad Right of Way;" Section 107.20, "Contractor's Responsibility to Protect the Work;" Section 108.6, "Determination and Extension of Contract Time;" Section 108.10, "Termination of Contract; No Fault of Contractor;" Section 109, "Measurement and Payment;" and this Section.

Except as otherwise agreed to by the Contractor and the T/LPA in a written Change Order, all Claims and causes of action arising out of the performance and administration of the Contract shall be governed by this Section including: Claims for Delay, Claims for additional compensation and time, Contract adjustment, Claims seeking extension of Contract Time, Claims seeking Delay damages, pass-through Subcontractor Claims, causes of action for breach of Contract, promissory estoppel, equitable estoppel, waiver, detrimental reliance, bad faith breach of contract, breach of the covenant of good faith and fair dealing, or any other cause of action arising out of the performance of the Work or the Contract. The compensation, time and damages provided for in this Section are exclusive, complete, and apply regardless of whether such Claims are to be resolved pursuant to the procedures set forth in Section 105.20, "Administrative Remedy," or any other legal or administrative procedure, whether or not authorized herein, including arbitration, mediation, or appeal.

109.11.1 Non Critical Disruption

Non-critical Disruption is a disruption or interference with Contractor's performance, regardless of cause, that does not negatively impact the Critical Path of the Project and therefore does not meet the definition of a Delay and for which the Contractor will not be entitled to receive Delay compensation per Section 109.11.2.2 nor time.

109.11.2 Delay

"Delay," in this Section, does not include time extensions granted by the T/LPA by Change Order in accordance with Section 108.6, "Determination and Extension of Contract Time," that do not result in any additional compensation.

The Contractor's entitlement to compensation and time for a Delay is defined, limited to, and provided as follows:

1. Excusable Delay: A Delay which is beyond the Contractor's control that negatively impacts the Critical Path of the Project and is not caused, by the Contractor's fault or negligence and for which compensation and/or a time extension may be granted, based upon the following:
    a. Excusable Compensable Delay: An excusable Delay that negatively impacts the Critical Path of the Project resulting from the neglect or default of the T/LPA or from a differing site conditions per the Section for differing site conditions. For such Delays, upon obtaining the approval of the District Engineer with concurrence from the CLE, the T/LPA may grant additional time and compensation. Examples of an excusable compensable Delay may include but are not limited to Delays attributable to design errors or a differing site condition not readily discovered through Pre-Bid Due Diligence, failure by the T/LPA to acquire Right of Way, and T/LPA-initiated design changes;
    b. Excusable Noncompensable Delay: An unforeseen and unanticipated excusable Delay not caused by the fault of either the Contractor or the T/LPA that negatively impacts the Critical Path of the Project. For such Delays, the Contractor may receive an extension of time but not additional compensation. Examples of a noncompensable Delay may include but are not limited to those events described in Section 107.20, "Contractor's Responsibility to Protect the Work."
2. Inexcusable Delay or nonexcusable Delay: A Delay for which the Contractor is not entitled to compensation and/or time that was caused by: factors within the Contractor's control; the fault or responsibility of the Contractor; factors that could or should have reasonably been foreseen by the Contractor; Delays caused by an event that the Contractor could have foreseen and prevented but failed to do so; or failure to reasonably mitigate additional Delay after an excusable Delay has been identified. Examples of inexcusable or nonexcusable Delays may include but are not limited to those attributable to reasonably expected seasonal inclement weather events based on historical data, reasonable time periods necessary for reviews of Shop Drawings by the

T/LPA, inefficient operation by the Contractor or Subcontractor, inefficient or ineffective construction management by the Contractor or Subcontractor, failure to assign sufficient resources to the Project by the Contractor or its Subcontractor, failure by the Contractor to properly perform Pre-Bid Due Diligence, or failure by the Contractor, Subcontractor or Supplier to procure Materials in a timely manner.

3. Concurrent Critical Delay: Concurrent Delay only occurs when the Project has two separate Critical Paths that have two separate Delays which start and end on the same date, Delaying the Project for the same amount of time. For Delays that start on the same date but are resolved at different dates the Contractor is not entitled to any time or additional compensation for the duration when a nonexcusable or inexcusable Delay occurs on either of the Critical Paths. When an excusable compensable Delay and excusable noncompensable Delay are concurrent as defined above the Contractor shall only be entitled to Contract Time and not any additional compensation.

109.11.2.1 Additional Time for Delay

The T/LPA may only add Contract Time for an excusable compensable Delay or an excusable noncompensable Delay using the Accepted updated monthly or revised schedules current and in effect at the time the Delay occurred. Additional Contract Time must be approved by the District Engineer with concurrence by the CLE.

109.11.2.2 Compensation for Delay

The T/LPA may only compensate the Contractor for an excusable, compensable Delay as provided in this Section and in the following order of priority and no other methods of calculating compensation will be Accepted. In order to receive compensation for a excusable compensable Delay the Contractor shall document and provide costs resulting from the excusable compensable Delay using actual cost records, shall measure and provide expenses using generally accepted accounting principles, and shall comply with Section 108.3.2, “Schedule Format,” and if an agreement about the extension of Contract Time cannot be reached then the Contractor shall comply with Section 108.6, “Determination and Extension of Contract Time.”

1. The T/LPA reserves the right to use innovative Bidding approaches, as specified in the Contract, including requiring Bidders to Bid a daily overhead rate (cost / Working Day) as a Bid Item Unit Price. For example the Contract may require that the Contractor escrow its Bid documents, and the escrow Bid Documents may be considered in resolving Claims.
2. The compensation which the Contractor may recover for a Delay Claim is limited to:
   a. Non-salaried labor expenses;
   b. Material costs;
   c. Equipment costs pursuant to Section 109.2, “Approved Equipment Rental Rates;”
   d. Costs of extended job site overhead, including bonds; or,
   e. An additional ten percent (10%) of the total of items 1, 2, 3, and 4 to cover home office overhead, salaried labor expenses, and profit.

3. If the source of the loss of productivity can be attributed to an excusable compensable Delay and cannot be isolated and priced separately, the method by which the T/LPA shall calculate the extent of an excusable compensable Delay caused by a production rate inefficiency shall be made in the following order of priority:
    a. Measured Mile analysis by which the T/LPA shall compare actual efficiency (production rates) in an impacted area to actual efficiency in a comparable non-impacted area; or
    b. Comparison of actual productivity to production rates in the Contractor's Baseline Schedule and timely submitted Acceptable updated monthly or revised schedules or in the escrow Bid Documents.

109.11.2.3 Non-Recoverable Damages

In no event shall the Contractor submit or be entitled to payment based on any of the following including but not limited to Eichleay formula, the Total Cost Method, original Contract period formula, fixed overhead formula, burden fluctuation method, and comparative absorption rates.

Regardless of the basis or cause of the Claim, the Contractor shall not recover and is not entitled to recover the following categories of damage:

1. Any compensation except as provided by Section 109.11.2.2, "Compensation for Delay;"
2. Loss of anticipated profit, incentives or bonuses;
3. Labor inefficiencies at the fault of the Contractor;
4. Home office overhead regardless of whether it is characterized as absorbed, unabsorbed, or extended exceeding that provided in Section 109.11.2.2, "Compensation for Delay;"
5. Any damages, costs or expenses that are indirect, special, Incidental or consequential, including, but not limited to, lost or impaired bonding capacity, loss of Bidding and contracting opportunities, loss of credit standing, cost of financing, interest paid, lost Material discounts, economic loss, loss of reputation, loss of other Work, loss of use, loss of business opportunity, loss of product or output, income, loss of profit or revenue, cost of capital, financing, and for loss of management or employee productivity or of the services of such persons, , and business devastation, bankruptcy, or insolvency. The T/LPA waives any entitlement to consequential damages from the Contractor but not general damages including but not limited to liquidated damages as provided in the Contract;
6. Acceleration costs and expenses. The Contractor shall only be entitled to acceleration costs and expenses if the T/LPA has expressly and specifically directed the Contractor in writing to accelerate the Work at the T/LPA's expense, the Contractor completes the Work within the time directed by the T/LPA, the Contractor actually incurs acceleration costs and expenses, and the Contractor provides verifiable documentation to support the acceleration costs and expenses;
7. Late payment charges, including late payment charges pursuant to NMSA 1978, § 13-1-158, associated with any Claim, or disputed construction services or Materials. The Contractor is also not entitled to late payment charges on any judgment or Award made to the Contractor. This provision does not affect the T/LPA's payment of late payment

charges on undisputed, qualified, Delayed Progress Payments for certified, approved and Accepted Work in accordance with Section 109.11, “Compensation for Claims,” that are not the subject of a disputed Claim;

8. Prejudgment or post-judgment interest related to or arising from any disputed Claim or on any Award made to the Contractor; or,
9. Attorneys’ fees and costs, Claim preparation expenses, and litigation or other costs related to or arising from any disputed Claim, or prosecution thereof.

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.

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

[a]Materials 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."

[b]Maximum 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 Factor[1]
Based on Binder Test Results

Binder Property	Measured Value	Pay Factor Applied
DSR on Original Binder G*/sinδ (kPa) Min. 1.00 kPa	<1.00-0.98 <0.98-0.96 <0.96-0.94 <0.94-0.90 <0.90	0.98 0.95 0.92 0.85 0.75 or Removal[2]
DSR on RTFO Aged Material G*/sinδ (kPa) Min. 2.20 kPa	<2.20-2.15 <2.15-2.09 <2.09-2.02 <2.02-2.00 <2.00	0.98 0.95 0.92 0.85 0.75 or Removal[2]
DSR on PAV Aged Material with δ < 42° G*sinδ (kPa) Max. 5000 kPa	>5000-5100 >5100-5250 >5250-5400 >5400-5600 >5600	0.98 0.95 0.92 0.85 0.75 or Removal[2]
DSR on PAV Aged Material with δ ≥ 42° G*sinδ (kPa) Max. 6000 kPa	>6000-6100 >6100-6250 >6250-6400 >6400-6600 >6600	0.98 0.95 0.92 0.85 0.75 or Removal[2]
BBR Slope value (m) of PAV Aged Binder Min 0.300	<0.300-0.298 <0.298-0.293 <0.293-0.290 <0.290-0.285 <0.285	0.98 0.95 0.92 0.85 0.75 or Removal[2]

Binder Property	Measured Value	Pay Factor Applied
BBR Stiffness of PAV Aged Binder S (MPa	>300-306 >306-315 >315-324 >324-330 >330	0.98 0.95 0.92 0.85 0.75 or Removal[2]
% Elastic Recovery on RTFO Aged Material[3] Min 65%	<65-60 <60	0.95 0.75 or Removal[2]
[1]Price Reduction will be applied to Contactor's invoice price of asphalt binder. [2]The 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. [3]Elastic-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_2O_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

July 26, 2022

SPECIAL PROVISIONS
MODIFYING
SECTION 405: DETOUR PAVEMENTS

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 405: DETOUR PAVEMENTS** in its entirety and replace with the following:

405.1 DESCRIPTION
This Work consists of the following:

1. Providing and placing surfacing Materials, including Subgrade Preparation, Base Course, Prime Coat, Tack Coat and HMA/WMA as required in accordance with the Plans;
2. Maintaining, removing, hauling, and disposing of Detour pavements in an environmentally Acceptable manner; and
3. Hauling and stockpiling salvageable Detour pavements as directed by the Project Manager.

Embankment, drainage, and major Structures will conform to their applicable Sections.

405.2 MATERIALS

405.2.1 General
The Contractor shall obtain surfacing Material for the Detour construction from a suitable source in accordance with Section 106, “Control of Materials”.

405.2.2 Alternate Pavement Section
Two (2) weeks before constructing the Detour, the Contractor may submit an alternative Detour pavement section proposal to the Project Manager for approval. The proposal shall include the surfacing thickness and the types of Materials.

The approved alternate Detour pavement section must have at least the same structural number specified in the Contract.

The Contractor shall determine the structural number in accordance with the values in Table 405.2.2:1, “Structural Coefficients”.

Table 405.2.2:1
Structural Coefficients

Description	Structural coefficient
Base Course	0.11
Hot-mix asphalt (HMA)	0.44
Cold-mixed asphalt pavement[a]	0.15
[a]The Contractor may use cold-mixed asphalt pavement in low-traffic areas, with the District Construction Engineer’s written approval.	

Detour pavements that will be removed do not require an approved asphalt mix design.

405.3 CONSTRUCTION REQUIREMENTS

405.3.1 General

The Contractor shall construct the Detour pavement in accordance with the following applicable Specifications:

1. Section 207, “Subgrade Preparation”;
2. Section 303, “Base Course”;
3. Section 407, “Tack Coat”;
4. Section 408, “Prime Coat”;
5. Section 416, “Minor Paving”;
6. Section 423, “Hot Mix Asphalt (HMA) (Major Paving)”; and
7. Section 424, “Warm Mix Asphalt (WMA) (Major Paving)”.

405.3.2 Contractor Testing/Design Requirements

The Contractor shall provide Subgrade R-values for the top two (2) ft of the Detour Subgrade by using AASHTO T-190.

405.3.3 Maintenance of Detour Section

The Contractor shall:

1. Ensure the maintenance and repair of the Detours minimizes the impact to the traveling public; and
2. Maintain safe traffic flow during construction.

If the Project Manager determines that the Detour surfacing is damaged, the Contractor shall correct the problem immediately. If the Project Manager determines that the corrective actions failed, overlay the Detour with additional HMA at no additional cost to the Department.

If the Contractor does not immediately fix the Detour surfacing as directed by the Project Manager, the Department will assess damages in accordance with the following Table 405.3.3:1, “Schedule of Damages”, for each Day that the Detour remains unacceptable to the Project Manager.

Table 405.3.3:1
Schedule of Damages

Total Original Contract Amount ($)	Charge ($) per Day
≤100,000	500
>100,000-500,000	1,000
>500,000-1,000,000	1,500
>1,000,000-2,000,000	2,000
>2,000,000-4,000,000	2,500
>4,000,000-7,000,000	3,000
>7,000,000-10,000,000	4,000
>10,000,000	5,000

405.3.4 Removal of Detours

When removing the Detour, the Contractor shall dispose of the surfacing Material in an environmentally Acceptable manner, or salvage the Material as shown in the Contract.

The salvage of the Detour pavement Material includes hauling and stockpiling.

405.4 METHOD OF MEASUREMENT

The Department will measure the Detour Pavement Construction placed and maintained on the top width and length of the Detour.

405.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Detour Pavement Construction	Square Yard

405.5.1 Work Included in Payment

The following Work or items will be considered as included in the payment for Detour Pavement Construction and will not be measured or paid for separately:

1. Submittals;
2. Furnishing and placement of Subgrade Preparation, Base Course, Prime Coat, Tack Coat and HMA/WMA on Detours;
3. Testing (includes AASHTO T190);
4. Maintenance of Detours;
5. Removal of Detour Materials including surfacing, earthwork, and drainage Structures; and
6. Hauling and stockpiling of salvageable Materials.

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 Widenings 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

416.5.1 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”.

416.5.2 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 following:

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 Department 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 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 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 Department 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 Contactor 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 ¼ 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.

July 13, 2020

SPECIAL PROVISIONS
MODIFYING
SECTION 452: SEALING AND RESEALING CONCRETE PAVEMENT JOINTS

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 452.4: Method Of Measurement** and replace with the following:

Resealing concrete pavement joints will be measured by the linear foot.

Delete **Section 452.5: Basis of Payment** and replace with the following**:**

Pay Item	**Pay Unit**
Resealing Concrete Pavement Joints	Linear Foot

Delete **Section 452.5.1 Work Included in Payment** and replace with the following:

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. Removing joint sealant, sawing, cleaning, priming, and resealing joints; and
2. Provide sealant Material.

April 6, 2020

SPECIAL PROVISIONS
MODIFYING
SECTION 501: DRIVEN PILES

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 501.2.3.1 Pile Driving Equipment Submittals** in its entirety and replace with the following:

The Contractor shall submit pile driving Equipment information to the Project Manager 30 Days before beginning pile driving. The Contractor shall submit the information on the Department's Pile and Driving Equipment Data Form. The Contractor shall provide information required on the form including the following:

1. Pile hammer make, model number, and serial number;
2. Driving head assembly, type, model number, and weight;
3. Hammer cushion, Material, size, and thickness;
4. Pile cushion, Material, size, and thickness;
5. Predrilling Equipment, if applicable; and
6. Blow Counting Device Energy Saximeter (E-Sax) or equivalent product Specifications and operating instructions.

The Department has fourteen (14) Days to Accept or reject the proposed pile driving Equipment after the Project Manager receives the Pile and Driving Equipment Data Form submittal. Acceptance will be in accordance with Section 501.3.1.4, "Approval of Driving System."

If the Department rejects the Equipment, the Contractor shall modify or replace the pile driving Equipment and revise and resubmit the form. The Department will have fourteen (14) Days to Accept or reject the revised Pile and Equipment Data Form.

The Contractor shall submit the manufacturer's chart showing stroke and blows per minute when proposing the use of open-end (single-acting) diesel hammers.

The Contractor shall submit a chart equating bounce chamber pressure and hose length to either equivalent energy or stroke when proposing use of closed-end (double-acting) diesel hammers. The Contractor shall specify hose lengths for closed-end hammers. The Contractor shall calibrate the chart to atmospheric pressure based on the Project site elevation to the nearest 1,500 foot elevation.

The Contractor shall submit a chart equating the plant operating pressure to the equivalent delivered energy of the hammer, including losses in the hose, when proposing the use of double acting or differential acting air/steam hammers. The Contractor shall calibrate the chart to atmospheric pressure based on the Project site elevation to the nearest 1,500 foot elevation.

The Contractor shall submit a certificate of calibration to the Project Manager for the pressure gauge required for double acting hammers or for delivered energy for hydraulic hammers. The Contractor shall provide

certificate of calibration from a National Institute of Standards and Technology traceable Laboratory performed no more than six (6) months before use.

Add the following to Section **501.3.2.2: Driving Apparatus:**

501.3.2.2.9 Blow Counting Device

The Contractor shall provide the Project construction office with an E-Sax or equivalent for each piling Project where piles will be driven and blow counts will be recorded. The E-Sax or equivalent shall document the installation process of each pile to assure that the pile driving criterion is met. The Contractor shall assist the Project Manager with operating the device and downloading all pile driving records at the end of each Day of pile driving. The records shall be downloaded to a computer for further review and permanent storage and a copy shall be transmitted to the State Geotechnical Engineer

The E-Sax or equivalent shall be a small hand held device. It shall numerically display all information gathered by a blow detection system (built-in microphone). The device shall have an easy-to-read digital screen clearly readable in daylight, and display four lines of text and 16 characters per line. The device shall display acquired data in real time, and shall store data electronically for transmission and permanent storage. The E-Sax or equivalent shall have a minimum of 8 MB of memory, equivalent to 21,500 lines of data, available for storage and download at a later time. Blow count per unit of penetration shall be obtained by the operator pressing a key for each unit penetration, or with optional depth sensor. Battery life shall be at least 16 hours.

The E-Sax shall be made available to the Project Manger prior to the Pre Pile Driving Conference and shall be maintained during the installation of all test and production piles. In the event that the device is not operational, the Contractor shall notify and work with the manufacturer to rectify the situation. The E-Sax shall remain the property of the Contractor at the conclusion of construction.

Delete **Section 501.3.4.4 Conditions to Proceed** in its entirety and replace with the following:

The Contractor shall not drive production piles until it meets the following conditions:

1. The State Geotechnical Engineer approves the driving system in accordance with Standard Specifications Section 501.3.2.4, “Approval of Driving System;”
2. The Inspector completes the Pile Driving Field Inspection Form and the form is then approved by the Project Manager;
3. The Contractor shall mark the piles in 1-foot increments beginning at the pile toe and continuing at the pile head. The cumulative distance from the pile toe shall be marked on the pile at 5-foot intervals from the pile toe. If necessary, the Contractor shall add inch marks between the 1-foot markers over a 10-foot length of pile as directed by the Project Manager.
4. All required load testing is complete as specified and in accordance with Standard Specifications Section 504, “Load Testing of Bearing Piles”. The Project Manager may approve driving production piles in a foundation element upon satisfactory completion of a load test prior to completion of remaining load tests;
5. The Pile Driving Acceptance Chart is completed and stamped with New Mexico P.E. seal by the State Geotechnical Engineer and approved by the State Geotechnical Engineer and submitted to the Project Manager;
6. The hammer and leads are aligned with the pile plan in vertical or battered position;

7. An E-Sax or equivalent has been made available to the Project Manager for use during pile driving operations and all necessary training has been conducted; and
8. The Inspector is present before beginning operations.

Delete **Section 501.3.5.1 Variations Due to Dynamic Testing** in its entirety and replace with the following:

The State Geotechnical Engineer will reject the hammer if the hammer is unable to transfer sufficient energy to perform the dynamic testing in accordance with Standard Specifications Section 504, "Load Testing of Bearing Piles." Reasons for rejection include pre-ignition from overheating or malfunctioning of the injection system and poor hammer or capblock maintenance. After rejection, the Contractor shall repair or replace the hammer at no additional cost to the Department.

Add the following to **Section 501.3.6.1: Pile Measurement and Recording:**

501.3.6.1. Blow Counting Device
The Contractor shall provide an E-Sax or equivalent for each piling Project where piles will be driven and blow counts will be recorded. The E-Sax or equivalent shall be made available for use by the Project Manager for the duration of the Project. The Contractor shall provide hands-on-training and other support as needed in order to operate the device and maintain driving records. The E-Sax or equivalent shall meet the requirements of Section 501.3.2.2.9, "Blow Counting Device".

Delete **Section 501.3.6.4 Pile Groups** in its entirety and replace with the following:

If driving multiple rows of piles for pile cap foundations, the Contractor shall drive the piles to the estimated or minimum penetration elevation, before determining pile capacity for Acceptance. The driving sequence of pile groups shall be completed from the center of the group outward or from one side to the other side. After driving the piles in the group to the required tip elevation, the Contractor shall re-strike to determine the pile nominal capacity. If the piles do not develop the required nominal bearing capacity at that elevation, the Contractor shall continue to drive until the required resistance is attained.

The following has been added to **Section 501.5.1: Work Included in Payment:**

12. Blow Counting Device. E-Sax or equivalent, and all necessary training associated with operating the device and working with the manufacturer to ensure the unit remain operational.

September 29, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 502: DRILLED SHAFTS

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 502.3.5.1.3: Slurry Displacement Construction Method** in its entirety and replace with the following:

The Contractor shall use the slurry displacement method at sites where maintaining a dry excavation is not possible. The Contractor shall use a mineral or polymer slurry, to maintain stability around the hole perimeter while advancing the shaft, placing the reinforcing cage and placing concrete. The Contractor shall displace the slurry during final cleaning of the excavation with a bailing bucket, air lift or submersible pump. The Contractor shall place concrete with a tremie or concrete pump beginning at the shaft bottom. During construction, the Contractor shall keep the slurry level in the shaft excavation high enough to prevent caving and at least five (5) feet above the highest expected piezometric pressure head along the depth of the shaft. If not using permanent casings, the Contractor shall provide temporary surface casings to aid shaft alignment and to prevent sloughing, unless otherwise approved by the State Geotechnical Engineer. If the slurry construction method does not produce the necessary results, the Contractor shall discontinue operations and make corrective modifications to the procedures and Equipment.

Delete **Section 502.3.5.2: Shaft Excavation** in its entirety and replace with the following:
The Contractor shall extend drilled shaft tip elevations when the State Geotechnical Engineer determines that the Material encountered during excavation is unsuitable. The Contractor shall dispose of Materials from the shaft excavation as directed by the Project Manager.

The Contractor shall not excavate any shaft or place any casing within four (4) shaft diameters of a previously constructed shaft, as measured center-to-center, until at least 48 hours has passed since completion of concrete placement in the previous shaft or until a concrete sample collected from the previous shaft, has been tested in accordance with **Section 510.3.4.3 Concrete Sampling and Testing,** attains a compressive strength of 2,000 psi or greater.

When using vibrating casing, the Contractor shall not place adjacent casings or excavate shafts until 48 hours after pour completion of an adjacent shaft or when concrete from the adjacent shaft pour breaks at least 2,000 psi, whichever comes first.

April 6, 2020

SPECIAL PROVISIONS
MODIFYING
SECTION 504: LOAD TESTING OF BEARING PILES

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 504.3.1.1: Equipment for Dynamic Testing:**

504.3.1.1.6 Blow Counting Device

The Contractor shall provide an Energy Saximeter (E-Sax) or equivalent for review, approval and use by the Project Manager for each piling Project where piles will be driven and blow counts will be recorded. The E-Sax or equivalent shall meet the requirements of Special Provisions Section 501.3.2.2.9, Blow Counting Device. The E-Sax shall remain the property of the Contractor at the conclusion of construction.

Add the following to **Section 504.5.1: Work Included in Payment:**

2. Blow Counting Device. E-Sax or equivalent and all necessary training associated with proper operation and continued use of the device.

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 Na_2O + 0.658 K_2O 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 Standard	Properties	Limits		
Coal Fly Ash, and Raw or Calcined Natural Pozzolans	ASTM C618	Class	N	F	C
		Sum of Al_2O_3, SiO_2, and Fe_2O_4, min	75%	65%	50%
		Loss on ignition, max	10.0%	4.0%	4.0%
		Magnesium Oxide (MgO), max	5.0%	5.0%	5.0%
		Sulfur Trioxide (SO_3), max	3.0%	4.0%	4.0%
		Available alkalis as Na_2O+0.658 K_2O	Report	Report	Report
		Calcium Oxide (CaO)	Report	18.0% max	18.0% min
Ultra Fine Fly Ash in addition to the requirements for Class F Fly Ash	AASHTO M 321	Accelerated Pozzolanic Activity Index, • 7 Day • 28 Day		 85% 100%	
		Particle size distribution • less than 2.25 μm • less than 8.50 μm		 50% 90%	
		Fineness, retained on 45 μm wet sieve, max		5.0%	
		Moisture content, max		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_2O_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_2O + 0.658 K_2O, 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	ASTM C1240	Reduction in mortar bar expansion when used with cement in the proposed mix design, min		80%	

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 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 inches-1; 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 flued, 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;

5.9 AASHTO T 96 - Los Angeles wear;
5.10 AASHTO T 104 - Soundness loss;
5.11 AASHTO T 112 - Clay lumps content;
5.12 AASHTO T 152 - Aggregate correction factor;
5.13 AASHTO T 176 - Sand equivalent of fine aggregate; and
5.14 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.

April 15, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 512: SUPERSTRUCTURE CONCRETE

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 Pay Items from **Section 512.5: Basis of Payment** and replace with the following;

The Department will pay for Superstructure Concrete and High Performance Concrete (HPD) in accordance with Section 511.5: Basis of Payment:

Pay Item	**Pay Unit**
Structural Concrete, Class AA	Cubic Yard
Structural Concrete Class HPD	Cubic Yard

December 20, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 514: CONCRETE BARRIER RAILINGS FOR BRIDGES

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 **514.5.1: Work Included in Payment:**

5. Two (2) Bridge number plates for every Bridge.

March 10, 2022

SPECIAL PROVISIONS
MODIFYING
SECTION 518: PRESTRESSED CONCRETE MEMBERS

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 518: PRE-STRESSED CONCRETE MEMBERS** in its entirety and replace with the following:

518.1 DESCRIPTION
This Work consists of manufacturing and erecting pretensioned Prestressed Concrete Bridge Members and Precast Prestressed Slabs.

518.2 MATERIALS

518.2.1 Portland Cement Concrete
The Contractor shall provide an approved State Materials Bureau concrete mix in accordance with Section 509, "Portland Cement Concrete Mix Designs", requirements for Special Concrete and the compressive strength specified in the Contract.

518.2.1.1 Coarse Aggregate
The Contractor shall provide coarse aggregate that consists of Material no larger than one-third (1/3) the size of the smallest clear space where the Contractor shall place the concrete.

518.2.1.2 Design and Acceptability Requirements
The Contractor shall obtain the State Materials Bureau's approval of the concrete mix designs before casting. Once the State Materials Bureau approves a concrete mix design, the Contractor may only make subsequent changes in the mix proportions in accordance with Section 509.2.7.7, "Mixture Design Approval."

When the concrete mix design has been approved, the State Materials Bureau will provide the Contractor/Supplier with a field report form. The Contractor/Supplier shall enter the actual batch weights used in each batch of concrete and the measured moisture contents for each of the aggregates contained within each batch on the field report form. provided to the Contractor/Supplier at the same time the approved mix was provided. The Contractor shall ensure that all test results for compressive strength and fresh concrete properties, including slump, air content and unit weight, are also entered on the field report form.

518.2.1.3 Testing Requirements for Release Strength
The Contractor shall test using the Maturity Method in accordance with Section 510.3.5.2, "In-Place Concrete Strength Measurements", or make additional field cured cylinders for in-place strength tests (to determine application of prestressing forces). The Contractor shall make at least four (4) field cured cylinders from concrete placed on each casting bed.

The test results shall confirm the compliance with the release strength requirement shown in the Contract.

518.2.1.4 Acceptance Requirements

The Contractor shall test a minimum of two (2) cylinders per girder or pile in accordance with AASHTO T23 to ensure compliance with Section 510, "Portland Cement Concrete" and the required 28-Day compressive strength.

The Department will not Accept girders or piles with test results less than 90% of the 28-Day required strength. Girders or piles greater than 90% and less than 100% of the 28-Day required strength will be evaluated by the Project Manager for possible Acceptance. Cylinders that have achieved required strength requirements prior to 28-Day cylinder breaks will be Accepted,

The Contractor shall not ship girders or piles until the required ultimate compressive strength is confirmed by the Maturity Method or compressive strength tests, unless otherwise approved by the Project Manager.

Acceptance will be based upon measurements, tests, supporting data, and visual inspection of the Work for compliance with the Contract.

518.2.2 Steel Products

518.2.2.1 Reinforcing Steel

The Contractor shall provide steel reinforcement in accordance with Section 540, "Steel Reinforcement."

The Contractor shall use uncoated corrosion resistant reinforcing steel for reinforcing bars that project from the tops of girder and those within four (4) feet of girder ends. The Contractor may substitute the remaining reinforcing bars with the same corrosion resistant bars used in the girder ends at no additional cost to the Department.

518.2.2.2 Prestressing Reinforcement

The Contractor shall provide prestressing reinforcement consisting of high strength steel wire, high strength seven (7) wire steel strands, or uncoated high strength steel bars, in accordance with the Contract.

The Contractor shall provide prestressing reinforcement that is uncoated, clean, and free of dirt, loose rust, oil, grease, or other Deleterious Material when placed in the Prestressed Concrete Members.

518.2.2.2.1 High-Strength Wire

The Contractor shall provide high-strength steel wire in accordance with AASHTO M 204.

518.2.2.2.2 High-Strength Multiple-Wire Steel Strand

The Contractor shall provide high-strength multiple-wire steel strands in accordance with AASHTO M 203M, Supplement S1 (low-relaxation), unless otherwise specified.

518.2.2.2.3 Uncoated High-Strength Steel Bars

The Contractor shall provide uncoated high-strength steel bars in accordance with AASHTO M 275. If the Department allows bars with a greater minimum ultimate strength, the Contractor shall produce and test them in accordance with AASHTO M 275.

518.2.2.2.4 Identification of Prestressing Reinforcement

The Contractor shall assign prestressing reinforcement and anchorage assemblies with a lot number and tag

for identification purposes. The Department will reject high-strength Materials lacking identification.

518.2.2.2.5 Sampling of Prestressing Reinforcement

The Contractor shall provide samples for further testing if requested by the Project Manager.

The Contractor shall provide certification with the samples that states the samples were taken from and are representative of the lot numbers provided.

The Contractor shall provide load elongation curves and mechanical properties representative of the strands or bars to the Project Manager.

The Contractor shall sample and test in accordance with AASHTO 203/M 203. If the Department requests, the Contractor shall provide the following:

1. Enough wire to make up one (1) parallel lay strand at least eight (8) feet long, consisting of the same number of wires required for the strand in which they are to be assembled. Cut wires requiring heading for anchoring to length and headed on both ends;
2. At least eight (8) feet of wire strand of each diameter, measured between near ends of fittings. Provide the sample with fittings attached;
3. One completely fabricated prestressing tendon ten (10) feet long for each size tendon, including anchorage assemblies;
4. At least eight (8) feet of high-tensile strength bars of each diameter, measured between threads at ends of bars if furnished with threaded ends and nuts, or between anchorage devices; and
5. At least two (2) anchorage assemblies, complete with distribution plates of each size or type, unless such anchorage assemblies are attached to the samples of pre-stressing reinforcement.

The Contractor shall provide Material samples for testing six (6) weeks in advance of the anticipated time of casting.

518.2.2.2.6 Protection of Prestressing Steel

The Contractor shall protect prestressing steel against physical damage, rust, and other results of corrosion, from the time the strand is manufactured to the time of release. The Department will reject prestressing steel that is damaged in any way.

The Contractor shall package prestressing steel in containers or other shipping forms to protect the steel against physical damage and corrosion during shipping and storage. The Contractor shall place a corrosion inhibitor that prevents rust or other results of corrosion in the package and form or apply directly to the steel if the Project Manager allows. The Contractor shall ensure the corrosion inhibitor has no damaging effect on the steel or concrete or bond strength of steel to concrete.

The Contractor shall immediately replace or restore damaged packaging or forms. If using a corrosion-inhibiting carrier-type packaging Material, the Contractor shall provide the Material in accordance with Military Specification MIL-P-3420. The Contractor shall clearly mark the shipping package or form with the following:

1. A statement that the package contains high-strength pre-stressing steel;
2. The care in handling;
3. The type, kind, and amount of corrosion inhibitor used, including the date placed or applied;

4. Safety orders; and
5. Instructions for use.

If directed by the Project Manager, the Contractor shall submit the following for the corrosion inhibitor:

1. A sample, a list of chemicals and their proportions, and instruction for use;
2. Evidence that the prestressing steel will be protected from rust and other results of corrosion; and
3. A Certificate of Compliance.

After the Contractor installs the prestressing steel, the Contractor shall not weld or have ground welding Equipment on the forms or on the steel in the member.

518.2.2.3 Structural Steel
The Contractor shall provide Structural Steel in accordance with Section 541, "Steel Structures."

518.2.2.4 Debonding and Camber Control Sleeves
The Contractor shall only debond designated strands shown on the Plans. No additional debonding will be allowed unless included in the Accepted Shop Drawings.

The Contractor shall provide debonding sleeves that have such strength, durability, chemical resistance, and other properties so that the sleeves will provide complete debonding between strands and concrete as called for in the Contract. The Contractor shall submit debonding and camber control sleeves product information to the Project Manager for approval.

518.2.3 Girder Identification
The Contractor shall apply a unique girder mark to each Prestressed Concrete Member in a location that shall be visible after construction is complete. This mark shall be consistent with Quality Control Plan (QCP) documentation in accordance with Section 518.3.1.1, "Quality Control (QC)". The mark shall be applied with black paint using a stencil that is approximately one (1) inch in height. The Contractor shall apply the text, over a clear acrylic coating to seal the concrete, and apply a clear acrylic coating over the text.

Alternatively, an electronic tracking mark may be embedded into the Prestressed Concrete Member if approved by the Project Manager. The Contractor shall include the same information on the electronic tracking mark as required on the paint stencil mark.

518.2.4 Submittals

518.2.4.1 Precast/Prestressed Concrete Institute Certified Plant
The Contractor shall provide Prestressed Concrete Members manufactured in a plant certified by PCI. The manufacturer shall have a B4 certification for Prestressed Deflected-Strand Bridge Members. The Contractor shall maintain certifications throughout the production of Prestressed Concrete Members. The Contractor shall stop production if at any time the manufacturer's certification is revoked, regardless of the status of completion of contracted Work. The Contractor shall not resume production until the necessary corrections are made and certification has been re-established.

The Department will not be responsible for time, additional compensation, or other Project impacts due to lack of certification.

518.2.4.2 Annual Approval Letter to Fabricate Prestressed Concrete Members

In addition to PCI certification, the Contractor shall submit the annual plant approval letter, signed by the State Bridge Engineer confirming approval to fabricate Prestressed Concrete Member for the Department, to the Project Manager.

518.2.4.2.1 Request for Annual Approval from State Bridge Engineer

The Fabricator shall submit a written request for plant approval to the State Bridge Engineer yearly for review and Approval. The State Bridge Engineer will have 60 Days for review and Approval.

The following documents shall be included with the request submittal to the State Bridge Engineer:

1. QCP, aka Quality Systems Manual (QSM) – certified by PCI;
2. Last two (2) PCI audit documentation, including the corrective action report (CAR);
3. Minutes from the yearly quality system committee;
4. Qualifications and certifications for:
   - 4.1 Quality Control (QC) Manager;
   - 4.2 QC Inspector(s);
   - 4.3 Material testing technician(s); and
   - 4.4 Shop welder(s);
5. Product data for repair Materials (concrete rub, concrete patch Material, epoxy injection Materials, etc.).

At the discretion of the State Bridge Engineer, a site visit may be required. This will be scheduled around the fabrication required for a Department Project. During a site visit, the follow actions could be observed: batching, concrete Material testing, pre-pour inspection, placement, curing, and final product inspections.

Upon Acceptance of the submittal, a letter of approval to fabricate prestressed elements for the Department will be issued to the Fabricator by the State Bridge Engineer. The Contractor shall submit only the approval letter to the Project Manager. The Contractor shall not submit the information reviewed and approved by the State Bridge Engineer for specific Projects.

518.2.4.2.2 Quality Control Plan (QCP)

The QCP shall list all methods utilized by the manufacturer to ensure that the Work conforms to the requirements in the Contract. The QC Manager is responsible for establishing the QCP, as well as conformance to the QCP. If Work methods for a specific Project or product are not listed in the original QCP, the Contractor shall submit written revisions addressing the proposed methods that are necessary to meet Contract requirements. The Contractor shall not start fabrication until the revisions have been reviewed and Accepted in writing by the Project Manager.

The Contractor shall ensure the manufacturer's QCP includes the following:

1. A listing of qualifications of the QC Manager and personnel conducting inspection and testing;
2. Materials sampling and testing schedule, showing testing methods and frequencies;
3. QC inspection methods and procedures for all stages of fabrication operations;
4. Methods for curing products and test specimens;
5. Method and sequence for tensioning strands, including methods used for verifying equal distribution of jacking forces and elongation measurements;

6. Method and sequence of de-tensioning strands;
7. Written report format for Materials sampling, testing, and inspection for all phases of the Work;
8. Provisions for fabrication operations during cold, windy, or hot weather conditions;
9. Procedures for patching small production holes and holes left by strand hold-down devices;
10. Procedures for identifying, evaluating and reporting defects, including dimensional Non-Conformance, discovered during QC/QA inspections and testing; and
11. Procedures for notifying the Project Manager of structural defects, and submittal of written proposal for repairs.

The QCP shall contain provisions for increased frequencies of inspection and testing when operations or products do not conform to the Contract. Repeated out of tolerance Work, including dimensional Non-Conformance, shall be considered as recurring deficiencies. When the State Bridge Engineer determines that fabrication operations are producing recurring defects that do not conform to the Contract, the Contractor/Fabricator shall be required to submit a written proposal addressing corrective procedures that the Contractor/Fabricator will take to prevent recurrence of the Non-Conformance Work. Approval of the QCP may be suspended until the proposal has been reviewed and Accepted in writing by the State Bridge Engineer.

518.2.4.3 Working Drawings

The Contractor shall furnish Working Drawings to the Project Manager for review and approval by the State Bridge Engineer. The Working Drawings shall be in accordance with Section 105.2, "Plans, Working Drawings", for all Prestressed Concrete Members. The Contractor shall provide Working Drawings stamped by a professional Engineer licensed in the State of New Mexico, that has a minimum of five (5) years' experience with prestressed concrete design. The Department's review of the Working Drawings does not relieve the Contractor of the responsibility for the adequacy of the Prestressed Concrete Members. The Contractor shall submit all supporting calculations for the Working Drawings. The Contractor shall allow 30 Days for review and Acceptance of Working Drawings and calculations. Any re-submittals will require an additional 14 Days for review.

The Contractor's Working Drawings shall include the following:

1. Unit dimensions;
2. Location, size, and type of prestressing strands;
3. Initial and final jacking forces;
4. Location, description, and detail of structural reinforcing items;
5. Location of all hold-down devices;
6. Shop Drawings of all steel items, and details for steel diaphragm connections. Shop Drawings shall be in accordance with AASHTO/NSBA G1.3, Shop Drawing Presentation-Guidelines;
7. Block-out and keyway dimensions, if any, including surface preparation;
8. Location and detail of debonded strands;
9. Rebar schedule per ACI detailing manual SP-66;
10. Framing Plan with the Fabricators unique mark numbers. Girders that are identical in every detail may be set interchangeably;
11. Embeds for overhang brackets and permanent steel deck forms;
12. Stresses in the top and bottom of the Prestressed Concrete Member during de-tensioning of the strands;
13. The predicted girder shortening, camber at release, and camber at 90 Days;

14. Shop Drawings, written procedures, and calculations for the special design such as camber control using prestressing top strands; and
15. Handling, storing and transportation details.

518.2.4.4 Notification of Fabrication for Prestressed Concrete Members

The Contractor shall notify the Project Manager of the following:

1. Start of Work. Fabrication shall not begin until the Working Drawings submittal has been reviewed and Accepted by the Project Manager;
2. Production Schedule. The production schedule shall be submitted to the Project Manager a minimum of 21 Days prior to the start of fabrication. The production schedule shall include start of Work, phase of Work, and shipment dates. Should modifications to the production schedule be necessary, the Contractor shall provide written notice to the Project Manager a minimum of 72 hours in advance of Work. After start of fabrication, the Department will Work with the Fabricators to flex the schedule around unforeseen circumstances;
3. Notice of Shipment. The Contractor shall notify the Project Manager, at least 72 hours before shipment of Prestressed Concrete Members to the job site; and
4. Notification. Failure to notify the Project Manager may be cause for suspension of Work or rejection.

518.2.4.5 Post Fabrication / Pre-Delivery QA/QC Documents

The Contractor shall submit the following records and reports to the Project Manager for acceptance ten (10) Days prior to the shipment of the girders.

1. Prestressing Steel. Tensioning reports for each setup, showing the jacking force calculations; initial and final jacking force used; calculated and final net measured elongation; applicable stressing corrections for seating, slippage, shortening, rotation movement, and temperature;
2. Concrete. Concrete cylinder break reports and daily reports of each mix design used, showing the fresh concrete slump, temperature, unit weight, and air content (if specified). The daily report shall also include the following data:
   2.1 Date and time of casting;
   2.2 Casting bed and setup location;
   2.3 Ambient conditions;
   2.4 Total cubic yards placed and number of girders or pieces completed;
   2.5 Actual product curing temperature charts or graphs;
   2.6 Average release strength in psi;
   2.7 Date and time of release strength; and
   2.8 Copies of individual batch tickets when requested by the Project Manager;
3. Pre-pour inspection records shall be per the Accepted QCP plan; and
4. Post-pour inspection records shall be per the Accepted QCP plan. These records shall include all discovered variances from product dimensional tolerances, report of minor repairs made to each individual product, and all other member specific information.

518.3 CONSTRUCTION REQUIREMENTS

518.3.1 Quality Processes

518.3.1.1 Quality Control (QC)

QC of Prestressed Concrete Member fabrication is the responsibility of the Contractor. The Contractor shall designate a QC Manager who shall be responsible for product quality requirements and the Contractor's approved QCP.

518.3.1.2 Quality Assurance (QA)

QA and product Acceptance are the prerogatives of the Department. The Project Manager will be the QA Representative. QA administration will be performed to the extent necessary to assure Contract compliance.

518.3.2 Fabrication

518.3.2.1 Pre-Fabrication Conference

A Pre-Fabrication Conference is required. The Pre-Fabrication Conference will be scheduled, by the Project Manager and will be held after Acceptance of Working Drawings, a minimum of 72 hours prior to start of fabrication. The agenda will include review of the fabrication schedule and the Department's QA involvement. Required attendees are the Project Manager, a Contractor representative, a Fabricator representative who can speak to schedule and quality, and the Bridge Engineer.

518.3.2.2 Forms

The Contractor shall use forms that are smooth, grout tight, and capable of withstanding the action of form vibrators. The Contractor shall accurately fabricate and secure the forms in position so that the cast member will present true, smooth and even surfaces.

The Contractor shall construct forms for interior cellular spaces with an approved Material that is watertight, resistant to breakage and deformation, and as lightweight as possible. The Contractor shall anchor interior forms to resist flotation or displacement during concrete placement. The design of interior and exterior forms shall not restrict the longitudinal movement of the member when the Contractor transfers the prestressing force to the casting.

518.3.2.3 Placement of Reinforcing Bars and Appurtenances

The Contractor shall place and secure reinforcing bars, forms for cored holes and cellular spaces in accordance with the Contract. The Contractor shall conform to concrete cover requirements over reinforcing bars near and at ends of girders.

518.3.2.4 Tensioning

The Contractor shall apply tension to prestressing steel with hydraulic jacks to produce forces in accordance with the approved Working Drawings.

During strand stressing, individual wire failures may be Acceptable if no more than one (1) wire in any strand is broken and the area of broken wire does not exceed two percent (2%) of the total area of the pre-stressing steel in the member. Wire failure shall be documented by the Contractor in record documents, in accordance with Section 518.2.4.2.2, "Quality Control Plan (QCP)".

The Contractor shall stress the members in a sequence that produces a minimum of eccentric forces.

518.3.2.4.1 Tensioning Equipment

The Contractor shall apply stress to tendons using hydraulic jacks that can provide and sustain the necessary

forces and have either a pressure gauge or a load cell for determining jacking stresses.

The Contractor shall use a pressure gauge with at least a six (6) inch diameter dial accompanied with a certified calibration chart. The Contractor shall calibrate each jack and its gauge as a unit with the cylinder extension in the approximate position that it will be at final jacking force.

The Contractor shall calibrate a load cell and provide it with an indicator to determine the prestressing force in the tendon. The Contractor shall use a load cell range that does not include the lower ten percent (10%) of the Fabricator's rated capacity to determine the jacking stress.

The Contractor shall use a testing Laboratory approved by the Project Manager to calibrate the Equipment. The Contractor shall ensure that the Equipment has been calibrated within a year of the Work. The Project Manager may check certified calibration charts for the hydraulic jacks, pressure gages or load cells used for tensioning pre-stressing steel before and during tensioning operations.

518.3.2.4.2 Measurement of Stress

The Contractor shall provide a record of gauge pressures and tendon elongations for each tendon, for review and approval by the Project Manager. The Contractor shall measure elongations to an accuracy of within 1/16 inch.

The Contractor shall use the gauge or load cell readings to determine the stress in the tendons during tensioning and verify with the measured elongations.

The Contractor shall use the modulus of elasticity to calculate anticipated elongations of and base calculations for the nominal area (provided by the Fabricator per lot of tensioned steel), or as determined by a bench test of strands used in the Work.

Before starting elongation readings, the Contractor shall tension the tendons to a preliminary force to eliminate take-up in the tensioning system. The Contractor shall ensure this preliminary force is between five percent (5%) and 25% of the final jacking force. The Contractor shall measure the initial force with a dynamometer or with other approved methods. The Contractor shall mark each strand before the final stressing to permit measurement of elongation and to ensure that anchor wedges are set properly.

The Contractor shall address a discrepancy in indicated stress between jack gauge pressure and elongation. If this occurs, the load used, as indicated by the gauge pressure, will produce a slight overstress rather than understress. The Contractor shall check the entire operation to determine the source of errors, if a discrepancy occurs between gauge pressure and elongation; more than five percent (5%) for tendons longer than 50 feet, or seven percent (7%) for tendons shorter than 50 feet. The Contractor shall correct errors before proceeding

518.3.2.4.3 Tensioning Pre-tensioned Members

The Contractor may cast several Prestressed Concrete Members in a continuous line on the casting bed.

Two (2) splices of pre-stressing strand are allowed within the entire spool. The Contractor shall not use strands within each Prestressed Concrete Member that have splices.

The Contractor shall accurately locate and hold strands in positions in accordance with the Contract for each

individual Prestressed Concrete Member. The Contractor may request to modify the strands by submitting an alternate strand layout, with Shop Drawings and calculations stamped by a professional Engineer licensed in the State of New Mexico, to the Project Manager for review and approval by the Bridge Engineer.

The Contractor may anchor straight prestressing strands at one end of the casting bed and stress the other end with hydraulic jacks. The Contractor shall tension each individual strand to the required stress. The Contractor shall adopt a method for stressing draped strands that prevents significant stress loss between the jacking and anchor ends of the casting bed. If required to avoid significant stress loss, the Contractor shall stress draped strands from both ends of the casting bed.

The Contractor shall stress or check prestressed strands for required stress within 24 hours before placing concrete in the Prestressed Concrete Members.

The Contractor shall not release or cut pre-tensioned strands until cylinder tests indicate that the concrete in the Prestressed Concrete Members has reached the designated compressive strength at release as shown in the Contract. The Contractor shall remove side forms before releasing the strands. Strands may be flame cut to release stress. The Contractor shall release or cut the strands in accordance with a previously approved sequence to avoid unbalanced forces in excess of that applied by one (1) strand. The Contractor shall trim strands in piles flush with the top and bottom of the piles.

518.3.2.5 Placement and Consolidation of Concrete

The Contractor shall place concrete in accordance with Section 511, “Concrete Structures,” and Section 512, “Superstructure Concrete.”

The Contractor shall inspect all items to be embedded in the concrete prior to concrete placement. The Project Manager may inspect embedded items at their discretion. The Department will allow the placement of concrete in the bottom flange of Prestressed Concrete Member Type Box before placement of the interior form and reinforcing bars in the upper portion of the Prestressed Concrete Member Type Box if concrete placement is continuous for longer than 30 minutes.

The Contractor shall use external vibration for Prestressed Concrete Member Type Box to eliminate internal honeycombing. The Contractor shall rigidly attach external vibrators to the forms in sufficient quantity so that the vibration extends throughout the entire length of the Prestressed Concrete Member Type Box.

The Contractor shall not use vibrating methods that cause segregation. The Department may reject Prestressed Concrete Members with voids in piles, voids in the bottoms of girders, voids in girders over-bearing points or honeycombing sufficient to expose pre-stressing tendons or reinforcement.

518.3.2.6 Finishing Concrete Surfaces

The Contractor shall provide a transversely roughened top surfaces of Prestressed Concrete Members over the entire flange width to a minimum depth of 1/4 inch and a maximum of 3/8 inch. The maximum allowable space between roughened areas on surfaces shall be 1/2 inch. The Contractor shall clean the top surface of Prestressed Concrete Members after initial set to remove laitance, dirt and debris.

The Contractor shall finish the top surface of Prestressed Concrete Member Type Box and piles by over filling the forms, vibrating, and striking off with a metal plated strike board. On the final forward movement of the strike board, the Contractor shall carry excess grout ahead to completely fill the form. After striking off the

concrete, the Contractor shall finish the surface to a true plane. The Contractor shall ensure that surface irregularities do not exceed 9/16 inch per ten (10) feet.

If the Contract requires the Contractor to embed the ends of Prestressed Concrete Members in concrete diaphragms, the ends of the Prestressed Concrete Members do not require hand finishing after removal of forms. If the Contract does not require the Contractor to extend strands for field or shop bending to provide continuity reinforcement, the Contractor shall cut the strands three (3) inches or less beyond the Prestressed Concrete Member ends.

The Contractor shall finish Prestressed Concrete Member ends that will not be embedded in concrete and other surfaces of Prestressed Concrete Members with a Class 2, Rubbed Surface Finish in accordance with Section 511.3.9, "Finishing".

518.3.2.6.1 Mockup of Finishing Concrete Surfaces

When required by the State Bridge Engineer, the Contractor shall mockup the concrete surface finish on a concrete slab with minimum dimensions of 24 inches by 48 inches. The mockup shall include simulated stirrups and stay-in-place form tabs at common spacing to demonstrate surface prep around these obstacles. Upon Acceptance by the State Bridge Engineer, this mockup shall be retained and made available upon request.

518.3.2.7 Curing

The Contractor shall steam cure or water cure Prestressed Concrete Members. The Contractor shall not use a curing temperature greater than 150 degrees F. The Contractor shall uniformly increase the temperature to the maximum temperature over a period not less than seven (7) hours. The Contractor shall additionally uniformly reduce the curing temperature such that at least seven (7) hours are required to reduce the temperature of the curing environment.

The Contractor shall perform steam curing in accordance with Section 517, "Precast Concrete Structures".

The Contractor shall perform water curing in accordance with Section 511, "Concrete Structures".

518.3.2.8 Tolerances

The maximum allowable deviations from the dimension and details shown on the Plans are listed in the Manual for Quality Control for Plants and Production of Structural Precast Concrete Products and the PCI Tolerance Manual, most current version, published by the PCI with the following exceptions:

1. The tolerance on tipping and flushness of shoe plates within 1/16 inch; and
2. The tolerance of steel diaphragms attachment holes shall be no greater than 1/16 inch.

The Contractor shall repair cracks in the end regions of Prestressed Concrete Members as follows:

1. Cracks that do not impact the structural integrity of the Prestressed Concrete Member that are equal to or greater than 0.007 inches in width and/or are located under expansion joints in the final condition of the Structure shall be epoxy injected in accordance with Section 534, "Epoxy Injection";
2. Cracks that may impact the structural integrity of the Prestressed Concrete Member shall be analyzed by the Bridge Engineer prior to Acceptance. The Contractor shall repair the Prestressed Concrete Member per the Bridge Engineer's recommendations; and

3. Excessive cracking that is outside the tolerance of Section 518.3.2.8 “Tolerances” shall not be repaired with epoxy injection and the Prestressed Concrete Member will not be Accepted.

518.3.2.9 Lifting, Handling, Storing and Transporting Prestressed Concrete Members

The Contractor shall not handle Prestressed Concrete Members until after prestressing tendons have been released and forms have been removed.

The Contractor shall always keep webs of Prestressed Concrete Members vertical and in the same position as shown in the final installation. The bottoms of Prestressed Concrete Members shall be kept level. The Contractor shall keep the points of support and direction of reactions in accordance with approved Working Drawings.

The Contractor shall limit the camber growth to a value not to exceed the predicted camber at erection dimension by two (2) inches at the time of deck slab placement for Prestressed Concrete Members greater than 54 inches in depth. The Contractor shall limit camber growth to one (1) inch for Prestressed Concrete Members 54 inches or less. If camber growth measures are necessary, the Contractor shall include the methods for camber control in the Shop Drawings submittal.

The Contractor shall include any devices that will be used for lifting, handling, transporting, and erection of the Prestressed Concrete Members in the Shop Drawings.

The Contractor shall not crack, spall, or otherwise damage Prestressed Concrete Members during lifting, handling, hauling, storing, erecting or transporting. Prestressed Concrete Members damaged by improper handling shall be brought to the attention of the Project Manager immediately and may be rejected.

The Contractor shall not transport Prestressed Concrete Members to the job site until the required ultimate compressive concrete strength is attained in accordance with Section 518.2.1.4,”Acceptance Requirements”.

518.3.3 Bracing for Prestressed Concrete Members

The Contractor shall tie and brace the Prestressed Concrete Members immediately after erection to prevent overturning. The Contractor shall leave ties and bracing in place until the Prestressed Concrete Members are permanently secured for lateral stability. If steel girder diaphragms are used, the Contractor shall install diaphragms during Prestressed Concrete Member erection.

Bracing shall be in accordance with Section 512.3, “Construction Requirements”.

518.3.4 Grouting Keyways in Prestressed Concrete Member Type Box and Precast Prestressed Slabs

The Contractor shall provide an exposed aggregate finish for all keyways used to connect adjacent Prestressed Concrete Members with a minimum amplitude of ¼ inch unless otherwise shown on the Plans.

The Contractor shall grout keyways between adjacent Prestressed Concrete Member Type Box or Precast Prestressed Slabs designated for grout in accordance with Section 521, “Non-Shrink Grout”.

518.4 METHOD OF MEASUREMENT

Prestressed Concrete Members will be measured by the linear foot. Precast Prestressed Slabs will be measured by the Square Foot.

518.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Prestressed Concrete Member Type ____	Linear Foot
Precast Prestressed Slab _____ In. Depth	Square Foot

518.5.1 Work Included in Payment

The following items will be considered as included in the payment for the main item(s) and will not be measured or paid for separately:

1. Prestressing steel, reinforcing steel and embedded items for Prestressed Concrete Members;
2. Mockup of surface finish;
3. The Quality Control and Quality Assurance requirements;
4. Epoxy Injection of cracks in end regions; and
5. Shipping and erecting Prestressed Concrete Members.

December 20, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 537: POLYESTER/EPOXY CONCRETE OVERLAY

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 **537.5.1: Work Included in Payment:**

4. Tining and/or grooving.

July 15, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 540: STEEL REINFORCEMENT

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 540.2: Materials:**

540.2.13 Headed Reinforcing Bars
Headed reinforcement shall meet the requirements of ASTM A970 "Headed Steel Bars for Concrete Reinforcement", Annex A1, Class HA.

If headed reinforcement is not included in the Contract, the Contractor may propose the use of headed reinforcement at no additional cost to the Department.

540.2.14 Mechanical Couplers
Mechanical couplers shall meet the requirements for AASHTO M31, Grade 60, and ASTM A706, Grade 60 or ACI 318, Type 2. Mechanical coupler splice strength must be greater than or equal to 125% of the yield strength of the spliced reinforcing bars and must develop the specified tensile strength of the bars. The Contractor shall submit the coupler type (manufacturer and model number) and certified test results showing that the coupler meets these requirements.

Delete 4. and 5. from **Section 540.2.5 Corrosion-resistant and Coated Reinforcing Bars** and replace with the following:

4. Uncoated low-carbon, chromium steel bars in accordance with AASHTO M334 or ASTM A1035; or
5. Galvanized reinforcement in accordance with ASTM A767 or ASTM A1094.

Delete 3. from **Section 540.2.6 Coating and Patching Materials and replace with the following:**

3. Zinc-rich paint with a minimum 65% zinc content in accordance with ASTM A780 for patching damaged and uncoated areas of galvanized reinforcing bars.

Delete the first paragraph and 6. from **Section 540.2.7 Accessories** and replace with the following, respectively**:**
The Contractor shall provide plastic-coated reinforcing tie wire for tying epoxy-coated reinforcing bars, for deformed stainless steel bars, for stainless steel clad deformed steel bars and for uncoated low-carbon, chromium, steel deformed bars. The Contractor shall provide galvanized, annealed wire tires for galvanized bars and for hot-dip galvanized reinforcing bars.

6. Galvanized sand chairs, hot-dip galvanized wire bar supports, or other non-corrosive metal supports placed directly on the ground; or

Delete **Section 540.2.11 Hot-Dip Galvanized Reinforcing Bars** in its entirety and replace with the following**:**
The Contractor shall choose one (1) of the options listed below when providing galvanized bars:

1. The Contractor shall provide hot-dip galvanized reinforcing bars in accordance with ASTM A767. The Contractor shall galvanize bar after cutting and bending; or
2. The Contractor shall provide continuous hot-dipped galvanized reinforcing bars (CGR) in accordance with ASTM A1094. The Contractor shall bend and cut bar after galvanizing.

Delete **Section 540.3.1.1 Bar Lists and Bending Diagram** in its entirety **and replace with the following:**
When the Plans do not include detailed bar lists and bending diagrams, the Contractor shall provide Shop Drawings, bar lists, bending diagrams, and estimated reinforcement quantity to the Project Manager for Bridge Engineer review and Acceptance, prior to ordering any Materials.

When a detailed bar list and bending diagram are included on the Plans, they are included for the Contractor's information and for quantity estimation only. It is the responsibility of the Contractor to notify the Department of any errors identified in the provided bar lists and bending diagrams. Once notified, the Department will correct the identified errors as necessary and provide the Contractor with amended details. The Contractor shall provide Shop Drawings, bar bending lists, bending diagrams, and estimated reinforcement quantity to the Project Manager for Bridge Engineer review and Acceptance in advance of ordering any Materials.

The Contractor shall include the bar marks, shown on the Plans, on the bar tags and the rebar details, bar lists, and bending diagrams on the Shop Drawings. Contractor may include an alternate bar mark for fabrication purposes, but the Contractor shall also show the Plan bar marks in all locations on Shop Drawings and bar tags.

Acceptance of the Shop Drawings, bar lists, bending diagrams and estimated reinforcement quantity shall not relieve the Contractor of responsibility for correctness of the Shop Drawings, bar lists, bending diagrams, and estimated reinforcement quantity. The Contractor's detailed bar lists and bending diagrams shall meet the requirements of the current edition of the Concrete Reinforcing Steel Institute's (CRSI) publication, Manual of Standard Practice. The Contractor shall allow 30 Days for review of the submittal.

Delete **Section 540.3.1.3 Bar Bending** in its entirety and replace with the following**:**
The Department will allow cold bending around a pin. The Contractor shall not field bend, Grade 60 bars, epoxy-coated bars or standard class hot-dip galvanized bars after galvanizing. For continuous hot-dip, galvanized reinforcing bars (CGR), the Contractor shall fabricate, bend and cut after galvanizing.

Unless otherwise directed, the Contractor shall ensure the bend diameter is in accordance with CRSI Manual of Standard Practice current edition.

Delete **Section 540.3.1.4: Splicing** in its entirety and replace with the following:
The Contractor shall splice bars in accordance with the Plans unless otherwise approved by the State Bridge Engineer.

The Contractor shall place and tie bars in lapped splices to maintain minimum reinforcing cover.

The Contractor shall splice spiral reinforcement by lapping. The Contractor shall ensure that laps are at least 48 bar or wire diameters, but not less than one (1) foot with 90° hooks around longitudinal bars at ends unless

otherwise indicated in the Contract.

The Department will allow the use of headed reinforcing bars in accordance with Section 540.2.13, “Headed Reinforcing Bars”.

The Department will allow the use of mechanical couplers in accordance with Section 540.2.14, “Mechanical Couplers”.

Unless otherwise specified, the Contractor shall ensure that welded wire fabric and bar-mat reinforcement overlap is at least one (1) spacing of cross wires plus two (2) inches when measured between the outer-most cross wires of each sheet.

Delete **Section 540.3.3.3: Thickness of Galvanizing** and replace with the following**:**
For ASTM A1094, the Contractor shall ensure that the galvanizing after drying with air, steam or wiping is from two (2) mils to three (3) mils thick.

For ASTM A767, the Contractor shall ensure that the galvanizing after drying with air, steam or wiping is from three (3) mils to 3.9 mils thick.

The Contractor shall determine the thickness with a magnetic thickness gage. The Contractor shall submit a Certificate of Compliance.

Add the following to **Section 540.5.1: Work Included in Payment:**

4. Headed reinforcement shall be included in the reinforcing bar pay item(s). No additional weight will be added.

May 27, 2022

SPECIAL PROVISIONS
MODIFYING
SECTION 542: HIGH-STRENGTH BOLTS

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 542: HIGH STRENGTH BOLTS** in its entirety and replace with the following:

542.1 DESCRIPTION
This Work consists of providing and installing High-Strength Bolts.

542.2 MATERIALS
The Contractor shall mark bolts, nuts, and washers in accordance with the applicable ASTM Specifications.

542.2.1 Bolts
The Contractor shall provide bolts in accordance with ASTM F3125, Grade F1852 or Grade F2280 bolts ("twist-off" style bolts). The Contractor shall ensure that bolt dimensions are in accordance with ASTM F3125 Table 2.

When specified in the Contract, or when bolts are embedded, or when a snug-tight condition is specified, it is Acceptable to use F3125 grade A325.

When the Contract requires unpainted corrosion resistant (weathering) steel, the Contractor shall supply Type 3 High-Strength Bolts in accordance with ASTM F3125. When the Contract does not require unpainted corrosion resistant (weathering) steel, the Contractor shall provide Type 1 High-Strength Bolts in accordance with ASTM F3125.

When the Contract requires galvanized fasteners, the Contractor shall mechanically galvanize in accordance with ASTM B695, Class 50.

542.2.2 Nuts
The Contractor shall provide nuts in accordance with ASTM A 563 with dimensions in accordance with ANSI 18.2.2. For both plain (ungalvanized) and heat-treated galvanized nuts, the Contractor shall ensure nuts meet the requirements of ASTM F3125 Table 2.

The Contractor shall lubricate galvanized nuts with a dyed lubricant of a color that contrasts with the galvanizing color.

542.2.3 Washers
The Contractor shall provide washers in accordance with ASTM F436.

The Contractor shall provide flat circular hardened washers and square or rectangular beveled washers with

dimensions according to ASTM F436 Table 2 and Table 3.

When the Contract requires unpainted corrosion-resistant (weather) steel, the Contractor shall supply Type 3 hardened washers.

542.2.4 Material Testing Requirements

542.2.4.1 Testing of Bolts

The Contractor shall conduct proof load tests in accordance with ASTM F606, Method 1.

The Contractor shall conduct wedge tests on full-size bolts in accordance with ASTM F606, paragraph 3.5. The Contractor shall perform tests on galvanized bolts after galvanizing.

The Contractor shall ensure that the minimum testing frequency is in accordance with ASTM F3125, paragraph 9.6.1. The Contractor shall measure zinc coating thickness on galvanized bolts on the wrench flats or bolt head tops.

The Contractor shall conduct additional testing of "twist-off" style bolts in accordance with ASTM F3125 paragraph 11.

542.2.4.2 Testing of Nuts

The Contractor shall perform proof load tests in accordance with ASTM F606, paragraph 4.2.

The Contractor shall ensure that the minimum testing frequency is in accordance with ASTM A563, paragraph 9.3. Test galvanized nuts after over tapping, galvanizing and lubricating.

542.2.4.3 Testing of Washers

The Contractor shall, test galvanized washers for hardness after galvanizing. The Contractor shall remove the coating before conducting the hardness tests.

542.2.5 Testing of Assemblies

The Contractor shall provide the manufacturers or distributors rotational capacity test results on bolt, nut, and washer assemblies. The Contractor shall use washers in the test, even if washers are not used in the assembly on the Project.

The Contractor shall test each combination of bolt production lot, nut lot, and washer lot as an assembly. Unless required by the installation procedures, the Contractor shall not include washers in the lot identification.

The Contractor shall assign a rotational capacity lot number to each lot combination tested.

The minimum testing frequency is two (2) assemblies per rotational capacity lot.

542.2.5.1 Procedure for Rotational Capacity Tests for Long Bolts

The Contractor shall test bolts long enough to test in a tension calibrator in accordance with the following procedures:

1. Mark the calibrator face plate with lines at vertical and at 1/3 (120°) and 2/3 (240°) of a turn, clockwise from vertical;
2. Use a calibrated torque wrench;
3. Use spacers with a hole size no larger than 1/16 inch larger than the bolt to be tested; and
4. Mount the bolt calibrator on a steel frame or section such as a flange or a cross frame.
   4.1. Put the nut on the bolt. Measure from the end of the threaded shank to the underside of the bolt head when there are three (3) to four (4) full threads of the bolt between the bearing face of the nut and the bolt head;
   4.2. Put the bolt in the tension calibrator and install the required number of shim plates and washers needed to produce the measurement from Step 4.1 (always install one (1) washer under the nut);
   4.3. Snug tighten the bolt with a hand wrench to the tension listed in Table 542.2.5.1:1, "Snug Tight Tension"; do not exceed two (2) kips more than the value;

Table 542.2.5.1:1
Snug Tight Tension

Bolt diameter (in)	Snug tight tension, minimum (kip)
1/2	1
5/8	2
3/4	3
7/8	4
1	5
1 1/8	6
1 1/4	7
1 3/8	9
1 1/2	10

   4.4. Match mark the nut to the vertical line on the bolt calibrator faceplate;
   4.5. Using the calibrated manual torque wrench, tighten the bolt to at least the tension listed in Table 542.2.5.1:2, "Installation Tension." Measure and record the torque and the tension generated simultaneously with that torque. Measure torque with the nut in motion;

Table 542.2.5.1:2
Installation Tension

Bolt diameter (in)	Installation tension, minimum (kip)
1/2	12
5/8	19
3/4	28
7/8	39
1	51
1 1/8	56
1 1/4	71
1 3/8	85
1 1/2	103

4.6. Calculate the torque in accordance with the following equation:

$$V = \frac{T \times d}{4}$$

Where,

V is the calculated torque value
T is the measured tension in pounds
d is the bolt diameter in feet

Record the calculated value. The measured torque values must equal or be less than the calculated torque. Assemblies with measured torque values exceeding the calculated value fail the test; and

4.7. For assemblies passing Step 4.6, further tighten the bolt to the rotation listed in Table 542.2.5.1:3, "Required Rotation." Measure the rotation from the vertical line to the initial match marking in Step 4.4. Record the bolt tension.

Table 542.2.5.1:3
Required Rotation

Bolt length (L) measured in step 1	Required rotation (turns)
$L \leq 4d_b$	2/3
$4d_b < L \leq 8d_b$	1
$L > 8d_b$	1 1/3

Note: d_b = bolt diameter

Assemblies that fail before completing the required rotation by stripping or fracture fail the test.

Bolt tension measured at the required rotation must equal or exceed the values in Table 542.2.5.1:4, "Minimum Tension Requirements." Assemblies that do not meet this tension fail.

Table 542.2.5.1:4
Minimum Tension Requirements

Bolt diameter (in)	Tension, minimum (kip)
1/2	14
5/8	22
3/4	32
7/8	45
1	59
1 1/8	64
1 1/4	82
1 3/8	98
1 1/2	118

4.8. Loosen and remove the nut and examine the threads on the nut and bolt. Assemblies showing evidence of thread shear failure, stripping, or torsion failure fail.

542.2.5.2. Procedure for Rotational Capacity Tests for Short Bolts

The Contractor shall test bolts that are too short for a tension calibrator in accordance with these procedures:

Equipment Requirements:

1. A calibrated torque wrench and a spud wrench;
2. Spacers with a hole size no larger than 1/16 inch greater than the tested bolt;
3. A steel section with a normal size hole to install bolt. Any available splice hole with plate thicknesses that will provide the number of threads under the nut required in Step 3.1 of the following procedures is Acceptable.

   This procedure is as follows:

   3.1. Mark the steel section with lines at vertical and at 1/3 (120°) and 2/3 (240°) of a turn, clockwise from vertical;

   3.2. Put the nut on the bolt. Measure the bolt length and the distance from the end of the threaded shank to the underside of the bolt head when there are three (3) to five (5) full threads of the bolt between the bearing face of the nut and the bolt head;

   3.3. Put the bolt in the hole and install the required number of shim plates to produce the thread stick-out measured in Step 3.1. Always install one (1) washer under the nut;

   3.4. Snug using a hand wrench. Do not exceed 20% of the torque determined in Step 3.6 of this procedure;

   3.5. Match mark the nut to the vertical line on the steel section; and

   3.6. Tighten the bolt using the torque wrench by turning the nut to the rotation listed in Table 542.2.5.2:1, "Initial Required Rotation". Use a second wrench to prevent bolt head rotation during tightening. Record the torque required to reach this rotation. Measure torque with the nut in motion.

Table 542.2.5.2:1
Initial Required Rotation

Bolt length (L) measured in step 3.2	Required rotation (turns)
$L \leq 4d_b$	1/3
$4d_b < L \leq 8d_b$	1/2
$L > 8d_b$	2/3

Note: d_b = bolt diameter

Assemblies that exceed the torque values listed in Table 542.2.5.2:2, "Torque Requirements," fail.

Table 542.2.5.2:2
Torque Requirements

Bolt Diameter (in)	Torque foot-pounds, maximum
1/2	150
5/8	290
3/4	500
7/8	820
1	1230

Table 542.2.5.2:2
Torque Requirements

Bolt Diameter (in)	Torque foot-pounds, maximum
1 1/8	1500
1 1/4	2140
1 3/8	2810
1 1/2	3690

3.7. For assemblies that pass Step 3.5, further tighten the bolt to the rotation required in Table 542.2.5.2:3, "Final Rotation Requirements." Measure the rotation from the vertical line to the initial match marking in Step 3.4; and

Table 542.2.5.2:3
Final Rotation Requirements

Bolt length (L) measured in step 1	Required rotation (turns)
$L \leq 4d_b$	2/3
$4d_b < L \leq 8d_b$	1
$L > 8d_b$	1 1/3

Note: d_b = bolt diameter

3.8. Loosen and remove nut and examine the threads on the nut and the bolt. Assemblies showing evidence of thread shear failure, stripping, or torsional failure fail the test.

542.2.6 Reporting

The Contractor shall provide notarized manufacturer and distributor CTR and MTR for mill steel used to manufacture bolts, nuts and washers. The Contractor shall indicate the steel melting and manufacture location in the MTR.

The Contractor shall show test results, including zinc coating thicknesses, in the CTR. The Contractor shall show test performance locations and test dates in the CTR.

542.2.6.1 Manufacturer CTR

The Contractor shall provide CTRs from the bolt, nut, and washer manufacturers that include the following:

1. Lot numbers of each item tested;
2. Rotational capacity test results, rotational capacity lot numbers, and individual lot numbers of the items tested if performed by the manufacturer;
3. Results of all other required tests; and
4. Locations where the bolt assembly components were manufactured.

542.2.6.2 Distributor CTR

The Contractor shall provide CTR from the bolt, nut, and washer distributors that include:

1. Documentation required in Section 542.2.6.1, “Manufacturer CTR”;
2. Rotational capacity test results, rotational capacity lot number, and individual lot numbers of the items tested if performed by the distributor; and
3. A statement that the manufacturer’s CTR represents the same items.

542.2.7 Sampling and Testing by the Department

Before installation, the Project Manager may select two (2) bolts, nuts, and hardened washer assemblies from each rotational capacity lot and at least three (3) bolts, nuts, and hardened washers, for each diameter and grade of fastener for testing by the State Materials Bureau.

542.2.8 Shipping

The Contractor shall ship bolts, nuts, and washers from each rotational capacity lot in the same container. If there is only one (1) production lot number for each size of nut and washer, the Contractor may ship the nuts and washers in separate containers.

The Contractor shall permanently mark each container with the rotational capacity lot number.

542.3 CONSTRUCTION REQUIREMENTS

The Contractor shall fabricate the Materials, to be connected with High-Strength Bolts, in accordance with Section 541, “Steel Structures”.

The Contractor shall blast clean steel faying surfaces in accordance with SSPC-SP 10.

The Contractor shall ensure that the bolted part surfaces adjacent to the bolt head and nut are parallel within the three (3) degrees for parallel surface rolled steel members. The Contractor shall use beveled washers on surfaces with more than a 1:20 slope for proper seating. The Contractor shall use bolted parts that fit solidly together when assembled. The Contractor shall not use gaskets or other flexible Material.

The Contractor shall erect joints and splices with cylindrical erection pins and bolts in accordance with Section 541, “Steel Structures.” The Contractor shall use high strength bolts instead of erection bolts if necessary. These can be left in place, provided they are not loosened and retightened.

542.3.1 Installation of Bolts

The Contractor shall ensure that bolt, nut and washer combinations are from the same rotational capacity lot.

542.3.2 Lubrication

The Contractor shall ensure that black bolts are oily to the touch when delivered and installed.

Secondary lubrication, by any party other than that which certified the assembly lot, is not permitted on a “twist-off” style bolt assembly lot, unless under the direction of the manufacturer.

If relubrication is permitted, the Contractor shall clean and relubricate weathered or rusted bolts and nuts before installation. The Contractor shall retest recleaned or relubricated bolt, nut, and washer assemblies.

Before installing galvanized nuts, the Contractor shall inspect the nuts to ensure the threads are properly lubricated. If lubricant is not visible or if tensioning indicates that thread friction is too high, the Contractor shall replace the bolt and nut with an unused lubricated bolt or if allowed apply an approved lubricant to the

remaining threads before installation.

542.3.3 Method of Installation
Wherever practical, the Contractor shall place the nut where it is not visible from the Traveled Way. When one end of a bolted assembly is embedded in concrete, the Contractor shall place the assembly so the nut end is in the concrete.

When tightening connections involving several bolts, The Contractor shall draw together plies of the steel by snugging the bolts before starting the tightening operations.

The Contractor shall prevent the stationary element from turning.

For oversized or slotted holes, the Contractor shall place additional hardened washers between the bolted Material and the fastener.

The Contractor shall not reuse bolts previously tightened. Touching up or re-tightening bolts that may have been loosened by the installation of adjacent bolts shall not be considered a reuse.

542.3.3.1 "Twist-off" Style Bolt Installation
The Contractor shall snug all bolts within the connection without severing the splined ends, drawing all plies of the connection together. If a splined end is severed prior to all bolts within the connection being snugged, the Contractor shall remove and replace severed end bolts. After all bolts within the connection are snug tight, the Contractor shall pretension all bolts within the connection with a calibrated "twist-off" style tension control bolt installation wrench, progressing systematically from the most rigid part of the connection to its free edges.

542.3.3.2 Turn-of-Nut Bolt Installation
The Contractor shall snug all bolts within the connection, drawing all plies of the connection together. The Contractor shall give bolts a suitable match-mark and tightened additionally by the applicable amount of nut rotation specified in Table 542.3.3.2:1, "Nut Rotation from Snug-Tight Condition", progressing systematically from the most rigid part of the connection to its free edges. During this operation, there shall be no rotation of the part not turned by the wrench. Nut rotation is relative to the bolt, regardless of the element being turned. For bolts installed by 1/2 turns and less, the tolerance is 0 to 30 degrees; for bolts installed by 2/3 turn or more, the tolerance is 0 to 45 degrees.

Table 542.3.3.2:1
Nut Rotation from Snug-Tight Condition

Bolt Length[2]	Disposition of Outer Faces of Bolted Parts[1]		
	Both faces normal to bolt axis	One face normal to bolt axis, other sloped not more than 1:20[3]	Both faces normal to bolt axis, other sloped not more than 1:20[3]
Not more than $4d_b$	1/2 turn	1/2 turn	2/3 turn

Table 542.3.3.2:1
Nut Rotation from Snug-Tight Condition

Bolt Length[2]	Disposition of Outer Faces of Bolted Parts[1]		
	Both faces normal to bolt axis	One face normal to bolt axis, other sloped not more than 1:20[3]	Both faces normal to bolt axis, other sloped not more than 1:20[3]
More than $4d_b$ but not more than $8d_b$	1/2 turn	2/3 turn	5/6 turn
More than $8d_b$ but not more than $12d_b$	2/3 turn	5/6 turn	1 turn

Notes:
1. Nut rotation is relative to bolt regardless of the element (nut or bolt) being turned. For all required nut rotations, the tolerance is plus 60 degrees (1/6 turn) and minus 30 degree;
2. When the bolt length exceeds $12d_b$, the required nut rotation shall be determined by actual testing in a suitable tension calibrator that simulates the conditions of solidly fitting steel;
3. Beveled washer not used; and
4. d_b = bolt diameter.

542.3.4 Quality Control Inspection

When turn-of-nut method is used, the Contractor shall use an inspection wrench to inspect the tightened bolts. If the inspection wrench is a torque wrench, the Contractor shall tighten each calibration test bolt in the calibration device to the minimum tension specified for its size listed in Table 542.3.4:1, "Bolt Tension'. The Contractor shall then apply the inspection wrench to the tightening bolt, and the torque necessary to turn the nut or bolt head five (5) degrees in the tightening direction shall be determined. The average torque measured in the tests of three (3) bolts shall be taken as the job-inspection torque. The torque wrench shall be a dial torque wrench and shall have been checked for accuracy within one (1) year of its current use by the manufacturer or an approved testing agency.

Table 542.3.4:1
Bolt Tension

Bolt Diameter	Required min. Bolt Tension (kips)
	ASTM A 325 Bolts
1/2	12
5/8	19
3/4	28

Table 542.3.4:1
Bolt Tension

Bolt Diameter	Required min. Bolt Tension (kips)
	ASTM A 325 Bolts
7/8	39
1	51
1 1/8	56
1 1/4	71
1 3/8	85
1 1/2	103

The Contractor shall inspect bolts that have been tightened in the Structure by applying, in the tightening direction, the inspection wrench and its job-inspection torque to ten percent (10%) of the bolts but not fewer than two (2) bolts within a connection. If no nut or bolt head is turned by this application of the job-inspection torque, the connection will be Accepted as properly tightened. If any nut or bolts head is turned by the application of the job-inspection torque, the Contractor shall apply this torque to all bolts in the connection. The Contractor shall retighten and reinspect bolts whose nut or head is turned by the job-inspection torque or all bolts in the connection may be retightened and the connection resubmitted for inspection.

The Contractor shall submit a written record of the inspection results, indicating the location, test dates, and the results of each inspection.

542.3.5 Quality Assurance Inspection

The Department may visually inspect every bolt for gaps. For "twist-off" style bolts, the Department may visually inspect any or all bolts to verify the splined ends have been properly severed. If "twist-off" style bolts are not used, the Department may require the Quality Control inspection be performed in the presence of a representative of the Department. If the inspections indicate improper installation, the Project Manager may reject the connection.

542.4 METHOD OF MEASUREMENT – Reserved

542.5 BASIS OF PAYMENT

The Department will pay for high strength bolts as a part of Structural Steel tonnage in accordance with Section 541, "Steel Structures."

December 20, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 543: METAL RAILING

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 **543.5.1: Work Included in Payment:**

4. Two (2) Bridge number plates for every Bridge.

February 8, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 548: COATING OF CONCRETE

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 548.1 Description** and replace with the following:

This Work consists of applying Coating of Concrete-Stain, Coating of Concrete-Paint or Coating of Concrete-Textured Coating as designated in the Contract.

Delete the first paragraph of **Section 548.2 Materials** and replace with the following.

The following coating of concrete systems are included in this Specification:

1. Coating System 548-1: colored concrete stain/sealer;
2. Coating System 548-2: paint; and
3. Coating System 548-3: textured coating.

Delete the second paragraph of **Section 548.2 Materials.**

Delete the first paragraph of **Section 548.3.1 General** and replace with the following:

Prior to application of a Coating of Concrete System, , the Contractor shall apply a Class 2, Rubbed Surface Finish in accordance with Section 511.3.9.3, “Class 2, Rubbed Surface Finish”.

May 9, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 560: ELASTOMERIC BEARING PADS

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 560.5: Basis of Payment and replace** with the following**:**

Pay Item	**Pay Unit**
Elastomeric Bearing Pads	Each

December 7, 2020

SPECIAL PROVISIONS
MODIFYING
SECTION 562: BRIDGE JOINT STRIP SEALS

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 562.1: Description** in its entirety and replace with the following**:**

This Work consists of providing, assembling, and installing Bridge joint strip seal assemblies and in accordance with the Standard Drawings for Bridge Joint Strip Seals.

In addition, this Work consists of replacing and installing Bridge joint elastomer on existing Bridge joints in accordance with the Standard Drawings for Bridge Joint Strip Seals.

Add the following to **Section 562.4: Method of Measurement:**

Bridge Joint Elastomer will be measured by the Linear Foot.

Add the following Pay Item to **Section 562.5: Basis of Payment:**

Pay Item	**Pay Unit**
Bridge Joint Elastomer	Linear Foot

Add the following to **Section 562.5.1: Work Included in Payment:**

8. Bridge Joint Elastomer.

May 14, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 601: REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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 601.3.2 Removal of Bridges, Culverts and Other Drainage Structures:**

601.3.2.1 Partial Removal of Bridge Elements
If partial removal is specified, the partial removal shall be in accordance with Section 533.3, "Construction Requirements".

Add the following to **Section 601.5.1: Work Included in Payment**:

4. Means and methods associated with partial removal of Bridge elements.

September 29, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 602: SLOPE AND EROSION PROTECTION 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:

602.2.1 Classifications
Delete **Table 602.2.1:1** and replace with the following:

Table 602.2.1:1
Riprap Classifications and Gabion Requirements

Class	Description	Stone Volume (cubic feet)		Minimum Dimension[a] (inches)	Nominal D50 (feet)	Minimum Blanket Thickness (feet)
		Minimum	Maximum			
A	Wire enclosed riprap	1/6	2/3	4	0.75	--
A	Non-enclosed riprap	1/6	2/3	4	0.75	1.25
B[b]	Non-enclosed riprap	1	2	6	1.25	2.0
C[b]	Non-enclosed riprap	2	4	9	1.5	2.25
D	Derrick stone	See Table 602.2.1:2				3.0
E	Grouted riprap	1/3	1	3	1.0	1.5
F	Grouted riprap	1	2	6	1.25	2.0
G	Rock plating	--	--	4-8[c]	--	1.0
N/A	Wrapped rockfacing	--	--	1	--	--
N/A	Gabions	--	--	4-8[c]	--	--

[a] Minimum size in the least dimension.

[b] Class B and C stone – at least two (2) Fractured Faces.

[c] 70% to 80% of the stone: at least four (4) inches but not more than eight (8) inches in the smallest dimension; 30% to 20% of the stone: no larger than four (4) inches in any dimension.

Add the following to **602.5 Basis of Payment**:

Pay Item	**Pay Unit**
Riprap Class A (Non-Enclosed)	Cubic Yard

April 6, 2023

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 Construction General Permit (CGP) is issued under the National Pollutant Discharge Elimination System (NPDES) as required by the US Clean Water Act (CWA). The SWPPP is required under the CGP. The SWPPP and Notice of Intent (NOI) are required for construction Projects with one (1) acre or more of earth disturbance or will disturb less than one (1) acre of land but are part of a common plan of development or sale that will ultimately disturb one (1) or more acres of land; or have been designated by EPA as needing permit coverage under 40 CFR § 122.26(a)(1)(v) or 40 CFR § 122.26(b)(15)(ii) as defined in the CGP.

The Contractor shall comply with requirements of Section 603, “Temporary Erosion and Sediment Control,” the CGP and if performing Work along or adjacent to live streams, the Contractor shall do so in accordance with the Federal Clean Water Act (33 USC 1251 et seq.) and the regulations and requirements of other authorities with jurisdiction.

603.1.1 Storm Water Pollution Prevention Plan

The Contractor’s SWPPP shall satisfy the requirements of the current CGP, applicable EPA Municipal Separate Storm Sewer System (MS4) Permit, and shall contain the following sections, forms and information sheet. The Contractor’s SWPPP shall meet the following:

1. Identification of other site operators;
2. Storm Water Team, including at least two (2) EPA-certified (or equivalent) inspectors, one (1) from the Contractor and one (1) from the Department;
3. Nature of construction activities;
4. Site map;
5. Non-storm water discharges;
6. Sequence and estimated dates of construction activities;
7. Temporary Erosion and Sediment Control Plan (TESCP) and description of storm water control measures (construction phase and final stabilization);
8. Natural buffer documentation;
9. Perimeter controls for a “linear construction site”;
10. Stabilization measures;

11. Procedures for inspection, maintenance, and corrective action;
12. Procedures for turbidity benchmark monitoring from dewatering discharges (if applicable);
13. Documentation of compliance and other federal requirements;
14. Staff training;
15. Pollution prevention procedures;
16. SWPPP certification; and
17. Post-authorization additions to the SWPPP.

The Contractor shall use the most current version of the following forms 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. 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 SWPPP information sheet will be included on the Plans.

603.1.1.1 Temporary Erosion and Sediment Control Plan

The Contractor's construction phase TESCP, 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 TESCP Plan sheets showing the placement of BMPs after all construction activities except for revegetation.

603.1.1.2 Department Responsibilities

The Project Manager will assign an EPA-certified (or equivalent) Department representative (with qualification form) experienced and trained in implementing BMPs. The Department will include a SWPPP Information Sheet and the Final Stabilization TESCP 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 TESCP 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 TESCP shall be developed by the Contractor's EPA-certified (or equivalent) representative for each construction phase, complying with provisions of the NPDES CGP and shall include at a minimum the following activities:

1. Develop the SWPPP using a combination of structural, non-structural, and vegetative best management practices (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 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. 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 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 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.

603.1.5 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 found in 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.

603.1.6 Liquidated Damages and EPA Fines

If the Contractor does any of the following, the Department will assess liquidated damages in accordance with Table 108.8:1, "Schedule of Liquidated Damages":

1. Fails to maintain temporary erosion control measures in accordance with Section 603.3.6, "SWPPP Inspection and Maintenance";
2. Fails to document inspection and maintenance activities as required by the CGP; or
3. Fails to document in a Corrective Action Report, as required by the CGP, field changes of erosion control measures as directed in writing by the Project Manager.

The Project Manager will keep a schedule of noncompliance that the Department will use to calculate liquidated damages. The first Day of the assessment for Item 1 will be the Day following Contractor notification by the Project Manager of the failure, allowing one (1) day to correct the failure. The first Day of the assessment for Items 2 and 3 will be the Day the document should have been completed. The Department will assess liquidated damages until the Project Manager issues a written notice of compliance to the Contractor.

The Contractor's failure to comply with the CGP may result in EPA citations. If the Contractor's failure to adhere to the CGP results in a fine assessed against the Department, the Contractor shall reimburse the Department within ten (10) Days of the assessment. If the Contractor does not reimburse the Department within the ten (10) Days, the Department may pay the fine assessed and withhold the fine amount from the Contractor's next partial payment.

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, socks, rock, riprap, soil retention blankets, 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.

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 Approved Products List (APL).

603.2.5.1 Containment Mesh
The Contractor shall furnish containment mesh that is made of 100 percent (100%) biodegradable 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.

603.3 CONSTRUCTION REQUIREMENTS

603.3.1 General
The Contractor shall apply appropriate erosion, sediment, and dewatering control measures for construction activities in accordance with the Accepted 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.

SWPPP measures shall be installed by EPA-certified (or equivalent) personnel.

603.3.2 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.

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.

603.3.2.1 Sequence of Operations
Before Work begins, the Project Manager and the Contractor will conduct a site inspection to review the SWPPP.

The Contractor shall coordinate the placement and maintenance of the temporary and permanent erosion and sediment control measures.

The Department will assess liquidated damages, in accordance with Section 603.1.6, "Liquidated Damages" if the Contractor begins earth-disturbing Work before the following:

1. Both the Contractor's and Department's NOIs are listed on the EPA website as "active"; or
2. Placing erosion control measures.

Assessed liquidated damages will be calculated with the first day of earth-disturbing activity being considered the first day for assessment, and assessment will continue until both items are completed.

603.3.2.2 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 otherwise specified in the Contract.

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 as soon as possible. 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.

603.3.3 Temporary Soil Stabilant Application
The Contractor shall apply Temporary Soil Stabilant to exposed areas not being worked. The Contractor shall begin stabilization within one (1) Working Day after Work ceases unless construction will resume within 14 Calendar Days after Work ceases.

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 Environment Design Manager or representative may modify the manufacturer's application rate.

The Contractor shall reapply Temporary Soil Stabilant to areas of continued erosion and areas disturbed by Contractor activity within four (4) weeks after the initial application at no additional cost to the Department, as directed by the Project Manager.

603.3.4 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.

603.3.5 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.

603.3.6 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) Calendar Days; or
2. Once every 14 Calendar Days and within 24 hours of a 0.25 inch or greater rainfall event; or
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.

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 familiar with the Project SWPPP and document the responsible person's experience and training on the qualification form. 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.

603.3.7 Removal of Control Installations

The Contractor shall remove and dispose of temporary erosion and sediment control installations and features from the Project area when no longer required, 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.

603.4 METHOD OF MEASUREMENT

The Department will measure rock check dams along the crest of the dam.

603.5 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

603.5.1 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;
5. Removal and disposal of temporary erosion and sediment control measures, if required;
6. Subsequent applications of Temporary Soil Stabilant due to unsatisfactory results;
7. Removal and replacement of the measure at the same location due to construction; and
8. Relocation of BMPs during phasing and final placement.

603.5.2 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.

January 1, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 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 9. from **Section 606.5.1: Work Included in Payment** and replace with the following:

9. Hot/Warm Mix Asphalt Material, placement and compaction;

July 17, 2023

SPECIAL PROVISIONS
MODIFYING
SECTION 607: FENCE

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 607.2: MATERIALS**

607.2.7 Channel Fence

607.2.7.1 Channel Fence
The Contractor shall provide two (2) inch by four (4) inch by 50 inch high V-mesh wire fence as indicated on the Plans. Channel Fence horizontal wire shall be two (2) 12.5 gauge wires twisted to form cables on four (4) inch spacing from top to bottom. Channel Fence vertical wire shall be 14 gauge securely wrapped around horizontal cables to form a diamond pattern.

607.2.7.2 Brace Wire
The Contractor shall provide steel cables with minimum diameter of 0.3125 inch (5/16 inch) to support fence fabric at top and bottom.

607.2.7.3 Metal Posts
The Contractor shall provide four (4) inch diameter by 14 feet long Schedule 40 steel pipe. Equivalent post Materials may be substituted for Schedule 40 steel pipe with approval of the Project Manager.

Add the following to **Section 607.3: CONSTRUCTION REQUIREMENTS**

607.3.10 Channel Fence
The Contractor shall set posts plumb. The Contractor shall install posts by driving or pushing, without setting the posts in concrete.

The Contractor shall install Channel Fence lines as indicated on the Plans. In the event fence posts cannot be fully embedded to a minimum depth of eight (8) feet, the Contractor may adjust the location of the post by one (1) foot either direction along the fence line. Project Manager to consult with Drainage Design Bureau for any other installation issues.

After the posts are installed to their final depth, the Contractor shall cut holes in posts four (4) inches from the ground and 42 inches above the bottom hole. The Contractor shall string brace wire through the line posts and securely fasten to the end posts using cable clamps. The Contractor shall weave cable through V-mesh wire fence at two (2) foot intervals top and bottom and tensioned to adequately support fence fabric between posts.

The Contractor shall place the V-mesh wire fence on the upstream side of the posts and support the fence fabric with the top and bottom brace cables. The Contractor shall tie the V-mesh wire fence to the fence posts

every 12 to 18 inches. The Contractor shall bury the bottom edge of fence fabric.

Delete **Section 607.5: BASIS OF PAYMENT i**n its entirety and replace with the following:

Pay Item	**Pay Unit**
Barbed Wire Fence ___ft	Linear Foot
Game Fence ___ft	Linear Foot
Woven Wire Fence ___ft	Linear Foot
Chain Link Fence ___ft	Linear Foot
Chain Link Security Fence ___ft	Linear Foot
Vinyl-Coated Chain Link Fence ___ft	Linear Foot
Snow Fence ___ft	Linear Foot
Channel Fence	Linear Foot
Pedestrian/Bicycle Railing ___ft	Linear Foot
Pedestrian Screening Fence Type ____ft	Linear Foot
Post and Cable Access Fence ___ft	Linear Foot
Remove and Rebuild (type) Fence	Linear Foot
Standard Gate ___ft	Each
Barbed Wire Gate, ___ft	Each
Chain Link Gate, ___ft Span	Each
Chain Link Gate, ___ft Span by ___ft Rise	Each
Pipe Gate ___ft	Each
Water Gap Gate	Linear Foot
Turnstile Gate ___ft	Each
Remove and Reset Gate	Each
Stile and Post Wire Trap	Each
Braces/Corner Posts	Each

Delete 9. from **Section 607.5.1: Work Included in Payment.**

September 10, 2021

SPECIAL PROVISIONS
MODIFYING
SECTION 610: CATTLE GUARDS

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 610: CATTLE GUARDS** in its entirety and replace with the following:

610.1 DESCRIPTION
This Work consists of constructing precast concrete Cattle/Game Guards or steel frame Cattle/Game Guards.

610.2 MATERIALS

610.2.1 General
The Contractor shall provide Cattle/Game Guards and grids in accordance with the Contract. The Contractor shall provide individual Cattle/Game Guards with grids of identical type having the same shapes, dimensions, and weight of the steel members.

The Contractor may use steel frame Cattle/Game Guards as an alternate to precast concrete Cattle/Game Guards at turnouts or at other locations in accordance with the Contract.

The Contractor shall permanently cap all vertical metal pipes.

If the Contract specifies precast concrete Cattle/Game Guards, the Department will not allow substitutions.

610.2.2 Precast Concrete Cattle and Game Guards
The Contractor shall use Class AA concrete in accordance with Section 510, “Portland Cement Concrete.”

The Department will reject Cattle/Game Guards with cracks, chips, spalls, or honeycombed or patched areas in excess of 30 in^2; or those that fail to meet the minimum strength requirements.

The Contractor shall provide Shop Drawings in accordance with Section 105.2, “Plans, Working Drawings” and in accordance with the current edition of the ACI Detailing Manual.

The Contractor shall fabricate precast concrete Cattle/Game Guards steel grids and other steel appurtenances in accordance with Section 541, “Steel Structures.”

610.2.3 Steel Frame Cattle and Game Guards
The Contractor shall provide steel frame Cattle/Game Guards guard, grids and appurtenances in accordance with Section 541, “Steel Structures.”

610.2.4 Reinforcing Steel

The Contractor shall use Grade 60 reinforcing steel deformed bars in accordance with Section 540, "Steel Reinforcement."

The Contractor shall provide welded wire fabric in accordance with AASHTO M *55.*

610.2.5 Cattle and Game Guards Guard Grids and Hardware

The Contractor shall provide traffic grill units, warning devices, bolts, tie bolts washers, hardware, and other Materials in accordance with Section 541, "Steel Structures."

The Contractor shall provide grid units in accordance with AASHTO M 183.

The Contractor shall provide aluminum members in warning devices in accordance with the ASTM Specifications listed in Table 610.2.5:1, "Aluminum Members Warning Devices Standards."

Table 610.2.5:1
Aluminum Members Warning Devices Standards

Description	ASTM	Alloy	Temper
Tubing	B 429	6061	T-6
Fence angle	B 221	6061	T-6
Base plate	B 209	6061	T-6

610.3 CONSTRUCTION REQUIREMENTS

610.3.1 Concrete Footings and Foundations

The Contractor shall excavate or build with Embankment, level, and compact foundations for Cattle/Game Guards before installing the Cattle/Game Guards. The Contractor shall excavate wide enough to compact and test Material adjacent to the Cattle/Game Guards or backfill with flowable fill at no extra cost to the Department.

The Contractor shall finish uneven foundation surfaces to ensure full bearing of Cattle/Game Guards units. The Contractor shall compact Subgrade foundations in accordance with Section 207*,* "Subgrade Preparation."

If the Contractor finds unstable Material in footing foundations, the Contractor shall stabilize, or remove and replace with Material approved by the Project Manager.

The Contractor shall place a three (3) inches thick bedding of fine aggregate over the Subgrade and compact it to at least 95% of the maximum density in accordance with AASHTO T 180 (Modified Proctor), Method D (TTCP Modified). The Contractor shall place the Cattle/Game Guards unit on the fine aggregate bedding.

The Contractor shall finish the tops of concrete footings so that stringer-bearing surfaces receive the full bearing under each stringer.

610.3.2 Placement Requirements

The Contractor shall place the precast concrete Cattle/Game Guards in accordance with Section 511, "Concrete Structures." The Contractor may splice reinforcing bars over 30 ft long using a minimum 24-bar diameter lap.

The Contractor shall chamfer exposed edges of concrete ¾ inch.

The Contractor may use used steel members that are free of bends and in good condition, if approved by the Project Manager.

The Contractor shall fabricate grids so that the bottoms of the stringers are in a plane surface.

610.3.3 Protective Coating

The Contractor shall provide Cattle /Game Guards with a protective coating in accordance with Section 545, "Protective Coating of Miscellaneous Structural Steel."

610.3.4 Backfill

The Contractor shall perform the excavation, placement and compaction of select backfill in accordance with Section 206, "Excavation and Backfill for Culverts and Minor Structures."

610.4 METHOD OF MEASUREMENT - Reserved

610.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Cattle Guard	Linear Foot
Game Guard	Linear Foot

610.5.1 Work Included in Payment

The following Work and items, except when otherwise specified, will be considered as included in the payment for the main items, complete in place as detailed in the Contract, and will not be measured or paid for separately:

1. Shop Drawings;
2. Subgrade preparation, excavation, replacement of unstable Subgrade, placement and compaction of select backfill;
3. All steel reinforcement (Including welded wire fabric);
4. All Structural Steel, bearing pads, all connecting hardware and associated components; and
5. All warning devices, all field painting, and all appurtenances necessary to complete the Work.

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 precedure:

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 demobiliation and remobilization due to shutdowns, whole or partial suspensions of the Work or for other Mobilization activities required for satisfactory completion of the Contract.

May 3, 2023

SPECIAL PROVISIONS
MODIFYING
SECTION 622: FIELD LABORATORIES AND FIELD OFFICES

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 622.1: DESCRIPTION**:
The Contractor shall provide the Equipment required for the Field Laboratories in compliance with the applicable current TTCP manuals located on the following link:

http://dot.state.nm.us/content/nmdot/en/TTCP.html

If Equipment becomes inoperable, the Contractor shall replace or fix the Equipment within 24 hours of notification from the Department that the Equipment is inoperable. All Equipment provided by the Contractor will remain the property of the Contractor upon conclusion of the Project.

Delete **Section 622.2.1.7: Field Laboratory Computer Facilities** in its entirety and replace with the following:
If the Contract specifies Type II Field Laboratories, the Contractor shall provide the Laboratory with a personal computer. The Contractor shall maintain this computer for the duration of the Project. The Project Manager will approve the model and location of the personal computer. The computer Equipment shall remain the property of the Contractor.

The Contractor shall provide computer hardware/software in accordance with the following requirements, or latest industry standard, or greater:

1. Microprocessor: Minimum Dual-core 3.0 GHz i-7;
2. Memory: Minimum of 32 gigabytes;
3. Hard disk: Minimum of 1 terabyte SSD;
4. Media drives: 16x DVD ±R/±RW Multi-burner;
5. Monitor: Dual 24-inch color graphics monitor;
6. Printer: letter-quality color laser printer, eight (8) pages per minute minimum;
7. Minimum 11-inch x 17-inch flatbed and/or ADF scanner w/600 optical dpi;
8. Operating System: Windows 10 64 bit (x64) Professional;
9. Microsoft Office 365 License; and
10. Adobe Acrobat Pro.

Add the following to **Section 622.2.1.9**: **Field Laboratory Utilities:**
The Contractor shall coordinate with the appropriate agencies to obtain the necessary permits for electricity, water, sewer, and communications, including internet, to the field Laboratories. Costs associated with the same shall be considered Incidental.

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Delete the fifth paragraph of **Section 622.3.1**: **General** and replace with the following**:**
The Contractor shall locate the field office where telephone, cellular service and internet access, with internet speeds to adequately meet business needs or as Accepted by the Department due to available speeds by the local provider, are available.

Add the following to **Section 622.3.2.3: Field Office Utilities:**
The Contractor shall coordinate with the appropriate agencies to obtain the necessary permits for electricity, water, sewer, and communications, including internet, to the field Offices. Costs associated with the same shall be considered Incidental.

July 17, 2023

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. For additional information refer to the US Clean Water Act as outlined in the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP). 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's Section Manager or its representatives approve 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.

The Contractor shall not use rolled erosion control products (RECPs) such as coir or straw blankets for any revegetation.

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 composted 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 composted 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”.

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 as 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 CNs 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 ladings 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 Composted 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. Composted 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 ¾ 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 ¾ 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, in accordance with Table 632.2.5:1, “Requirements of Composted Mulch”, is unavailable within 300 paved road miles of the Project, the Contractor shall replace Class A Seeding with Class B Seeding. The Contractor shall provide documentation of composted 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 Stabilant that has 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. Additionally, in accordance with Section 632.2.9, "Hydro-Mulch - Bonded Fiber Matrix (BFM)", the Contractor may use BFM in place of Temporary Soil Stabilant and dye in Class A Seeding operations and apply at a rate of 400 lbs. per acre.

The Contractor shall use a Temporary Soil Stabilant that is 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 2,000 lbs. per acre. As a hydraulic erosion control product (HECP) as defined by the Erosion Control Technology Council, the BFM or its equivalent shall be Type 3 or higher in functional longevity as defined in Table 1 of the 2014 Standard Specifications for Hydraulic Erosion Control Products (HECPs) Part 2.01 found at the following link:

https://www.ectc.org/assets/docs/HECPDocs/ectc_apr2014_hecp%20spec%20april2014%20approved%20final.pdf

632.2.10 Rock Mulch for Class C Seeding

The Contractor shall provide rock mulch that is between one (1) inch and no greater than one and one half (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 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	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 Contractor 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 acreage 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 (½) 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 composted mulch;
3. Disk ground to four (4) inches;
4. Apply fertilizer;
5. Disk ground to four (4) inches;
6. Drill seed;
7. Apply straw;
8. Crimp straw; and
9. Apply Temporary Soil Stabilant and 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.

632.3.5.3 Composted Mulch Application for Class A Seeding

The Contractor shall ensure the composted 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 composted 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 on the Contract but composted mulch, is unavailable, the Contractor shall replace Class A Seeding with Class B Seeding.

632.3.5.4 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.

632.3.5.5 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 one half (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.

632.3.5.6 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 entire bedding area with no bare areas showing or areas with straw mulch deeper than four (4) inches in depth before crimping.

632.3.5.7 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 with slopes 3:1 or flatter requiring revegetation and are either less than eight (8) feet wide, and/or are inaccessible to drill seeding Equipment, and/or are too rocky to disk 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 accordance with Table 632.3:1, "Construction Requirements for Classes of Seeding."

632.3.7.1 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 one half (½) 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 one half (½) 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 composted mulch;
4. Scale for drill seeder calibration; and
5. Construction staking.

May 10, 2021

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.

Add the following to **Section 701.3.5 Removing and Resetting Traffic 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

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.

December 1, 2022

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:**

702.2.6 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 ¾ 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 Contactor 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**
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 24, 2019

SPECIAL PROVISIONS
MODIFYING
SECTION 713: DETECTORS

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 **Sections 713.2.2: Radar Presence Detector (RPD) and 713.2.2.1 thru 713.2.2.11** and replace with the following, respectively:

713.2.2 Radar Presence Detector (RPD)

The Contractor shall provide a Radar Presence Detector (RPD) sensor devices which utilizes Frequency Modulated Continuous Wave (FMCW) radar to provide accurate vehicle detection at the stop bar. The RPD shall have the following features:

1. Detect the real-time presence of both moving and stopped vehicles within a 90° field of view extending from 6 feet to 140 feet from the sensor unit;
2. Automatic or manually configurable to provide detection in 16 zones and ten (10) lanes including curved lanes and lanes separated by islands or medians;
3. Provide detector outputs on 16 channels user-mappable to zones with both AND/OR logic and extend and delay functionality;
4. Capable of mitigating detections from wrong way or cross traffic;
5. Requires no cleaning or adjustment necessary to maintain performance; and
6. Housed in a watertight, corrosion-resistant enclosure compliant with the NEMA 250 Type 4X standard.

The RPD shall have the following operational requirements:

1. Radar Operating Frequency of 24.00 – 24.25 GHz (K-Band);
2. Low voltage operation at 10 - 28 VDC;
3. Low power consumption at less than 10 W;
4. Maintain accurate performance in all weather conditions including rain, freezing rain, snow, wind, dust, fog, and changes in temperature and light, including direct light on sensor at dawn and dusk.
5. Ambient operating temperature range of -40°F to 165°F; and
6. Operational in humidity up to 95% (non-condensing).

713.2.2.1 Radar Advance Detector

The Contractor shall provide Radar Advance Detector (RAD) sensor devices which utilize FMCW radar to provide accurate continuous tracking of vehicles approaching the intersection. The RAD shall have the following:

1. Detect and simultaneously track range and speed of 25 independent vehicles in an area extending from 50 feet to 600 feet from the sensor unit;
2. Dynamically tracks ETA-to-stop-bar as each vehicle changes speed;

3. Automatic or manually configurable to provide detection zones in 5-foot increments;
4. Provide eight (8) channel outputs with four alerts per channel (32 alerts) and four zones per alert (128 zones);
5. Support logic filters for zone output, combinational logic on zone outputs for alert output, and channel output from multiple alerts;
6. Support latched channel output controlled by alerts and timer;
7. Support delay and extend settings used for channel outputs;
8. Support user-configurable high-speed and low-speed detection filters in 1-MPH increments for each zone;
9. Support user-configurable ETA-to-stop-bar filters in 0.1-second increments for each zone;
10. Requires no cleaning or adjustment necessary to maintain performance; and
11. Housed in a watertight, corrosion-resistant enclosure compliant with the NEMA 250 Type 4X standard.

The RPD shall have the following operational requirements:

1. Radar Operating Frequency of 10.50–10.55 GHz (X-band);
2. Low voltage operation at 10 - 28 VDC;
3. Low power consumption at less than 10 W;
4. Maintain accurate performance in all weather conditions including rain, freezing rain, snow, wind, dust, fog, and changes in temperature and light, including direct light on sensor at dawn and dusk.
5. Ambient operating temperature range of -40°F to 165°F; and
6. Operational in humidity up to 95% (non-condensing).

713.2.2.2 Radar Detection Cabinet Interface Unit

The Contractor shall provide a Radar Detection Cabinet Interface Unit (RDCIU) which provides power, connectivity, and surge protection to the sensors (RPD's and RAD's); communicates the detector outputs to the traffic signal controller; and shall have the following features:

1. Compliant with applicable NEMA TS2-2003 standards;
2. Shelf-mounted or 19 inch rack-mounted as directed by the Department's Signal Lab;
3. Six (6) terminal block connectors for connecting to the sensors;
4. One (1) SDLC port for connecting to the traffic signal controller;
5. Communication ports (RJ-11, DB-9, mini-USB, and T-bus) for connecting to a computer to configure the sensors;
6. An Ethernet communication port to connect to the Cabinet Interface Unit via an IP network; and
7. Separate power switches to turn on/off each sensor.

The RDCIU shall have the following operational requirements:

1. Operate on power supply voltage of 100 - 240 VDC;
2. Output voltage to sensors of 24 VDC;
3. Power consumption at 120 W maximum;
4. Transient surge suppression conforming to IEC/EN 61000-4-5 level 3 on the AC power input; and
5. Transient surge suppression conforming to IEC/EN 61000-4-5 level 4 on the sensor ports.

713.2.2.3 Radar Detector Cable
The Contractor shall provide Radar Detector Cable as recommended by the manufacturer consisting of multi-conductor cable in a single jacket to provide the necessary conductors for power and communication between the sensor units and the cabinet interface unit. Conductor size shall be selected per the manufacturer's recommendation, taking into account the length of cable and the operational voltage of the sensor unit.

713.2.2.4 Mounting Hardware
The Contractor shall provide mounting brackets to securely attach the sensors to the traffic signal poles or mast arms with 3/4 inch steel banding. Brackets shall have two (2) hinged joints allowing two (2) axes of rotation for horizontal and vertical positioning. Mounting plate shall be directly compatible with the sensor mounting. Brackets shall be powder-coated aluminum with stainless steel hardware.

713.2.2.5 Warranty, Maintenance and Support

1. The Contractor shall obtain and assign to the Department all manufacturers guarantees or warranties which are normally provided as customary trade practice for items and Materials incorporated into the Work. In the absence of a manufacturer's guarantee, the Contractor shall warrant that mechanical and electrical Equipment and Material incorporated into the Work are free from any defects or imperfections in workmanship and Material for a period of one (1) year after partial Acceptance of the Project. The Contractor shall be responsible for repairing any malfunction or defect in any such Equipment or Material, which develops during the one (1) year period.
2. The Contractor shall supply two (2) sets of installation guides and user manuals for the Equipment incorporated in the Project, one (1) of which shall be submitted to the Project Manager with submittal of manufacturers shop drawings.
3. During the warranty period, technical support by toll-free telephone shall be provided by the manufacturer 24 hours per Day, 365 Days per year, and request for support by telephone shall be answered by manufacturer personnel within one hour.

Add the following **to Section 713.3: Construction Requirements**:

713.3.8 Radar Presence Detector
The Contractor shall install the Radar Presence Detector per the manufacturer's recommendations.

713.3.8.1 Mounting and Positioning
The Contractor shall mount each RPD and RAD sensor at the locations as shown on the Contract and as directed by the manufacturer's representative such that the sensor has an unobstructed view of the approach lanes.

The Contractor shall mount each RPD sensor at a height of 20 feet ±5 feet.

The Contractor shall mount each RAD sensor at a typical height of 25 feet or within the range of 17 feet to 40 feet.

The Contractor shall aim, tilt, and align each sensor per the manufacturer's recommendations and as directed by the manufacturer's representative.

713.3.8.2 Cabling and Connections

The Contractor shall route cabling from the RPD and RAD sensors into the signal pole or mast arm to the pole base and then via conduit to the controller cabinet. Radar Detector Cable shall be continuous from the sensor to the Cabinet Interface Unit with no splices.

The Contractor shall leave sufficient slack in the Radar Detector Cable at the sensor to allow aligning the sensor without causing cable strain and to provide a drip loop that drains rain water away from the connector.

The Contractor shall apply silicone dielectric compound to the sensor unit connector before attaching the Radar Detector Cable.

The Contractor shall provide an SDLC cable as recommended by the manufacturer to connect the RDCIU to the Controller. In the case of multiple RDCIU's, provide SDLC wye cables or a SDLC Hub unit to connect the multiple SDLC devices to the controller.

Add the following Pay Items to **Section 713.5: Basis of Payment**:

Pay Item	**Unit**
Radar Advance Detector	Each
Radar Detector Cable	Foot
Radar Detection Cabinet Interface Unit	Each

Delete **Section 713.5.1 Work Included in Payment** and replace with the following:

The following Work and items shall be considered as included in the payment for Radar Presence Detector or Radar Advance Detector and will not be measured or paid for separately:

1. RPD or RAD sensor unit;
2. Mounting bracket, steel banding and hardware; and
3. Silicone dielectric compound.

The following Work and items shall be considered as included in the payment for Radar Detection Cabinet Interface Unit and will not be measured or paid for separately:

1. AC power cord;
2. Rack or shelf mounting hardware;
3. SDLC Cable(s), SDLC wye cable(s); and
4. Multiport SDLC hub unit.

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".

January 21, 2021

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 sublot 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 for the lot.

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
≥±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		

* 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**
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				
	Moisture/ Density Tests (Proctor), Soils Classification		1 per material type		
	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		

* 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**
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		

* 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**
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		

* 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 906.1.2:2 - 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

* 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 906.1.2:5 - 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 Compaction Nuclear Densometer *		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 Department 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		

* 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 906.1.2:6 - 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 manufacture's certificate of compliance will suffice for testing credits	N/A	N/A	N/A	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 906.1.2:8 - 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)		N/A	As needed	N/A
	FF, , SE, F&E, FAA, Moisture	Cold Feed before addition of Mineral Admixtures			
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

* 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 906.1.2:9 - 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	Compressive Strength Cylinders and Plastic Properties (Slump, Unit Weight, Calculated 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 6 load sublot.	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

* 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 906.1.2:10 - 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 production	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	Compressive Strength Cylinders, and Plastic Properties (Slump, Unit Weight, Calculated 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 6 load sublot.	Each mix design per day of placement. Test the first three loads and one load from each 6 load sublot for plastic properties.	1 per project

* 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 906.1.2:11 - Non QLA PORTLAND CEMENT CONCRETE PAVEMENT (509,451)						
Item	**Test Required**	**Sampling/ Testing Location**	**Agency Testing**	**Contractor Testing**	**Independent Assurance*** **Project Approach**	**State Materials Bureau**
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 6 load sublot.	Each mix design per day of placement. Test the first three loads and one load from each 6 load sublot for plastic properties.	1 per 10,000 S.Y.	N/A
	Thickness	Roadway	1 per 300 cy	N/A	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

* 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 906.1.2:12 - Non QLA Superstructure Concrete (509, 510, 512)						
Item	**Test Required**	**Sampling/ Testing Location**	**Agency Testing**	**Contractor Testing**	**Independent Assurance*** **Project Approach**	**State Materials Bureau**
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 sublot.	Each mix design per day of placement. Test the first three loads and one load from each 3 load sublot for plastic properties.	1 per 300 cy	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

* 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 906.1.2:13 - QLA PORTLAND CEMENT CONCRETE PAVEMENT (450)						
Item	**Test Required**	**Sampling/ Testing Location**	**Agency Testing**	**Contractor 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

* 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 906.1.2:14 - TABLE B

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

Table 906.1.2:15 - Tolerances for Comparison of *Independent Assurance Sample Tests* to Acceptance and Process Control Tests

CHARACTERISTICS	**TOLERANCES**
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

GRADATION	**TOLERANCES**
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

CONCRETE	**TOLERANCES**
Slump	± 0.5 Inch
Unit Weight	± 2.0 PCF
Compressive Strength	Within-test coefficient of variation less than 5 %

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