NOTICE TO CONTRACTORS

2019 Standard Drawings for Highway and Bridge Construction Disclaimer

The 2019 Edition of the New Mexico Department of Transportation (NMDOT) Standard Drawings for Highway and Bridge Construction and all updates are for use on NMDOT Projects.

These Standard Drawings are for use only on NMDOT Projects. Others who use the NMDOT Standard Drawings do so at their own risk and accept the responsibility of determining their applicability and any resulting liability.

NOTICE TO CONTRACTORS

2019 Standard Drawings for Highway and Bridge Construction Updates (Effective August 2021 Letting)

The 2019 Edition of the New Mexico Department of Transportation Standard Drawings for Highway and Bridge Construction shall apply in addition to the following:

Delete the following 2019 Standard Drawings for Highway and Bridge Construction:

Standard Section 511 - Concrete Structures

 511-65-2/3, Concrete Box Culvert Triple Opening – Design Fills B, C, D, E, Dimensions and Rebar Schedule (4-9-07)

Standard Section 514 - Concrete Barrier Railing for Bridges

- 514-01-1/6, 32" Concrete Bridge Barrier Railing General Details (4-3-12)
- 514-01-2/6, 32" Concrete Bridge Barrier Railing General Details (4-3-12)
- 514-01-3/6, 32" Concrete Bridge Barrier Railing Standard Section and Details (4-3-12)
- 514-01-4/6, 32" Concrete Bridge Barrier Railing Transition Section and Details (12-27-12)
- 514-01-5/6, 32" Concrete Bridge Barrier Railing Details at Joint Seals (4-3-12)
- 514-01-6/6, 32" Dowel Assembly for Expansion Joints in Concrete Wall Barrier and Concrete Bridge Barrier Railing (4-3-12)
- 514-03-1/6, 42" Concrete Bridge Barrier Railing General Details (4-3-12)
- 514-03-2/6, 42" Concrete Bridge Barrier Railing General Details (4-3-12)
- 514-03-3/6, 42" Concrete Bridge Barrier Railing Standard Section and Details (4-3-12)
- 514-03-4/6, 42" Concrete Bridge Barrier Railing Transition Section and Details (12-27-12)
- 514-03-5/6, 42" Concrete Bridge Barrier Railing Details at Joint Seals (4-3-12)
- 514-03-6/6, Dowel Assembly for Expansion Joints in 42" Concrete Wall Barrier and Concrete Bridge Barrier Railing (4-3-12)
- 514-10-1/1, Bridge Number Plate, Tag, and Survey Marker (12-16-19)

Standard Section 543 - Metal Railing

- 543-02-1/1, Metal Railing Type "A" (11-13-09)
- 543-03-1/2, Metal Railing Type "D" (11-13-09)
- 543-03-2/2, Metal Railing Type "D" Details (11-13-09)
- 543-06-1/4, Metal Railing NM Type A32 Details of Post on Bridge, Wingwalls and Approach Slab (9-23-14)
- 543-06-2/4, Metal Railing NM Type A32 Railing Elevation and Bridge Rail Joint Details (9-23-14)
- 543-06-3/4, Metal Railing NM Type A32 General Notes and Details of Rail to Post Connection and Gutter Detail (9-23-14)
- 543-06-4/4, Metal Railing NM Type A32 Rail to Thrie Beam Connection (9-23-14)

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- 543-07-1/4, Metal Railing NM Type A42 Details of Posts on Bridge, Wingwalls and Approach Slab (9-23-14)
- 543-07-2/4, Metal Railing New Mexico Type A42 Railing Elevation and Rail Expansion Joint Detail (9-23-14)
- 543-07-3/4, Metal Railing NM Type A42 General Notes and Details of Rail to Post Connection and Gutter Details (9-23-14)
- 543-07-4/4, Metal Railing NM Type A42 Details of Posts on Bridge, Wingwalls and Approach Slab (9-23-14)
- 543-08-1/4. Side Mounted Bridge Railing Details (4-8-13)
- 543-08-2/4, Side Mounted Bridge Railing Details (4-8-13)
- 543-08-3/4, Side Mounted Bridge Railing Details (4-8-13)
- 543-08-4/4, Side Mounted Bridge Railing Details (4-8-13)
- 543-09-1/1, Bridge Number Plate, Tag, and Survey Marker (12-16-19)

Standard Section 564 - Preformed Closed Cell Foam Bridge Joint Seals

• 564-01-1/1, Preformed Closed Cell Foam Bridge Joint Seal (6-24-13)

Standard Section 602 – Slope and Erosion Protection Structures

- 602-05-1/2, Gabion Basket Details (1-9-13)
- 602-05-2/2, Gabion Retaining Wall Details (1-9-13)
- 602-08-1/2, Wire Enclosed Tire Bales for Erosion Control or Earth Retaining (1-9-12)
- 602-08-2/2, Wire Enclosed Tire Bales for Erosion Control or Earth Retaining (1-9-12)

Standard Section 606 – Metal Barrier, Cable Barrier and Concrete Wall Barrier

- 606-GR31-17/20, Transition Metal Barrier to Rigid Barrier (5-6-14)
- 606-15-1/7, Concrete Wall Barrier Type 32 General Notes, Quantities and Rebar Schedule (1-30-14)
- 606-15-2/7, Concrete Wall Barrier Type 32 (1-30-14)
- 606-15-3/7, 32" Dowel Assembly for Expansion Joints in Concrete Wall Barrier and Concrete Barrier Railing (1-30-14)
- 606-15-4/7, Concrete Wall Barrier Type 32 Transition Details (1-30-14)
- 606-15-5/7, Concrete Wall Barrier Type 32 Transition (1-30-14)
- 606-15-6/7, Concrete Wall Barrier Type 32 at Column and Sign Pedestals (1-30-14)
- 606-15-7/7, Concrete Wall Barrier Type 32 Over Culvert (1-30-14)
- 606-17-1/7, Concrete Wall Barrier Type 42 General Notes, Quantities and Rebar Schedule (1-30-14)
- 606-17-2/7, Concrete Wall Barrier Type 42 (1-30-14)
- 606-17-3/7, 42" Dowel Assembly for Expansion Joints in Concrete Wall Barrier and Concrete Barrier Railing (1-30-14)
- 606-17-4/7, Concrete Barrier Wall Type 42 Transition Details (1-30-14)
- 606-17-5/7, Concrete Wall Barrier Type 42 Transition (1-30-14)
- 606-17-6/7. Concrete Wall Barrier Type 42 at Column and Sign Pedestals (1-30-14).
- 606-17-7/7, Concrete Wall Barrier Type 42 Over Culvert (1-30-14)
- 606-22-1/4, 20' Concrete Barrier General Notes & Reinforcing Schedule (1-26-17)

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- 606-22-2/4, 20' Concrete Barrier Fabrication and Reinforcement Details (1-26-17)
- 606-22-3/4, 20' Concrete Barrier Staking & Anchoring Details (1-26-17)
- 606-22-4/4, 20' Concrete Barrier Staking & Connection Details (1-26-17)

Standard Section 610 – Cattle Guards

- 610-02-1/2, Game Guard Plan & Elevation (8-18-09)
- 610-02-2/2, Game Guard 6'-0" & 7'-6" Steel Grids (8-18-09)

Standard Section 701 – Traffic Signs and Sign Structures

• 701-20-1/1, Official Median Crossover (6-18-05)

Standard Section 702 – Construction Traffic Control Devices

Delete all 702 Standard Drawings

Standard Section 707 - Signal and Lighting Standards

- 707L-08-1/7, High Mast Luminaire Support Structures Type VI (12-15-08)
- 707L-08-2/7, High Mast Luminaire Support Structures Type VI (12-15-08)
- 707L-08-3/7, High Mast Luminaire Support Structures Type VI (12-15-08)
- 707L-08-4/7, High Mast Luminaire Support Structures Type VI (12-15-08)
- 707L-08-5/7, High Mast Luminaire Support Structures Type VI (12-15-08)
- 707L-08-6/7, High Mast Luminaire Support Structures Type VI (12-15-08)

Add the following Standard Drawings to the 2019 Standard Drawings for Highway and Bridge Construction:

Standard Section 206 - Excavation and Backfill for Culverts and Minor Structures

• 206-11-1/1, Fill Heights for HDPE and PP Pipe Excavation Details (2-19-20)

Standard Section 511 - Concrete Structures

• 511-65-2/3, Concrete Box Culvert Triple Opening - Design Fills B, C, D, E, Dimensions and Rebar Schedule (2-19-19)

Standard Section 514 - Concrete Barrier Railing for Bridges

- 514-01-1/5, 32 Inch Concrete Bridge Barrier Railing General Details (6-24-21)
- 514-01-2/5, 32 Inch Concrete Bridge Barrier Railing Transition Section and Details (6-24-21)
- 514-01-3/5, 32 Inch Concrete Bridge Barrier Railing General Details (6-24-21)
- 514-01-4/5, 32 Inch Concrete Bridge Barrier Railing Standard Section and Details (6-24-21)
- 514-01-5/5, 32 Inch Concrete Barrier Details at Expansion Joint (6-24-21)
- 514-03-1/5, 42 Inch Concrete Bridge Barrier Railing General Details (6-24-21)
- 514-03-2/5, 42 Inch Concrete Bridge Barrier Railing General Details (6-24-21)
- 514-03-3/5, 42 Inch Concrete Bridge Barrier Railing Transition Section and Details (6-24-21)
- 514-03-4/5, 42 Inch Concrete Bridge Barrier Railing Standard Section and Details (6-24-21)
- 514-03-5/5, 42 Inch Concrete Bridge Barrier Railing Details at Joint Seals (6-24-21)
- 514-10-1/1, Bridge Number Plate (4-24-20)

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Standard Section 543 – Metal Railing

- 543-06-1/4, Metal Railing NM Type A32 Details of Post on Bridge, Wingwalls, and Approach Slab (4-20-21)
- 543-06-2/4, Metal Railing NM Type A32 Railing Elevation and Bridge Rail Joint Details (4-20-21)
- 543-06-3/4, Metal Railing NM Type A32 General Notes and Details of Rail to Post Connection and Gutter Detail (4-20-21)
- 543-06-4/4, Metal Railing NM Type A32 Rail to Thrie Beam Connection (4-20-21)
- 543-07-1/4, Metal Railing NM Type A42 Details of Posts on Bridge, Wingwalls, and Approach Slab (4-20-21)
- 543-07-2/4, Metal Railing NM Type A42 Railing Elevation and Railing Elevation Rail Expansion Joint Detail (4-20-21)
- 543-07-3/4, Metal Railing NM Type A42 General Notes and Details of Rail to Post Connection and Gutter Detail (4-20-21)
- 543-07-4/4, Metal Railing NM Type A42 Rail to Thrie Beam Connection (4-20-21)
- 543-09-1/1, Bridge Number Plate (4-25-20)

Standard Section 602 – Slope and Erosion Protection Structures

• 602-05-1/1, Gabion Retaining Wall Details (7-26-21)

Standard Section 606 – Metal Barrier, Cable Barrier and Concrete Wall Barrier

- 606-GR31-17/20, Guardrail Connection Details (7-13-21)
- 606-17-1/9, Concrete Wall Barrier Type 42 General Notes and Rebar Schedule (7-21-21)
- 606-17-2/9, Concrete Barrier Wall Type 42 (7-21-21)
- 606-17-3/9. Concrete Barrier Wall Type 42 Over Culvert (7-21-21)
- 606-17-4/9, Concrete Wall Barrier Type 42 Sections (7-21-21)
- 606-17-5/9, 42" Dowel Assembly for Expansion Joints in Concrete Wall Barrier and Concrete Barrier Railing (7-21-21)
- 606-17-6/9, Concrete Barrier Wall Type 42 Transition Details (7-21-21)
- 606-17-7/9. Concrete Barrier Wall Type 42 Transition Details (7-21-21)
- 606-17-8/9, Concrete Barrier Wall Type 42 Transition Details (7-21-21)
- 606-17-9/9, Concrete Wall Barrier Type 42 at Column and Sign Pedestals (7-21-21)
- 606-19-1/4, 54" Concrete Wall Barrier and Transition to 42" General Notes and Reinforcing Schedule (6-24-21)
- 606-19-2/4, 54" Concrete Wall Barrier and Transition to 42" Plan & Elevation (6-24-21)
- 606-19-3/4, 54" Concrete Wall Barrier and Transition to 42" Elevation and Section (6-24-21)
- 606-19-4/4, 54" Concrete Wall Barrier and Transition to 42" Elevation and Section (6-24-21)
- 606-22-1/4, 20' Concrete Barrier General Notes & Reinforcing Schedule (12-17-19)
- 606-22-2/4, 20' Concrete Barrier Fabrication and Reinforcement Details (12-17-19)
- 606-22-3/4, 20' Concrete Barrier Staking & Anchoring Details (12-17-19)
- 606-22-4/4, 20' Concrete Barrier Staking & Connection Details (12-17-19)

Standard Section 607 - Fence

- 607-08-1/6, Game Fence General Notes & Overall Plan (6-18-21)
- 607-08-2/6, Game Fence Bracing and Typical Installation (6-18-21)

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- 607-08-3/6, Game Fence Details at Game Guard Locations (6-18-21)
- 607-08-4/6, Escape Ramp Plan and Profile (6-18-21)
- 607-08-5/6, Game Fence Vehicle Gate Detail and Gap Closures (6-18-21)
- 607-08-6/6, Game Fence Pedestrian Gate Detail (6-18-21)

Standard Section 610 - Cattle Guards

- 610-02-1/2, Game Guard Plan and Elevation (4-20-21)
- 610-02-2/2, Metal Grate Plan and Misc Details (4-20-21)

Standard Section 701 – Traffic Signs and Sign Structures

• 701-20-1/1, Official Median Crossover (2-17-20)

Standard Section 702 - Construction Traffic Control Devices

- 702-01-1/1, Traffic Control General Notes (12-11-19)
- 702-02-1/1, Temporary Traffic Markings for Construction (12-11-19)
- 702-03-1/4, Double Fines in Work Zones Signing Layout (2-19-20)
- 702-03-2/4, Double Fines in Work Zones Sign Face Details (2-19-20)
- 702-03-3/4, Project Limit Signing (2-19-20)
- 702-03-4/4, B.O.P and E.O.P (Approach and Departure) Sign Face Details (2-19-20)
- 702-04-1/2, 4 Lane, Interstate/Non-Interstate, Typical Crossover Signing (12-11-19)
- 702-04-2/2, 4 Lane, Interstate/Non-Interstate, Typical Crossover Signing (12-11-19)
- 702-05-1/1, Inside/Median and Outside Lane Operations for Divided Interstates & Non-Interstates (12-11-19)
- 702-06-1/1, Examples of Temporary Pedestrian Detour Routing for Roadways with Posted Speeds of 40 MPH or Less (12-11-19)

Standard Section 707 - Signal and Lighting Standards

- 707L-08-1/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-2/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-3/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-4/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-5/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-6/9, High Mast Luminaire Support Structures Type VI (12-8-11)
- 707L-08-7/9, High Mast Luminaire Support Structures Type VI (12-8-11)

Standard Section 730 - Weigh-In-Motion System and Continuous Count Station

- 730-01-1/3, Weigh-In-Motion (WIM) Undivided Section Details (12-17-19)
- 730-01-2/3, Weigh-In-Motion (WIM) Divided Section Details (12-17-19)
- 730-01-3/3, Weigh-In-Motion (WIM) 6-Lane Section Details (12-17-19)
- 730-02-1/3, Continuous Count Station (CCS) Undivided Section Details (12-17-19)
- 730-02-2/3, Continuous Count Station (CCS) Divided Section Details (12-17-19)
- 730-02-3/3, Continuous Count Station (CCS) 6-Lane Section Details (12-17-19)
- 730-03-1/2, Radar Continuous Count Station 1 to 4 Lanes Single Sensor (12-17-19)

• 730-03-2/2, Radar Continuous Count Station 5 to 8 Lanes Dual Sensors (12-17-19)

Standard Section 750 – Intelligent Transportation Systems (ITS)

- 750-01-1/2, Typical Conduit Trench and Installation Details (ITS) (7-21-21) *
- 750-01-2/2, Conduit Expansion, Coupling and Two Hole Clamp (7-21-21)*
- 750-02-1/1, ITS Pull Box Installation Detail (7-21-21)*
- 750-03-1/2, ITS Manhole Installation Details (7-21-21)*
- 750-03-2/2, ITS Manhole Installation Details (7-21-21)*
- 750-05-1/1, ITS Equipment Cabinet Details (7-21-21)

The added Standard Drawings are available at the following link:

https://dot.state.nm.us/content/nmdot/en/Standards.html

^{*}Standard Drawings included in the Index of 2019 Standard Drawings book. However, Standard Drawings were inadvertently omitted from the Standard Drawings book.

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

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

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:

- 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".

Section 303: Base Course 303-1

Table 303.2.2:1

Type I Base Course Gradation Band

	Type i Bace Cource Ciadation Bana	
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 Facea	Minimum 50% on Untreated Material
Alb	Maximum 35
LL	Maximum 25
PI	Maximum 6

^aMaterials retained on or above the No. 4 sieve shall have at least two (2) Fractured Faces when evaluated in accordance with AASHTO T-335, "Determining the Percentage of Fractured Faces in Coarse Aggregate."

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

Section 303: Base Course 303-2

^bMaximum AI of 35 for untreated natural aggregate source when calculated in accordance with Section 910, "Aggregate Index".

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;
- 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

Section 303: Base Course 303-3

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:

Section 416: Minor Paving 416-1

- 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

Day Itam

The Department will adjust payment for Minor Paving in accordance with Section 905, "Quality Assurance for Minor Paving".

Pay Unit

ray Offic
Ton or Square Yard

Section 416: Minor Paving 416-2

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.

Section 416: Minor Paving 416-3

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:

3	11 7	3	
Add the following to Sect i	ion 511.1 Description:		
Reference Section 512 fo	r additional information related	to Superstructure Concrete.	
Delete the following Pay I	tem from Section 511.5: Basi	s of Payment:	
Pay Item		Pay Unit	
Substructure Concrete, C	lass	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.

Section 511: Concrete Structures 511-1

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
- 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.

Section 540: Steel Reinforcement 540-3

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.

Section 543: Metal Railing 543-1

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.

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

	1.00	prup Glucom	oationo ana t	Pabion Requireme	110	
			Volume c feet)	Minimum Dimension ^a	Nominal	Minimum Blanket Thickness
Class	Description	Minimum	Maximum	(inches)	D50 (feet)	(feet)
Α	Wire enclosed	1/6	2/3	4	0.75	
	riprap					
Α	Non-enclosed	1/6	2/3	4	0.75	1.25
	riprap					
Bb	Non-enclosed	1	2	6	1.25	2.0
	riprap					
Cp	Non-enclosed	2	4	9	1.5	2.25
	riprap					
D	Derrick stone		See Ta	able 602.2.1:2		3.0
Е	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			1		
	rockfacing					
N/A	Gabions			4-8 ^c		

^a Minimum size in the least dimension.

Add the following to **602.5 Basis of Payment**:

Pay ItemPay UnitRiprap Class A (Non-Enclosed)Cubic Yard

^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.

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 603.2.6: Composted Mulch Socks** in its entirety and replace with the following:

The Contractor shall furnish core Material (composted mulch). The core Material shall be a minimum of 60% composted mulch by volume in accordance with Section 632, "Revegetation" with 100% passing through a 3/4" sieve. The remainder of the Composted Mulch Sock core Material shall be 100% untreated wood chips free of inorganic debris, such as plastic, glass, metal, etc. which shall pass through a 1" screen, but be retained by a 3/4" screen. The manufacturer shall certify that the Material is free of noxious weeds. The screened compost mulch and wood chips shall be premixed by an approved compost mulch provider.

603.2.6.1: Containment Mesh

The Contractor shall furnish containment mesh that is made of 100% biodegradable Material such as cotton, jute, sisal, burlap, wood-based yarn, coir or other Acceptable Material as directed by the Project Manager.

The containment mesh shall not exceed 3/8 inch in diameter. The containment mesh shall be greater than nine (9) inches in height after being packed. The containment mesh shall be densely packed so that the Composted Mulch Socks do not deform.

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:

Delete 9. from Section 607.5.1: Work Included in Payment.

Section 607: Fence 607-1

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.

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.

Section 621: Mobilization 621-1

632-1

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 the first paragraph of Section 632.2.1: Temporary Soil Stabilant/Tackifiers for Class A Seeding and replace with the following:

Temporary soil stabilant and tackifier shall be considered the same and the terms used interchangeably. Tackifiers shall have a blue or green dye lasting a minimum of 36 hours to aid in application, inspection and be bio-degradable. When used as part of Class A seeding operations it shall be applied at a rate of 200 pounds per acre. Additionally, in accordance with Section 632.2.4, "Hydro-Mulch – Bonded Fiber Matrix (BMF) for Class C Seeding", BMF may be used in place of tackifier and dye in Class A Seeding operations at a rate of 400 lbs. per acre.

Section 632.2.6 Composted Mulch for Class A Seeding Delete Table 632.2.6:1 Requirements of Compost Mulch and replace with the following:

Table 632.2.6:1
Requirements of Compost Mulch

		to or compost mare	· · ·
Material	Measure	Method	Criterion
	Moisture Content*	Evaporative loss at 105°C	Between 35% and 60%
	Carbon/Nitrogen Ratio*	Nitrogen by AOAC 993.13, Carbon by ASTM D5373	Between 20:1 and 60:1
All Composted Mulches	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

Table 632.2.6:1 Requirements of Compost Mulch

Material	Measure	Method	Criterion
All Composted Mulches	Maturity	Germination test in 50:50 (volume basis) mixture of ³ / ₄ inch screened composted mulch and twice-rinsed nursery sand.	Minimum 50% germination to second set of leaves for marigold seeds.
	Stability	By temperature and moisture content	Maximum core temperature of 110°F after 48 hours in 5 foot tall conical pile, with moisture adjusted to between 40% and 60%.
	Debris	By volume	Less than one percent (1%) inorganic debris, including but not limited to, glass, plastic, stones and metal.
Composted Mulches with	Trace Metals*	HNO₃ digestion	Complies with Table 3 of 40 CFR 503.13
Wastewater Biosolids	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.

Add the following to Section 632.2: MATERIALS:

632.2.7 Hydraulic Biotic Soil Amendment for Class A Modified Seeding

Hydraulic biotic soil amendment (HBSA) shall be in accordance with Table 632.2.7:1, "Hydraulic Biotic Soil Amendment Properties".

Table 632.2.7:1

Hydraulic Biotic Soil Amendment Properties

Hydraulic 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

Table 632.2.7:1

Hydraulic Biotic Soil Amendment Properties

Biotic Soil Amendment Property	Test Method	Desired Results
Amendment Property		Physical
		,
рН	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
	E	ndurance
Functional Longevity	Observation	Grass established in 6 months
	Pe	erformance
Vegetation Establishment	ASTM 7322	400% minimum

Delete the first paragraph of **Section 632.3.3: Pre-Seeding Conference** and replace with the following:

A mandatory pre-seeding conference called by the Project Manager shall be held on the Project before revegetation Work begins. Attending shall be the NMDOT Project Manager or representative, the Department Landscape Architect or Revegetation Specialist, the Contractor, and the Revegetation Contractor.

632.3.4 Seeding Classes

Delete Table 632.3.4:1, "Operations Sequence for Classes of Seeding" and replace with the following:

Table 632.3.4:1
Operations Sequence for Classes of Seeding

Operation		Class	
	Α	MOD A	С
Disk seed bed to four inches (4")	Χ	Χ	
Apply fertilizer by broadcast, then disk to four inches (4")	Χ	_	
Apply one inch (1") compost mulch, disk to four inches (4")	Χ		
Drill seed	Χ		
Straw crimp; apply tackifier, dye	Χ		

Table 632.3.4:1
Operations Sequence for Classes of Seeding

Operation		Class	
	Α	MOD A	С
Apply combination of HBSA fertilizer and seed		Χ	
Track slopes with ridges horizontal and parallel to bottom of slope			Χ
Hand rake or chain harrow surface horizontally			Χ
Hydro apply seed, fertilizer, dye, tackifier			Χ
Scarify seeded areas horizontally to slope			Χ
Hydro mulch; apply tackifier, dye		Χ	Χ
Rock Mulch			Χ

Note: No seeding shall be applied on frozen ground.

Key: X = required; and __= not required

The Department defines the seeding classes as follows:

- 1. Class A = seeding with a drill seeder (slopes up to 3:1 or flatter); and
- 2. Class C = seeding with hydro seeder (slopes steeper than 3:1 to a maximum of 2:1).

Delete Section 632.3.5: Modified Class A Seeding for Narrow Areas or Areas Inaccessible to Drill Seeding Equipment in its entirety and replace with the following:

The Contractor shall use Modified Class A Seeding, for any Project areas with slopes less than 3:1 requiring revegetation and are either less than eight (8) feet wide, are inaccessible to drill seeding Equipment, and/or are too rocky to disk to a four (4) inch depth.

When Class A Seeding is established on the Contract but compost mulch, in accordance with Table 632.2.6:1, "Requirements of Compost Mulch", is unavailable within 300 paved road miles of the Project, the Contractor shall replace Class A Seeding with Modified Class A Seeding. The Contractor shall provide documentation of compost mulch unavailability in accordance with Section 632.2, "Materials".

The Modified Class A Seeding treatment shall be as follows. The Contractor shall use a hydro-seeder to apply seed and HBSA conforming to the standards of the Erosion Control Technology Council (ECTC) including, dye, tackifier and hydro mulch as follows:

Step 1. Disk ground to four inches (4") in accordance with Section 632.2.3, "Fertilizer for Class A and C Seeding", unless soil is determined by Project Manager to be too rocky;

Step 2. 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. Fertilizer, humates and mycorrhizae shall then be added. Seed shall be added last. Uniform slurries shall be agitated or mixed for a minimum of ten (10) minutes after all water and materials are in the tank. Apply HBSA and seed to the soil surface from two (2) coats in opposing directions. Seed shall be applied at twice the normal rate. HBSA shall be applied at a rate of 4,000 lbs. per acre for zones 2, 4, and 6. For all other zones the application rate shall be 4500 lbs. per acre; and

Step 3. Apply approved bonded fiber mulch with tackifier and dye in two (2) coats from opposing directions at a rate of 2,000 lbs. per acre.

Delete Section 632.3.18: Class C Slopes with over 50' of Slope Length in its entirety and replace with the following:

Class C slopes in excess of 50' of slope length (measured along the slope face from toe to crest) shall have the following treatment:

The Contractor shall use Class G riprap for the lower portion of the slope from the toe upwards to the point where there will not be more than 50' of slope length covered with one (1) inch and no greater than 1 ½ inches in size rock mulch described in Section 632.2.5, "Rock Mulch for Class C Seeding," and Table 632.3.4:1, "Operations Sequence for Classes of Seeding." The Contractor shall place the riprap over the hydro-seeded and mulched surface in a way that does not damage the applied mulch treatment, shall be installed from the toe of the slope upwards and shall be one layer of Class G riprap in thickness. Class G riprap shall be considered Incidental to Class C seeding.

Add the following to **Section 632.5: BASIS OF PAYMENT:**

Pay ItemPay UnitModified Class A SeedingAcre

Add the following to **Section 632.5.1: Work Included in Payment:**

10. Class G riprap for Class C slopes.

632-5

701-1

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 ItemPay UnitRemove and Reset Overhead Sign StructureEach

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.

Section 701: Traffic Signs and Sign Structures

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 ³/₄ inch;
- 6. The TPRS shall be a minimum of ten (10) inches wide;
- 7. No assembly shall be required prior to or during deployment;
- 8. Performance will be rated to withstand surface temperatures of 0 180°F and shall maintain integrity while being deployed, used and removed;
- 9. Integrated, ergonomic handles on both ends of the TPRS:
- 10. Grooved designs on the bottom to prevent hydroplaning;
- 11. Raised designs on the top, with leading and trailing beveled edges to facilitate the safe traversing of motorcycles;
- 12. Durable orientation indicators to prevent improper deployment;
- 13. Flexible along the length of the TPRS to conform to the road surface;
- 14. Hinged at the midpoint of the TPRS for ease of installation:
- 15. Withstand vehicles with a maximum weight of 80,000 pounds and retain original placement with minimal movement such that performance is not compromised;
- 16. Function on roads with posted speed limits up to 80 mph; and resist movement such that performance is not compromised; and
- 17. Manufacturer's warranty of at least three (3) years.

Add the following to **Section 702.3.1: General**

702.3.1.3 Temporary Portable Rumble Strips

The Contractor shall install TPRS in accordance with the manufacturer's recommendations.

The Contractor shall clean the roadway to ensure that there is no dust, sand or any other materials that may cause slippage prior to placement of the TPRS.

The Contractor shall install the TPRS arranged in an array, as indicated on the Plans or as directed by the Project Manager. The TPRS array shall consist of three (3) TPRS placed perpendicular to the centerline and parallel to one another. The spacing of TPRS in each array shall be in accordance with Table 702.3.1.3:1, "TPRS Array Spacing". The Contractor shall regularly monitor and maintain TPRS to ensure proper placement under traffic.

Table 702.3.1.3:1
TPRS Array Spacing

······································			
Posted Speed	Spacing		
Up to 40 mph	10 feet		
41-55 mph	15 feet		
56-64 mph	20 feet		
65+ mph	35 feet+		

The Contractor shall install the TPRS array using the manufacturer designed TPRS Deployment and Transport Device (DTD) or TPRS Rapid Deployment and Transport Device (RDTD).

702.3.1.3.1 Deployment Transport Device and Rapid Deployment and Transport Device

The Contractor shall use a TPRS DTD that meets the following requirements:

- 1. Carry and support at least six (6) folded TPRS or 600 lbs;
- 2. Weigh no more than 150 lbs. when empty;
- 3. Designed with roller bearings to facilitate ease of deployment and retrieval;
- 4. Designed with capability of being attached/detached from the vehicle using a forklift; and
- 5. Designed with collapsible guide markers for visual conspicuity.

The Contractor shall use a TPRS RDTD that meets the following requirements:

1. Allow deployment, realignment, and retrieval of strips without workers leaving the vehicle.

The TPRS DTD and RDTD shall be designed to transport TPRS in alignment with deployment orientation and to facilitate deployment of TPRS directly onto the road surface.

The Contractor shall install the TPRS using methods that maximize the efficiency of installation, relocation, or removal without impacting the safety of the traveling public or the workers.

The Contractor shall install the TPRS at the beginning of operations in accordance with the following guidelines:

- 1. The TPRS shall be installed perpendicular to the longitudinal pavement markings;
- 2. The TPRS shall be positioned across the entire travel lane but not intrude into the opposing travel lane. It may be necessary to extend the TPRS onto the shoulder;
- 3. TPRS shall be installed in accordance with the permanent orientation indicators on the TPRS, to ensure proper deployment;
- 4. Unless otherwise indicated on the plans, TPRS shall remain for Work duration; and
- 5. Removal of TPRS shall coincide with the removal of the Rumble Strips advanced warning sign(s) using the TPRS DTD or RDTD.

The Contractor shall install TPRS as follows:

- 1. On intermediate and long-term stationary operations when crews are present; and
- 2. In advance of horizontal curves.

The 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 ItemPay UnitTemporary Portable Rumble StripsEach

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 Markingsinch	Foot
Temporary Retroreflectorized Painted Markingsinch	Foot
Retroreflectorized Painted Arrow, Type	Each
Retroreflectorized Painted Word ()	Each
Retroreflectorized Painted Symbol, Type	Each
Retroreflectorized Painted Railroad Crossing	Each

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 Tapeinch	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).

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.