DIVISION II
CONSTRUCTION
PROVISIONS

CROWDER PARKING LOT
PROJECT NO. G09907-2632(1) S
SPECIFICATIONS

DIVISION II – CONSTRUCTION PROVISIONS

PROJECT OVERVIEW:

The Crowder Parking Lot Project consists of an asphalt concrete overlay along an existing parking lot and includes asphalt concrete with aggregate base parking being added. The project includes approximately 360 feet of construction improvements and is located within the city of Crowder, Pittsburg County, Oklahoma.

SCOPE:

The work covered by these specifications consists of furnishing all materials, labor, equipment, services, and incidentals necessary to perform all operations in connection with the Project, including but not limited to performing grade/drain earthwork, removing other existing structures, installing new pipe culverts, placing aggregate base and asphaltic concrete pavement, and applying traffic striping. All work shall be in strict accordance with the Oklahoma Department of Transportation Standard Specifications for Highway drawings and specifications.

SPECIFICATIONS:

The Project generally incorporates by reference the Oklahoma Department of Transportation (ODOT) 2009 Standard Specifications for Highway Construction, as well as all subsequent supplemental specifications issued by ODOT. However, the Division I *General & Project Provisions* (i.e., §§101 through 109 and §§151 through 155) supersede and/or control where conflicting provisions arise.

All references to "Engineer", "Materials Engineer", or "Director" in the Oklahoma Department of Transportation standard specifications shall be revised to read the Contracting Officer or Contracting Officer's Representative. All references to the State, Department, Project Manager, Materials Division or Transportation Department shall be revised to read Pittsburg County. Any address for submittal of information shall be revised to read as follows:

Pittsburg County
Att'n County Clerk
115 E. Carl Albert Parkway
McAlester, OK 74501

CERTIFICATIONS AND TEST REPORTS:

Contractor shall furnish the following required certifications and test reports for such materials used on the Project.

1) Silt Fence
2) Construction Fabrics
3) Mineral Aggregates
4) Bituminous Binder
5) Tack Coat
6) Asphalt for Prime Coat
7) Asphalt Mix Design Components
8) Corrugated Metal Pipe
9) Metal Culvert End Sections
10) R.C. Pipe
11) Fences and Gates
12) Wire and Posts for Fence
13) Pipe Railing
14) Sign Blanks
15) Reflective Sheeting
16) Sign Posts
17) Bolts and Nuts
18) Traffic Stripe Components
19) Guardrail & Guardrail Posts
20) Guardrail End Sections
21) Premolded Elastomeric Compression Joint Fillers & Sealers
22) Structural Steel
23) Steel Piling
24) Prestressed Concrete Beams
25) Cement for Structural Concrete
26) Concrete Mix Designs
27) Air-Entraining Admixture
28) Membrane Curing Compound
29) Reinforcing Steel
30) Bar Lists and Bending Schedules for Reinforcing Steel
31) Expansion Joint

Contractor shall not incorporate any material for which a certification or test report is required into the Project Work until a satisfactory certification or test report has been received by the Contracting Officer or Contracting Officer's Representative and approved by the Regional Transportation Engineer.

CONTRACTOR CONSTRUCTION QUALITY CONTROL:

Refer to the specifications entitled *Contractor Quality Control* and *Contractor Sampling and Testing* within Division I, Sections 153 and 154, respectively for pertinent information.

DEVIATIONS FROM THE STANDARD SPECIFICATIONS:

The following Sections specify exceptions and/or additions to the Standard Specifications.

SPECIAL PROVISION
FOR
PRICE ADJUSTMENT FOR ASPHALT BINDER

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the Oklahoma Department of Transportation 2009 Standard Specifications for Highway Construction, English and Metric. Units of measurement are provided in the subsections in both English and Metric equivalents. The units for this project shall be those specified in the project plans.

109.10 PRICE ADJUSTMENT FOR ASPHALT BINDER.

A price adjustment clause is included in this contract to provide additional compensation to the Contractor or a credit to the County for fluctuations in asphalt binder prices. This price adjustment is dependent upon a change in the average price of asphalt binder which results in an increase or decrease in the price of products utilized on this project.

(a) Payment will be made to the Contractor for *weekly* fluctuation in the cost of asphalt binder used in performing the applicable items of Asphalt Concrete work as listed in the table below when the asphalt binder cost fluctuates by more than 3% from the base price defined below. Payments may be positive, negative, or nonexistent depending on the circumstances. Payments or deductions will only be calculated on that portion of the asphalt binder cost fluctuation that exceeds the 3% specified above. Payments or deductions for the asphalt binder cost adjustment will be included in the Contractor's progressive estimates, and the payment or deduction authorized for each estimate will be based upon the algebraic difference between the quantities for applicable items of work.

(b) The Asphalt Binder Cost Adjustment (ACA) for the current estimate will be computed according to the following formula:

$$ACA = Q \times F \times D$$

where

ACA = Asphalt binder cost adjustment, in dollars;

Q = The algebraic difference between the quantities for the applicable items on the current estimate and the quantities shown on the previous estimate, in tons of mix;

F = The Asphalt Binder Use Factor for the applicable items of work subject to this price adjustment, as listed in the following table, are:

ITEM OF WORK	SPECIFICATION NUMBER	ASPHALT BINDER USE FACTOR PER UNIT (metric and U.S. Customary units)
Open Graded Bituminous Base	319	0.025 ton of binder per ton of mix
Open Graded Friction Surface Course	406	0.058 ton of binder per ton of mix
Permeable Friction Course	409	0.062 ton of binder per ton of mix
Asphalt Concrete, Type S-6	411 (S6)	0.058 ton of binder per ton of mix
Asphalt Concrete, Type S-5	411 (S5)	0.053 ton of binder per ton of mix
Asphalt Concrete, Type S-4	411 (S4)	0.048 ton of binder per ton of mix
Asphalt Concrete, Type S-3	411 (S3)	0.042 ton of binder per ton of mix
Asphalt Concrete, Type S-2	411 (S2)	0037 ton of binder per ton of mix
Asphalt Concrete, Type RBL	411 (V)	0.054 ton of binder per ton of mix
SMA	418	0.062 ton of binder per ton of mix

Note: When the units of measure in this contract for the Items of Work listed in the table do not correspond with the units shown in the table (i.e. Asphalt Concrete paid by the square yard, etc.), those Items will not be subject to the terms of this special provision or any asphalt binder price adjustment.

D = Allowable price differential, in dollars;

The allowable price differential, "D", for the current estimate will be computed according to the following formulas:

When the current price, P, is greater than the base price, $P_{(b)}$.

$D = P-[1.03 \times P_{(b)}]$, but not less than zero.

When the current price, P, is less than the base price, $P_{(b)}$.

$D = P-[0.97 \times P_{(b)}]$, but not greater than zero.

In either case, P(b) shall be the base asphalt binder price, in dollars per ton (mton), defined as the average of the minimum and maximum prices for performance-graded binder using the Selling Price of PG 64-22 paving grade, F.O.B. manufacturer's terminal, as listed under "Midwest/Mid-Continent Market - Tulsa, Oklahoma/Southern Kansas area" as published in the last issue of Asphalt Weekly Monitor® furnished by Poten & Parners, Inc. for the month prior to the month in which the bids for the work were received.

In either case, $P_{(b)}$, shall be the current asphalt binder price, in dollars per ton (mton), as defined above for the base asphalt binder price. The publication used will be the

last issue published in the month prior to the month in which the progressive estimate is generated.

(c) Items included in the contract that are listed in the table above are subject to adjustment in accordance with this provision, regardless of any amount of overrun to the plan quantity. Any new items of work added to the contract by supplemental agreement that are listed in the table above, will be subject to the asphalt binder price adjustments in accordance with this provision. The base asphalt binder price, $P_{(b)}$, for any newly added eligible items will be the same $P_{(b)}$ as the eligible items in the contract and the new unit price established by supplemental agreement shall be determined accordingly.

SPECIAL PROVISION

STORMWATER POLLUTION DISCHARGE ELIMINATION

1.0 DESCRIPTION

Contractor acknowledges his role as having day-to-day responsibilities/control for the project. Accordingly, Contractor shall comply with the requirements of the Oklahoma Department of Environmental Quality (ODEQ) general stormwater permit for construction activities on all non restricted areas of the project and with the Environmental Protection Agency (EPA) stormwater permit requirements for construction activities on all restricted areas of the project. (For the purpose of this Special Provision, restricted areas are defined as lands held in trust by the federal government for the benefit of an individual Indian allottee, an allottee's heirs, or a Tribe/Tribal Entity)

Contractor shall use the remaining portions of this Special Provision in relation to stormwater pollution discharge elimination, as well as applicable portions of the Plans and Standard Specifications for the project, unless Contractor elects to develop a more comprehensive Stormwater Management Plan (SMP). In the event Contractor elects to develop a SMP, this plan shall be subject to the BIA's approval prior to commencing earth disturbing activities on the project.

Contractor shall, as needed, be responsible for initiating any modifications to the original permit connected with the location of his storage yard(s), plant sites, and borrow areas, regardless of location on/off the rights-of-way. This requirement shall include modification to the existing stormwater pollution discharge elimination requirements associated with this Special Provision (as approved by the BIA) or, if Contractor elects to develop a more comprehensive plan, the Contractor's SMP. The Contractor shall be solely responsible for implementing the requirements of this Special Provision or his SMP and shall indemnify and hold harmless the BIA for enforcement actions and claims resulting from a failure to comply with the terms of the permit(s).

The Contractor shall be responsible for submitting the Notice of Intent (NOI) to the ODEQ, or if applicable, to the EPA, according to the associated permit requirements and shall allow sufficient time prior to commencing earth-disturbing activities.

Contractor's on-site Superintendent, as identified by 52.236-06 of the Federal Acquisition Regulation, shall complete the forms immediately following this Special Provision as required by the permit(s) and timely submit copies to the BIA field representative. In no event shall submittal times exceed seven (7) calendar days following completion of the form.

Failure to comply with requirements of this Special Provision and the permit(s), including but not limited to recordkeeping, inspections/monitoring, and maintenance of controls, shall justify the BIA's withholding of Contractor's progress payments.

2.0 CONTROLS TO REDUCE POLLUTION

2.1 Erosion and Sediment Control.

This Special Provision requires strict adherence to federal, state, and local erosion and sedimentation control requirements. Consequently, areas to remain undisturbed for 21 days or more shall be stabilized as soon as practicable, but in no case later than the 14th day after the last disturbance. Also, the Permit requires final stabilization of the Project 14 days after completion of the last soil-disturbing activities. Final stabilization is defined as meaning all soil disturbing activities at the Project have been completed; and uniform, perennial vegetative cover or equivalent permanent, structural stabilization measures (such as rip-rap, gabions, or geotextiles) have been established for 70-percent of the unpaved area.

The Contractor shall use erosion and sediment controls to divert up-slope stormwater runoff around disturbed areas, to limit the exposure of disturbed areas to the shortest duration possible, and to remove sediment from runoff at the toe of slopes prior to discharge from the Project. Two (2) types of controls, stabilization practices and structural practices, shall be utilized. The Drainage Map in the Construction Plans illustrates the Project's drainage area.

During construction, various controls will be implemented to reduce soil-erosion pollution to stormwater discharges from the Project. In addition to control features contained in the Construction Plans, the standard drawings illustrate stabilization and structural controls for implementation during the earth-disturbing construction activities.

2.1.1 Stabilization Practices - Various stabilization practices will be utilized to prevent soil erosion from polluting stormwater discharges from the Project. The following list describes some of the practices that may be used for this purpose.

- Temporary/permanent seeding,
- Mulching,
- Sod stabilization, and
- Vegetative buffer strips, and
- Protective trees.

Seeding, mulching, sod stabilization, vegetative buffer strips, or combinations of the aforementioned will be placed in susceptible areas to control soil erosion and prevent suspended solids from polluting the Project's stormwater discharges. Temporary seeding may be used during on-going construction

activities as necessary. Fast-growing grasses, such as rye and fescue, should be used for this purpose. Permanent seeding or sodding will be utilized upon completion of all soil-disturbing construction activities as a final stabilization procedure at the Project. Permanent vegetation, such as grass, trees, or shrubs, will be used for this function. Mulching, sod stabilization, and/or vegetative buffer strips will be placed during construction as necessary to control erosion and remove sediment.

2.1.2 Structural Practices. Structural practices will be used in areas where stabilization practices are ineffective, such as continually disturbed areas and time-constrained areas. These practices will either divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of stormwater pollutants from the Project's exposed areas. The following list provides practices or measures that may be utilized in the aforementioned areas.

- Silt Dikes,
- Silt Fences,
- Drainage Swales,
- Sediment Traps,
- Rip-rap, and
- Geotextiles.

All of the aforementioned control devices will be constructed according to Best Management Practices.

2.2 Other Controls

Although the major anticipated stormwater pollutant from the construction Project is suspended solids, other types of pollution are possible. The management and control of other materials that may potentially contribute to pollution are discussed in this section of text.

2.2.1 Good Housekeeping Practices - Good housekeeping practices will be followed during the Project to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. Materials likely to be present at the Project during construction include fuel, oil and grease, fly ash (or a similar soil-stabilization substance), asphaltic and portland cement concrete, and general construction trash. All materials stored onsite will be stored in a neat, orderly manner. A plastic-lined fuel depot, which maintains sufficient secondary containment for the entire fuel tank, shall be constructed onsite. Additionally, the Contractor shall place bulk storage (i.e., a barge cargo container, mobile office, trailer, etc.) at the Project for storing oil and grease, as well as other materials capable of contaminating stormwater. Materials stored in these areas shall be kept in their original containers with the original manufacturer's label. The Contractor shall undertake reasonable efforts to store only enough product required to perform each job. Substances will not be mixed with one another unless recommended by the manufacturer. Whenever

possible, all of a product will be used before disposing of the container. Finally, the Contractor's superintendent will ensure proper use and disposal of all materials and containers.

2.2.2 Waste Disposal - The Contractor is responsible for the cleanup of any spillage containing oil, grease, or fuel. Contaminated soil will be remediated according to state and federal requirements, and all materials will be handled in accordance with all State and Federal waste handling regulations. As necessary, materials will be properly documented and removed from the Project for disposal. Additionally, construction personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the project trailer(s).

All non-hazardous wastes (e.g. concrete waste, general construction trash, etc.) shall be containerized by the Contractor and hauled off-site for proper disposal. Also, the Contractor will be responsible for providing temporary sanitary waste facilities, and will be responsible for collection and proper disposal of sanitary wastes.

The Contract does not anticipate generation or discovery of hazardous waste on the Project. In the event the Contractor generates or encounters hazardous waste, all hazardous waste materials will be disposed of in the manner specified by local or state regulations or by the manufacturer. The Project superintendent shall be responsible for seeing that these practices are followed.

2.2.3 Offsite Vehicle Tracking - Sediment reaching streets and highways generally routes to lakes, streams, and wetlands. Consequently, the tracking of dirt and mud onto public roads outside the Project will be minimized to the greatest extent possible.

2.2.4 Dust Suppression - Water sprays will be used to control dust during extended dry periods. Chemical dust suppressants shall not be used.

3.0 INSPECTION/MAINTENANCE OF CONTROLS

3.1 Inspections

Inspections will be performed every fourteen (14) calendar days, or within 24 hours of any significant storm event. Significant storm events are defined as precipitation occurrences greater than 0.5-inches. Areas requiring inspections include all disturbed areas, materials storage locations exposed to precipitation, stabilization control measures (i.e., grasses, trees, etc.), structural control measures (i.e., silt dikes, silt fences, etc.), and all locations where vehicles enter or exit the Project. Any necessary repairs or modifications resulting from the inspection shall be made within seven (7) days after the inspection and noted so that preventative measures are taken to limit repeated problems.

Inspections shall be conducted by the Contractor and documented on Form 1, entitled Inspection Report Form. Each inspection report will summarize the inspection scope, inspection date and time, inspector's name and title, major observations, and any necessary changes noted. These forms shall be maintained at the Project and timely submitted to the Contracting Officer's Representative. Additionally, copies of all inspection reports shall be kept by the Contractor for three (3) years after the construction is completed.

3.2 Maintenance

Sedimentation and erosion controls can become altered by construction activities or by stormwater events such that their ability to remove pollutants is severely limited. Therefore, maintenance of all controls will be implemented as necessary during the course of the project. Maintenance actions include but are not limited to the following.

- Irrigation of stabilization controls (grass, trees, etc.), as necessary.
- Replacement of damaged stabilization controls.
- Removal of sediment from silt fences when accumulations reach one-half the above ground silt fence height.
- Removal of sediment from sediment traps after all significant storm events or as necessary to ensure proper function.
- Maintenance of conveyance structures so as to operate according to design.

Additionally Contractor shall ensure that:

- Velocity attenuating channels, if required in the Contract, shall provide vegetation, rip rap or other means as designed to accomplish the desired result.
- Foreign debris, including leaves and lawn cuttings shall not be allowed to accumulate in drainage ditches.

Form 2, entitled Maintenance Action Report Form, shall be used to record all maintenance actions.

4.0 NON-STORMWATER DISCHARGES

Stormwater permits require all anticipated non-stormwater discharges to be identified and appropriate pollution prevention measures be implemented to eliminate them. Although the presence of materials such as fuels, lubricants, concrete, paint, detergents, fertilizers, and treated lumber are possible during the project, the Contractor shall store the materials in either a plastic-lined fuel depot, which maintains sufficient secondary containment for the entire fuel tank, or another appropriate storage container/area.

Consequently, the only likely non-stormwater discharge associated with the Project is water generated from watering and vehicle washing to minimize offsite tracking. However, vehicle washing operations are anticipated to be minimal and will likely occur offsite. Accordingly, no non-stormwater discharges are anticipated. In the event of an unforeseen, non-stormwater discharge occurrence, the Contractor shall collect the material for appropriate disposal according to state and federal requirements.

5.0 SIGNATURES AND ADMINISTRATION

The Contractor and all subcontractors shall acknowledge this Special Provision by signing the Contractor/Subcontractor Certification(s) following Form 3, prior to commencing work. This signed acknowledgement form and the associated Special Provision shall be retained on the Project by the Contractor and made available to subcontractors; state and local agencies involved with either sediment and erosion plans, grading plans, or stormwater management plans; the ODEQ; and the EPA.

In the event that this Special Provision or Contractor's SMP fails to adequately fulfill the permit requirements, Contractor shall timely amend the appropriate document to assure compliance. Examples of instances requiring amendment include:

- Special Provision or SMP proves ineffective in eliminating or significantly minimizing the pollutants in stormwater discharges at the Project.
- Contractor performs significant construction changes that may potentially affect stormwater discharge quality.
- The ODEQ, EPA, or any another applicable regulatory agency request amendments/revisions.

All revisions shall be recorded on Form 3, entitled Revision Log.

When the Project has undergone final stabilization and the Project no longer discharges stormwater associated with construction activities, the Contractor shall submit a Notice of Termination (NOT) to the BIA and appropriate regulatory agency, thereby transferring operational responsibility of stormwater requirements back to the proper authority. Upon submission, the Contractor will attach a copy of

the NOT to this Special Provision and retain the document for at least three (3) years.

6.0 BASIS OF PAYMENT

Payment for all Work under this Special Provision shall be included in the price bid for items listed in the Bid Schedule. Such payment shall be full compensation for furnishing all materials, equipment, labor, fees, and incidentals necessary to complete the work as specified in this Special Provision.

FORM 1

INSPECTION REPORT FORM

INSPECTION DATE: _____ **TIME:** _____

INSPECTOR'S NAME: _____ **TIME:** _____

A. REASON FOR THIS INSPECTION: _____Routine weekly inspection

_____Rainfall event greater than 0.5 inches

B. POINTS OF INSPECTION\POSSIBLE PROBLEMS

1. Disturbed Areas	- Any signs of pollutants entering drainage system?	_____ **YES** _____ **NO**
2. Materials Storage Areas Exposed to Precipitation	- Any signs of pollutants entering drainage system?	_____ **YES** _____ **NO**
3. Stabilization Control Measure	- Any control measures not in place or not operating correctly?	_____ **YES** _____ **NO**
4. Structural Control Measure	- Any control measures not in place or not operating correctly?	_____ **YES** _____ **NO**
5. Locations where Vehicles Enter or Exit the Site	- Any evidence of off-site sediment tracking?	_____ **YES** _____ **NO**

C. LIST ANY PROBLEMS NOTED (CHECKED YES IN SECTION B) AND THE CORRESPONDING REMEDIAL ACTION.

D. SWPPP REVISION NECESSARY? _____ **YES** _____ **NO**

E. INSPECTOR'S CERTIFICATION:

"I certify under penalty of law that this Inspection Report Form was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Furthermore, I acknowledge that this document will be maintained on-site and that it will be made available for review by either the United States Environmental Protection Agency, Oklahoma Department of Environmental Quality, or any other state or local authority upon request."

_____

SIGNATURE

FORM 2

MAINTENANCE ACTION REPORT FORM

ACTION DATE: _____ **TIME:** _____

PREPARER'S TITLE: _____ **NAME:** _____

DESCRIPTION OF PROBLEM:	
DESCRIPTION OF ACTION TAKEN:	
COMPLETION AND FOLLOW-UP REMARKS:	
DATE AND TIME OF COMPLETION:	
PREPARER'S SIGNATURE: _____ SIGNATURE	

FORM 3

CONTRACTOR/SUBCONTRACTOR CERTIFICATION(S)

"I certify under penalty of law that I have reviewed and understand the terms and conditions of this Special Provision for Stormwater Pollution Discharge Elimination as they pertain to the general Oklahoma Pollutant and Discharge Elimination System (OPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified below as part of this certification."

_____
Name/Title

_____
Date

_____
Contractor/Subcontractor Company Name

_____
Contractor/Subcontractor Address

_____
Contractor/Subcontractor Phone Number

_____
Site Location

FORM 4

REVISION LOG

All revisions to the Storm Water Pollution Prevention Plan must be documented.

Revision 1:

Date: _____

Section(s) Revised: _____

Purpose of Revision: _____

_____

Revised By: _____

Work Phone Number: _____

Revision 2:

Date: _____

Section(s) Revised: _____

Purpose of Revision: _____

_____

Revised By: _____

Work Phone Number: _____

Revision 3:

Date: _____

Section(s) Revised: _____

Purpose of Revision: _____

_____

Revised By: _____

Work Phone Number: _____

SECTION 230

SODDING AND SPRIGGING

This Section of the Standard Specification shall apply in its entirety with the following addition(s):

230.01 DESCRIPTION.

(Add to this subsection:)

All Work under Section 229 *Ditch Liner Protection* shall be included in the unit price for items under Section 230(A) *Solid Slab Sodding*. The method of measurement for Work under this item, including ditch liner protection, shall remain as square yard.

All Work under Section 230(F) *Watering* shall be included in the unit price for items under Section 230(A) *Solid Slab Sodding*. The method of measurement for Work under this item, including watering, shall remain as square yard.

All Work under Section 234(A) *Fertilizing* shall be included in the unit price for items under Section 230(A) *Solid Slab Sodding*. The method of measurement for Work under this item, including fertilizing, shall remain as square yard.

All Work under Section 241 *Mowing* shall be included in the unit price for items under Section 230(A) *Solid Slab Sodding*. The method of measurement for Work under this item, including mowing, shall remain as square yard.

SECTION 303

AGGREGATE BASE

This Section of the Standard Specification shall apply in its entirety with the following exception(s):

303.01 DESCRIPTION.

(Revise the following subsection:)

(Revise entire paragraph to read, "This work shall consist of furnishing and placing one or more courses of aggregates and any specified additives on a prepared subgrade or subbase in accordance with these Specifications and in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the Plans or established by the Contracting Officer's Representative. Aggregate base shall be mixed off the roadbed and may be blended by plant mixing or other approved methods.")

303.04 CONSTRUCTION METHODS.

(Delete the following from this subsection.)

303.04(b)(1)1.2 *Travel Plant – Mixing Method* (Delete in entirety)

303.04(b)(2) *Onsite Mixing* (Delete in entirety)

303.04(c) (Replace paragraph 4 to state, "Dumping in piles upon the subgrade or tailgate spreading shall not be permitted and spreading shall be accomplished by using a mechanical spreader approved by the Contracting Officer's Representative.")

SECTION 408

PRIME COAT

This Section of the Standard Specification shall apply in its entirety with the following revision(s) and addition(s):

408.04 CONSTRUCTION METHODS.

(Revise the following subsection:)

408.04(e) (Revise entire paragraph to read, "If, after the application of the prime coat, the bituminous material fails to penetrate within the time specified and the roadway must be used by traffic, blotter material *may be used with prior approval by the Contracting Officer's Representative or Regional Transportation Engineer and* shall be spread in the amount required to absorb any excess bituminous material.")

(Add to this subsection:)

(f) Contractor shall be required to maintain the primed surface area until completion of surfacing operations.

Contractor shall note that portions of the Work require construction while under traffic. Accordingly, Contractor shall plan Work to allow sufficient time for activities specified in 408.04(d).

(g) Contractor shall not commence paving operations on primed surface without prior approval by the Contracting Officer's Representative or Regional Roads Engineer.

SECTION 411

PLANT MIX ASPHALT CONCRETE PAVEMENT

This Section of the Standard Specification shall apply in its entirety with the following revision(s):

411.02 MATERIALS.

(Revise the following subsection:)

(Revise entire paragraph to read, "Materials shall meet the requirements of Section 708, as well as the applicable Special Provision, available from ODOT. Contractor shall have ample material in the stockpiles at the site at the beginning of each day's operation to supply and be used for that day's operation as provide to the Department's representative results of quality control tests on a daily basis.")

411.04 CONSTRUCTION METHODS.

(Revise the following subsection:)

(a) **Stockpiling Materials.** Deliver and stockpile aggregates in accordance with Subsection 105.05 .

411.06 BASIS OF PAYMENT.

(Add the following:)

411(S1)	(SP) ASPHALT CONCRETE, Type S1	TON
411(S2)	(SP) ASPHALT CONCRETE, Type S2	TON
411(S3)	(SP) ASPHALT CONCRETE, Type S3	TON
411(S4)	(SP) ASPHALT CONCRETE, Type S4	TON
411(S5)	(SP) ASPHALT CONCRETE, Type S5	TON
411(S6)	(SP) ASPHALT CONCRETE, Type S6	TON
411(S3)	(SP) ASPHALT CONCRETE, Type S3, (PATCHING)	TON
411(S4)	(SP) ASPHALT CONCRETE, Type S4 (PATCHING)	TON

SECTION 613

DRAINAGE CONDUITS

This Section of the Standard Specification shall apply in its entirety with the following exception(s):

613.02 MATERIALS.

All corrugated galvanized steel pipe used on this project shall conform to AASHTO M 245, 246-80, 190-80, Sec. 5.3.3. Polycoat Steel Pipe.

613.04 CONSTRUCTION METHODS.

The following shall supplement or when in conflict shall supersede the requirements of this subsection.

(b) Excavation

Where new structures are called for on the plans, the Contractor shall remove the existing structure and all associated material of the structure. The removed material will become property of the Contractor and disposed of in a satisfactory manner.

The structural excavation to remove all materials of every character to place the new structures at the locations and elevations as shown on the plans or as directed by the Engineer shall be done by the Contractor.

Backfill shall be acceptable material placed in layers not to exceed eight (8) inches loose-measurement and shall be kept as approximately the same elevation on both sides of the structure. No rocks or boulders larger than four (4) inches in the largest dimensions shall be placed next to the culvert. Backfill material shall be compacted thoroughly and uniformly. Thoroughly and uniformly compacted means a degree of compaction that is equal to at lest 95% of standard density, AASHTO T 99.

Watering shall be required as directed by the Engineer. Rollers, Vibrators, or other approved compactors shall be operated parallel to the barrel of culverts. All areas, inaccessible to rolling equipment shall be compacted with a mechanical tamper.

SECTION 619

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

This Section of the Standard Specification shall apply in its entirety with the following addition(s):

619.04 CONSTRUCTION METHODS.

(b) **Removal of Bridges, Culverts and other Existing Structures.**

(Revise the second paragraph as follows:)

Removal of existing structures when shown on the Plans shall be in accordance with Subsection 104.07.

(Revise the Subsection as follows:)

(2) When structures or material in structures are to become the property of the Contractor, remove and dispose of the material in accordance with Subsection 104.08. Remove piers, abutments, piling, and substructures as specified in (1) above.

SECTION 641

MOBILIZATION

This Section of the Standard Specification shall apply in its entirety with the following addition(s):

641.01 DESCRIPTION. *(Add to this subsection:)*

All Work under Division I, Section 155 S*chedules for Construction Contracts* shall be included in the unit price for items under Section 641 *Mobilization.* The method of measurement for Work under this item, including construction schedules, shall remain as lump sum.

641.06 BASIS OF PAYMENT.

(Revise third paragraph as follows:)

The second and final payment will be made on the next estimate following the completion of substantial mobilization. The determination of when an estimate is due shall be in accordance with Subsection 109.09. Mobilization will not be considered in this determination. The completion of the erection of materials processing plants, if any, will not be required as a condition to release of the final payment.

(Revise the first note for Table A as follows:)

* In the event the lump sum bid for mobilization exceeds the amount stated herein, the difference (remainder) will not be paid until the project is complete in accordance with Subsection 106.06(b).

SECTION 711

TRAFFIC STRIPE

This Section of the Standard Specification shall apply in its entirety with the following revision(s):

711.01 THERMOPLASTIC COMPOUNDS.

(Revise the following subsection:)

Hot Applied Thermoplastic Compound Materials. The hot applied thermoplastic compound shall meet the requirements of AASHTO M 249. The binder component shown in Section 4.2, Table 1 Composition, shall be made of hydrocarbon material unless otherwise specified on the Plans. Each shipment of the product shall be accompanied by a certification as specified in Subsection 106.03.

(ADD THE FOLLOWING SUBSECTIONS)

In order to allow for timely striping of projects during this period of supply shortages of hydrocarbon based thermoplastic, as well as ease concerns over price volatility, the following guidelines will be adopted.

Full Thickness Stripe

The substitution of full depth alkyd thermoplastic stripe in lieu of full depth hydro carbon based thermoplastic will be allowed as a no cost change, provided the substituted material meet the AASHTO M 249 specifications.

The substitution of epoxy multi-polymer stripe in lieu of full depth hydro carbon based thermoplastic will be allowed as a no cost change, provided the substituted material meets ODOT 2009 specification section 856. Epoxy thickness shall be 20 mill when applied to concrete and 25 mill thickness when applied to asphalt.

Multi-polymer epoxy stripe will be the only acceptable permanent stripe on Portland cement concrete pavements when specified in the contract as such.

Thin Line Stripe

The substitution of thin line alkyd thermoplastic stripe in lieu of thin line hydro carbon based thermoplastic will be allowed as no cost change, provided the substituted material meets the ASSHTO M 249 specifications. The substitution of a multi-polymer epoxy stripe meeting ODOT 2009 specification section 856 may, if directed by ODOT, be allowed with a negotiated increase in cost to the Department.

Material on hand

Material on hand may, at the contractor's request, be paid for thermoplastic materials per ODOT 2009 specification 109.07. Care must be taken to ensure the expiration date of the materials will not be exceeded during the material on hand storage period.

711.02 PERMANENT PAVEMENT MARKING TAPE.

(Revise the fifth paragraph as follows:)

Certification shall be furnished in accordance with Subsection 106.03.

711.03 NON-REMOVABLE TEMPORARY PAVEMENT MARKING TAPE.

(Revise the following subsections:)

(f) **Certification.** Certification shall be required for non-removable temporary pavement marking tape in accordance with Subsection 106.03.

711.04 REMOVABLE PAVEMENT MARKING TAPE.

(Revise the following subsections:)

(g) **Certification.** Certification shall be required for removable pavement marking tape in accordance with Subsection 106.03.

711.09 GLASS BEADS.

(Revise the following subsections:)

(a) **Traffic Paint.** Glass beads used for traffic stripe paint shall meet the requirements of AASHTO M 247, Type I, Beads shall be supplied with a moisture-resistant coating.

(b) **Glass Beads For Thermoplastic.** Furnish drop-on glass beads in accordance with these specifications. Glass traffic beads shall comply with the following:

1. Be colorless, clean, transparent, and free from milkiness, excessive air bubbles, skins and foreign objects.
2. Contain less than 0.25% moisture by weight.
3. Have a minimum refractive index of 1.5 when tested by the liquid immersion method at 77° F.
4. Be spherical in shape, and essentially free of sharp angular particles, and particles showing surface scarring and scratching.
5. Show no evidence of objectionable static electricity when flowing through a regular traffic bead dispenser.
6. **Gradation.** *Oklahoma DOT Standard Glass Beads for Thermoplastic* shall meet the requirements of AASHTO M247, Type I. *Oklahoma DOT Large Glass Beads for Thermoplastic* shall meet the following requirements:

Open U.S. Std Sieves	Percent Retained
#10 Sieve	0
#12 Sieve	0-5
#14 Sieve	5-20

#16 Sieve	40-80
#18 Sieve	10-40
#20 Sieve	0-5
Pan	0-2

7. **Roundness.** *Standard* gradation glass beads shall be a minimum of 70% true spheres when tested according to ASTM D-1155. *Large* gradation beads shall be a minimum of 80% true spheres. The manufacturer shall provide a Type A certification for roundness for each shipments of *Large* beads.

8. **Coatings.** Standard and Large glass beads shall be supplied with an adhesion coating to promote adhesion in thermoplastic pavement marking material. Standard glass beads (AASHTO M247, Type I), shall also be supplied with a moisture-resistant coating to prevent clumping.

SECTION 855

TRAFFIC STRIPE

See Special Provisions for Section 711 Traffic Stripe.

SECTION 880

CONSTRUCTION SIGNING AND TRAFFIC CONTROL

This Section of the Standard Specification shall apply in its entirety with the following revision(s):

880.01 DESCRIPTION.

(Addition)

All Work under Division I, Section 155 S*chedules for Construction Contracts* shall be included in the unit price for items under Section *880 Construction Traffic Control.* The method of measurement for Work under this item, including construction schedules, shall remain as lump sum.

880.02 MATERIALS.

(a) **Construction Signing and Traffic Control Materials.**

(Revision)

10. Plastic Drums. Drums shall be of two-piece breakaway type, meeting the requirements of the *"Manual on Uniform Traffic Control Devices,"* , current edition. Vendor shall submit a letter of "Certificate of Crashworthiness" that drums, with conventional barricade warning lights securely attached, meet the NCHRP-350 Category I Device requirements. These drums are to be used as Channelizing devices on construction and maintenance operations.

Plastic drums shall have a minimum overall height of approximately thirty-six inches (36") with a minimum diameter of eighteen inches (18") at any point. The upper body of the unreflectorized drum shall weigh a minimum of 9.5 pounds. The base shall weigh a minimum of 40 pounds.

Drums shall be constructed of impact resistant, low density polyethylene (density of 0.925 and melt index of 0.3). The material shall be bright orange in color and resistant to color fading. The material shall maintain structural integrity throughout a temperature range of -58°F to +120°F. All sheeting surfaces shall be 100% flame treated to maximize adhesion of reflective sheeting to the channelizer body.

Drums shall be designed to accept horizontal, circumferential bands of reflectorized sheeting four inches (4") to six inches (6") wide. The drum shall have a D-shaped configuration at the base attachment point to minimize rolling after impact. The unit shall have an enclosed top and be weather tight and shall have provisions for drainage to prevent water from accumulating. Drums shall be stackable without damaging the reflective surface. Drums shall provide the facility for attaching two type "A" or "C" conventional barricade warning light which stay in place with repeated impacts with speeds greater than 55 M.P.H. and meet the NCHRP-350 requirements.

Drum base sections shall not exceed four inches (4") in height. The base shall be an integral component of the Plastic Drum. The base shall be manufactured with a minimum quantity of 45% post consumer or post industrial (recycled) rubber, with a total weight of 40 pounds, and with a maximum 3" vertical profile. Drum base shall be designed so that it may be attached or detached by one person without the use of any tools. The assembled unit shall withstand 60 M.P.H. winds, turbulence created by passing trucks and cars, moderate winds, or repeated movement during construction and maintenance operations.

The top portion of the unit, upon impact by a vehicle, shall deform and breakaway from the base and ballast. The ballast must remain in place, allowing the vehicle to pass over it.

The exterior vertical surface shall have altering, two-orange-two-white circumferential stripes starting with the orange stripe at the top of the drum. Each stripe shall be four inches (4") wide and shall be reflectorized. The bottom portion of the drum shall not be reflectorized. If there are non-reflectorized spaces between the horizontal orange and white stripes, they shall be no more than two inches (2") wide.

Reflectorized sheeting shall meet the requirements of the latest ASTM D4956 for Type III reboundable sheeting.

(b) **Sampling and Testing.** A Type D certification shall be furnished in accordance with subsection 106.03.

880.04 CONSTRUCTION METHODS.

(Addition)

Unnecessary traffic control devices shall be immediately removed or covered in a manner approved by the County's Technical Representative.

880.05 METHOD OF MEASUREMENT.

(Revision to seventh paragraph)

During any period that contract time is suspended in accordance with Subsection 108.03, any traffic control devices required for the safety of the motoring public will continue to be measured and paid for.

(Addition)

Construction Traffic Control will be paid for as a lump sum pay item. Contractor shall be responsible for construction traffic control and for construction signing in accordance with the Manual on Uniform Traffic Control Devices, latest edition, and applicable ODOT standard drawings.

Price bid for this item shall be payment in full for the installation and removal of Construction Signing and Traffic Control. Contractor shall be responsible for

removal of all necessary construction traffic control items upon completion of the project.

All change orders approved which provide for addition work **and** additional calendar days shall provide for additional compensation for Traffic Control and Construction Signing. Payment for additional traffic control and construction signing shall be determined by dividing the lump sum bid for traffic control and construction signing shall be determined by dividing the lump sum bid for Traffic Control and Construction Signing by the number of calendar days specified in the contract as the contract time. The daily rate thus derived shall then be multiplied by the number of additional days provided by the change order. The sum computed by this multiplication shall be added to the change order price for additional work and shall be full compensation for all Traffic Control and Construction Signing for the added work.

To facilitate prompt maintenance and/or changes in traffic control devices, the County's Technical Representative may give written notice to the Contractor. The identified items must be corrected within 24 hours of receipt of the notice. If the Contractor fails to correct the specified items within the 24 hour period, the County's Technical Representative may assess a daily charge equal to ½ of the daily rate derived above. The County's Technical Representative may continue to assess the daily charge for each additional 24 hour period until the items are corrected. The charge will be subtracted from the Contractor's next progress payment and will be unrecoverable.

There will be no additional compensation for Traffic Control and Construction Signing for time extensions and/or suspensions due to unusually severe weather or weather related conditions.

880.06 BASIS OF PAYMENT.

(Addition)

All Traffic Control and Construction Signing for this project as bid as a lump sum. All necessary traffic control items listed under Section 880.02, except for those items listed below, are paid under the Construction Traffic Control pay item. Payment for this item will be made progressively as a percentage of the total lump sum bid for traffic control and construction signing equal to the total percentage earned on the project. Any amounts remaining on the date of completion will be paid on the next estimate. Any amounts assessed for failure to correct traffic control items will be deducted from the next progressive payment.

MINIMUM SAMPLING AND TESTING SCHEDULE

The following sampling and testing schedules shall supplement the Standard Specifications, and subject to the Contracting Officer's approval, shall supersede and/or control where conflicting provisions arise.

Embankment	
In Place Density & Moisture Content	One per 1,000-linear feet per lift.
Borrow	
Classification & Proctor Density	One per each source per 2000-cubic yards.
Fabric Reinforcement	
Fabric	Identify as being from an approved source. One Manufacture's Certificate with Laboratory Analysis and test results for each source.
Asphalt Cement	Identify as being from an approved source. One refinery certificate with Laboratory Analysis and test results for each day or per shipment, whichever occurs more frequently.
Riprap	
Materials	Supplier's (or ODOT Approved) Certificate of Compliance.
Filter Blanket (for Rip Rap)	
Gradation	One per 1000-tons or per source.
Vegetative Mulch	
Materials	Field inspection of material by BIA personnel.
Fertilizer	
Materials	Supplier's Certificate of Compliance for each shipment.
Seed	
Materials	Supplier's Certificate of Compliance for each shipment, and Oklahoma State Agricultural Board placard placed on each container.

MINIMUM SAMPLING AND TESTING SCHEDULE (CONT'D)

Subgrade	
Classification	One per 1,000-feet of finished grade and one for each type of soil (AASHTO Classification Method). At least one per mile of finished grade.
In Place Density	One per 1,000-feet of each lift placed and at least one per 500-feet of finished grade.
Subgrade Modification (Including Lime Treatment)	
Materials	Manufacturer's Certificate of Compliance for each shipment.
Aggregate Base or Traffic Bound Surface Course	
Quality	One per source.
Gradation, LL & PI	One per 1,000-linear feet or per 1000-tons, whichever occurs more frequently.
Thickness (In-Place)	One per 500-linear feet.
Grade Tolerance	One per 100-linear feet.
Density	One per 500-linear feet.
Tack Coat	
Bituminous Material	Identify as being from an approved source. One Refinery Certificate with Laboratory Analysis and test results for each source every 5,000 Gal.
Asphaltic Concrete	
Asphalt Cement	For PG-76, PG-70, and PG-64, identify as being from an approved source. One refinery certificate with Laboratory Analysis and test results for each day or per shipment, whichever occurs more frequently.
Aggregate	One L.A. Abrasion test, One Durability test, One Micro Duvall test, One Sand Equivalent Test and One Gradation test for each source every 10,000 Ton.
Mix	One Rice Specific Gravity, One Asphalt Content, One Sieve Analysis, Two Lab Molded Densities, Three Roadway Densities and Three Mat Thicknesses for each mix every 1,000 Ton.

MINIMUM SAMPLING AND TESTING SCHEDULE (CONT'D)

Asphaltic Concrete (cont'd)	
Mat Thickness/Roadway Density	Three cores per day or three cores per 1,000 tons, whichever occurs more frequently.
Density	One per day or one per 1000-tons, whichever occurs more frequently.
Concrete	
Material	Entrained air test, slump test, and four compressive strength specimens per pour. For large pours, aforementioned testing per 100-cubic yards.
Culverts (CMP or RCP), Metal End Sections	
Materials	One Manufacturer's Certificate of Compliance, including Chemical Analysis, Spelter Report, and Heat Numbers, for each source. Additionally, one Manufacturer's Certificate of Compliance for each load test and size of RCP.
Treated Timber Posts	
Treatment	Manufacturer's Certificate of Compliance.
Material	Field inspection of material by BIA personnel.
Fence and Fence Posts (Metal)	
Materials	Supplier's Certificate of Compliance for wire and posts.
Bolt and Bolt Accessories	
Materials	Field inspection of materials by BIA personnel.
Cattle Guard	
Materials	Field inspection of materials by BIA personnel.

MINIMUM SAMPLING AND TESTING SCHEDULE (CONT'D)

Guardrail	
Rail	Manufacturer's Certificate of Compliance including Chemical Analysis, Spelter Report, and Heat Numbers, for each source.
Posts	Manufacturer's Certificate of Compliance.
Construction Signing	
Reflective Sheeting	Manufacturer's Certificate of Compliance for each shipment.
Signs	
Panels & Sheeting	Manufacturer's Certificate of Compliance.
Posts	Manufacturer's Certificate of Compliance.
Traffic Stripe	
Glass Beads	Manufacturer's Certificate of Compliance for each shipment.
Thermoplastic	Manufacturer's Certificate of Compliance for each shipment.
Removable Tape	Manufacturer's Certificate of Compliance for each shipment.
Reinforcing Steel	
Material	Manufacturer's Certificate and Mill Test Report for each shipment, or per 20-tons, whichever occurs more frequently.
Structural Concrete	
Portland Cement	One Certificate of Compliance with project specifications or manufacturer's certification that cement was manufactured under the quality control agreement with the Oklahoma State Highway Commission. One certificate for every 2,000-bags, 500-bbls, or for each shipment.

MINIMUM SAMPLING AND TESTING SCHEDULE (CONT'D)

Structural Concrete (cont'd)

Aggregate	
- Quality	One initial laboratory quality test per source or Supplier's Certificate of Compliance.
- Gradation	One Fine Aggregate and one Course Aggregate gradation per 100-cubic yards of concrete.
-Organic,	Deleterious, one test per 1000-cubic yards.
Water - Quality	When required by the Contracting Officer's Representative, the water quality shall be in accordance with AASHTO T 26.
Material	Four compressive strength specimens per pour for each structure or per 100-cubic yards.
Curing Agents	Manufacturer's Certificate of Compliance for each brand and each shipment.
Air Entraining Agent	Manufacturer's Certificate of Compliance for each brand and each shipment.
Air Content & Slump	One of each test per 25-cubic yards.
Yield	One test per 50-cubic yards.

Backfill For Culverts & Bridge Abutments

Materials	One gradation per 200-cubic yards placed.
Density	One per lift (i.e., collected at alternating sides of the culvert) per installation.

Premolded Elastomeric Compression Joint Fillers and Sealers

Material	Certificate of Compliance that material meets project specifications.

Elastomeric Bearing Pads

Material	Certificate of Compliance that material meets project specifications.

Prestressed Concrete Beams

Material	One Certificate of Compliance that material meets project specifications with verification by on-site, independent inspection of concrete quality and prestressing loads.