PPPSCSA

CALL ORDER: 265
February 04 2020

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			STREET			HOMA CITY,			
	200			* PROPO		* * * * *	75100		
			STAPLE E	BID BOND TO					
		P		ECEIVED UNTI					
JOB PI	IECE NO			STATE AID	PROJECT NO	).			
310	07404		SH-11 )	SBR-257B(0	079)SB	OSAGE			
DESCRI	IPTION:	BRIDGE	REHABILITA	ATION					
LOCATI	ION:		OVER BIRD ON IN PAWHU	CREEK, 0.2 JSKA.	MILES SOUT	TH OF THE (	JS-60		
LENGTH	H:	0.104	MILES						
AMOUNT	OF PR	OPOSAL G	SUARANTEE:	FIVE PERCE	ENT (5%) OF	THE BID.			
NOTE:	PROPOS OF ITE BEEN A ELECTR	AL REQUI MS BY ME .DDED TO	RING SIGNA ANS OF ELE ELECTRONIC IA AND SCH	ATURE MUST E	BE SIGNED A DIA PROVIDE INT OUT ITE	AND NOTARIZ ED. AFTER S EM SCHEDULE	ZED. SUBMI SCHEDULES E AND INSE	OF ITEMS HAVE	Ξ
SIGN:	PR	OPOSAL M	UST BE SIG	GNED TO COIN	NCIDE WITH	PRE-QUALIE	FICATION P	APERS.	
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				TH OR STAPLE REOF AND PRO					
		THIS PR	OPOSAL ISS	SUED TO:		CONTRA	ACTOR'S ID	NO.	
		PROPOSA	L NO.						
		REVISED	:						
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BID RIGGING IS A SERIOUS CRIME. IF YOU HAVE ANY INFORMATION CONCERNING COLLUSIVE BIDDING, EVEN A REQUEST TO SUBMIT A COMPLIMENTARY BID, PLEASE CALL THE OKLAHOMA ATTORNEY GENERAL'S OFFICE AT TELE. NO. 405-521-3921.

Unless otherwise noted in the proposal, all bids must be submitted over the Internet via Bid Express. When written bids are allowed, sealed proposals sent by registered mail will be received through the ODOT Office Engineer Division until 30 minutes prior to the scheduled bid opening. From 30 minutes prior to the bid opening until the time of the bid opening, bid proposals must be turned in directly to the ODOT Commission Room located on the east side of the lobby. The scheduled bid opening is 10:30 A.M., April 16, 2020 for the work listed below.

No Proposal for construction or maintenance work of the department will be issued to any contractor after 10:30 A.M. on the working day preceding opening of bids for any contract.

Each bid shall be accompanied by a Certified or Cashier's Check or Bid Bond equal to 5% of the bid made payable to the State of Oklahoma, Department of Transportation, as a proposal guaranty. Proposal checks will be held or returned by the Department as per Section 103.04 of the State Standard Specifications.

The minimum wage to be paid laborers and mechanics employed on this project shall be included in the proposal.

Bids must be prepared as directed by the State Standard Specifications.

Plans, proposals, and specifications may be examined in the plan room or in the Office Engineer Division at the Oklahoma Department of Transportation central office in Oklahoma City, Oklahoma.

This work will be done under the Oklahoma Department of Transportation applicable specifications for highway construction as depicted on the lower left corner of the plan's title sheet.

Plans and proposal forms may be ordered from the Office Engineer Division, Oklahoma Department of Transportation Building, 200 N.E. 21st Street, Oklahoma City, OK 73105. Cost of Bidding Documents is \$ 50.00 + tax for each Bidding Proposal. State Standard Specifications may be purchased for \$55.00 + tax. (Oklahoma tax is 8.375%).

Plans(Reduced Size Complete with X-Sec if applicable) \$ 28.24 + postage/handling. Make checks payable to Oklahoma Department of Transportation.

No refunds will be made for bidding documents or Specification books purchased.

Unless otherwise noted in the proposal, upon award of the contract to the successful bidder, the contract will be completely and correctly executed by the contractor and returned to the Department within ten (10) working days from the date of award. The Department will have fourteen (14) working days from the date of award to complete it's execution of the contract.

The Oklahoma Department of Transportation (ODOT) ensures that no person or groups of persons shall, on the grounds of race, color, sex, age, national origin, disability/handicap, or income status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any and all programs, services, or activities administered by ODOT, it's recipients, sub-recipients, and contractors.

Description of work and location of project: Job Piece No. SBR-257B(079)SB SH-11 OSAGE 3107404

BRIDGE REHABILITATION SH-11: OVER BIRD CREEK, 0.2 MILES SOUTH OF THE US-60 JUNCTION IN PAWHUSKA.

STATE OF OKLAHOMA, DEPARTMENT OF TRANSPORTATION - By: Tim Gatz, Director.

## OKLAHOMA DOT BAMS/PES - PROPOSAL AND ESTIMATION SYSTEM

CONTRACT REQUIREMENTS February 04, 2020

CA000001

11/25/2014

CONTRACT TIME ALLOTTED FOR THIS PROJECT IS 90 CALENDAR DAYS.

DISADVANTAGE BUSINESS ENTERPRISES: REQUIRED PARTICIPATION IS 0.00 %.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \* THE DEPARTMENT WILL CONSIDER A PROPOSAL NONRESPONSIVE AND MAY REJECT IT \*

 $<sup>^{\</sup>star}$  IN ACCORDANCE WITH SUBSECTIONS 102.08 AND/OR 102.14 OF THE 2009 OKLAHOMA  $^{\star}$ 

<sup>\*</sup> DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

DATE: February 04, 2020

SCHEDULE OF PRICES REVISED:

CONTRACT ID:	200166	PROJECT(S):	310/404
J.P. NUMBER	3107404		SH-11

LINE NO	ITEM   DESCRIPTION		APPROX.   QUANTITY	UNIT PRICE	BID AMOUNT	
		<u> </u> 	AND UNITS	DOLLARS   CTS	DOLLARS	CTS
ECTI	ON 0001 ROADWAY					
	202(D) 0184  UNCLASSIFIED BORROW 	    CY			   	
	230(A) 2806 SOLID SLAB  SODDING 	    SY			   	
	411(C) 5960 SUPERPAVE,  TYPE S4(PG 64-22 OK) 	     TON	41.000  		     	•
	619(B) 4780 REMOVAL OF  GUARDRAIL		  300.000 		     	
0005	623(A) 0932 BEAM  GUARDRAIL W-BEAM SINGLE 	    LF	162.500    162		     	•
	623(F) 5686 GUARDRAIL  ANCHOR UNIT (TYPE D-BF) 	    EA	2.000    2.000		   	
0007	623(G) 8571 GUARDRAIL  END TREATMENT (GET) 	    EA			   	
	   SECTION 0001 TOTAL		1 			•

SCHEDULE OF PRICES

DATE: February 04, 2020

REVISED:

CONTRACT ID: 200166 J.P. NUMBER 3107404 PROJECT(S): 3107404

LINE	!	ļ	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION		AND UNITS	DOLLARS   CTS	DOLLARS	CTS
		    SY	85.500		     	
	504(C) 6250 SEALED  EXPANSION JOINT 		131.300		   	
	504(G) 6390 RAPID CURE  JOINT SEALANT 	    LF	85.500  		 	
	504(H) 6389 ELASTOMERIC  MORTAR		21.400		   	
		Ì	1167.000		   	
	CONCRETE	    CY			   	
	509(D) 1331 CLASS C CONCRETE	    CY	   15.000		   	
	511 6306 MECHANICAL SPLICES	    EA	96.000    96.000		   	
  0016	511(B) 6010 EPOXY COATED REINFORCING STEEL	    LB	   8880.000		   	
	512(A) 1323 PAINTING EXISTING STRUCTURES	    LSU	1.000  IM		     	

DATE: Fel SCHEDULE OF PRICES REVISED:

DATE: February 04, 2020

CONTRACT ID: 200166

PROJECT(S): 3107404

J.P. NUMBER 3107404 SH-11

LINE	ITEM	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	   DOLLARS   CTS	DOLLARS   CTS	
0018	512(B) 6303 COLLECTION AND HANDLING OF WASTE	   1.000  LSUM	 	 	
0019	515(A) 6013 WATER REPELLENT (VISUALLY INSPECTED)	   254.000  SY		   	
0020       020	520(A) 6058 PREPARATION OF CRACKS, ABOVE WATER	   6.000  LF	     		
  021 	520(C) 6060 EPOXY RESIN, ABOVE WATER	   0.600  GAL	     		
0022	521(A) 6210 PNEUMATICALLY PLACED MORTAR	   147.000  SY			
	523(C) 6570 DECK AREA SEALED (FLOODCOATS)	   1817.000  SY			
  024 	524(A) 6610 (SP)CARBON FIBER-REINFORCED POLYMER	1022.000			
025     025   	535 6130 (SP)CORROSION INHIBITOR(SURFACE APPLIED)	   285.000  SY	       		
		   1.000  LSUM			
	SECTION 0002 TOTAL		 		

DATE: February 04, 2020 SCHEDULE OF PRICES REVISED:

CONTRACT ID: 200166 J.P. NUMBER 3107404

PROJECT(S): 3107404

BIDDER MUST	ENTER AL	L UNIT	PRICES,	MAKE	ALL	EXTENSIONS	AND	TOTAL	THE	BID.

LINE			APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	1	QUANTITY AND UNITS	DOLLARS   CTS	DOLLARS   CTS
0027	823 8478  (SP)PORTABLE TRAFFIC  SIGNAL SYSTEM	    SD	90.000	     	     
0028	857(A) 8839  CONSTRUCTION TRAFFIC  STRIPE(PAINT)(4" WIDE) 	      LF	6200.000		     
0029	857(C) 8851 REMOVABLE  PAVEMENT MARKING TAPE(4"  WIDE)	    LF	3000.000	   	     
0030	857(E) 8887  (PL)CONSTRUCTION ZONE  PAVEMENT MARKERS(FLEX  TAB)TYPE 2-1	    EA	3000.000	     	       .
	871(B) 8705 (SP)CONST.  ZONE IMPACT ATTEN. 	    SD	180.000		   
0032	877(B) 8484 DELIVER  PORTABLE LONGITUDINAL  BARRIER	    LF	650.000    650.000		     
0033	877(C) 8486 RELOCATION  OF PORTABLE LONGITUDINAL  BARRIER	    LF	650.000    650.000		   
0034	880(B) 8818  CONSTRUCTION SIGNS 0 TO  6.25 SF	    SD	1620.000    1620		   
0035	880(B) 8821  CONSTRUCTION SIGNS 6.26  SF TO 15.99 SF	    SD	900.000    900.000		   

DATE: Feb SCHEDULE OF PRICES REVISED:

DATE: February 04, 2020

CONTRACT ID: 200166 J.P. NUMBER 3107404

PROJECT(S): 3107404

BIDDE	R MUST ENTER ALL UNIT PRIC	CES,	MAKE ALL EXTI	ENSIONS AND TOTAL	THE BID.
LINE		1	APPROX.	UNIT PRICE	BID AMOUNT
	DESCRIPTION			DOLLARS   CTS	
0036	880(B) 8824  CONSTRUCTION SIGNS 16.0  SF TO 32.99 SF	    SD		     	     
0037	880(C) 8842  CONSTRUCTION  BARRICADES(TYPE III)		270.000	     	     
	880(E) 8860 WARNING  LIGHTS(TYPE A) 	    SD	2250.000	     	     
0039	880(F) 8878 DRUMS   	    SD	2925.000	     	     
	882(A) 8306 PORT.  CHANGEABLE MESSAGE SIGN 	    SD		     	   
	   SECTION 0003 TOTAL				
SECTIO	ON 0004 TRAFFIC PERMANENT	1			
	805(D) 8756 (PL)REMOVE & RESET EXISTING SIGNS	      EA	1.000	     	     
0042	853 9069 GUARDRAIL DELINEATORS (TYPE 2, CODE 1)	    EA			   
0043	856(A) 8530 TRAFFIC STRIPE(MULTI-POLYMER)(4" WIDE)	i			     
	SECTION 0004 TOTAL			   	
SECTIC	ON 0005 CONSTRUCTION				

SCHEDULE OF PRICES

DATE: February 04, 2020

REVISED:

CONTRACT ID: 200166 J.P. NUMBER 3107404

PROJECT(S): 3107404

O.I. NOMBER SIO74	<i>9</i> <del>1</del>		S	11 11														
BIDDER MUST ENTER	ALL UNIT PRIC	CES, MA	KE ALL	EXTE	NSIONS AN	D TOTAL	THE BID.	_										
LINE  ITI				· · · · · · · · · · · · · · · · · · ·						· ·						RICE	BID AMOUNT	
NO   DESCR		. ~	QUANTITY AND UNITS		DOLLARS	CTS	DOLLARS	CTS										
641 1399   0044 MOBILIZATION	='	    LSUM	1.	  000			   											
   SECTION 000	)5 TOTAL			   				•										
   TOTAL BID				 				•										

DATE: March 11, 2020

## OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS - 2009 SPECIFICATION

CONTRACT ID : 200166

SPECIAL PROVISIONS FOR J.P.: 3107404 SH-11

OKLAHOMA PROJECT NUMBER : SBR-257B(079)SB

	MAINTENANCE BOND
106-5(a-f)09 108-2(a-b)09	
108-23(a)09	FLEXIBLE NOTICE TO PROCEED
109-7(a-c)09	PRICE ADJUSTMENT FOR ASPHALT BINDER
109-8(a-b)09	PAYMENTS TO SUBCONTRACTORS
109-11(a)09	PAYMENT FOR MATERIAL ON HAND
202-2(a-b)09	OSAGE NATION MINERAL RESERVATION SANDY SOIL MINING
411-12(a)09	LONGITUDINAL JOINT DENSITY ON ASPHALT CONCRETE PAVEMENT
411-13(a)09	WARM MIX ASPHALT
411-17(a)09	COMPACTION OF HOT MIX ASPHALT
524-3(a-e)09	FIBER-REINFORCED POLYMER MATERIAL
535-1(a-d)09	SURFACE APPLIED PENETRATING CORROSION INHIBITORS
708-22(a)09	WARM MIX ASPHALT MATERIAL REQUIREMENTS
708-23(a)09	HAMBURG RUT TESTING OF HOT MIX ASPHALT
708-26(a-f)09	PLANT MIX BITUMINOUS BASES AND SURFACES (SUPERPAVE) MULTIPLE STRESS CREEP RECOVERY (MSCR) TESTING
708-28(a)09 823-1(a)09	TEMPORARY TRAFFIC SIGNALS
856-1 (a-g) 09	TRAFFIC STRIPE (MULTI-POLYMER)
857-2(a-c)09	CONSTRUCTION ZONE PAVEMENT MARKINGS
877-1(a-c)09	PORTABLE LONGITUDINAL BARRIER
880-1(a-b)09	PLASTIC DRUMS
000 1 (4 2) 03	CORPS OF ENGINEERS PERMIT
CS000300	REQUIRED LABOR PROVISIONS SAP PROJECTS
CS000350	SPECIAL LABOR PROVISIONS FOR PROJECTS FINANCED W/STATE FUNDS
CS001600	SAMPLE MAINTENANCE BOND
CZ002300	CONTRACT DISPUTE RESOLUTION PROCEDURE
CZ002850	NO.2 PROPOSAL SHEET
CZ002975	* BIDDER'S AFFIDAVIT - STATEMENT UNDER PENALTY

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR MAINTENANCE BOND SBR-257B(079)SB, J/P 3107404, Osage County

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 101.05 DEFINITIONS

## P. Bond

2. Maintenance Bond (Replace definition with the following: )

A bond of at least the total Contract Price to protect the Department from defective Work and Materials for one year after Project Completion.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR BUY AMERICA

These Special Provisions amend, revise, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## 106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

## **B.** Buy America (Replace with the following:)

Comply with the Buy America provisions of Title 23 CFR 635.410 which states that all manufacturing processes, including the application of a coating, for all steel or iron products permanently incorporated into the project shall have occurred in the United States (U.S.). These requirements are in effect on all Contracts regardless of the use of federal funds. All referenced forms and letters must be obtained from the current version of the ODOT Construction Control Directive (CCD) No. 20140620 – Buy America.

"All manufacturing processes" are defined as any process required to change the raw ore or scrap metal into the finished steel or iron product (e.g. smelting, rolling, extruding, bending, etc.).

"Coating" is defined as any process which protects or enhances the value of the steel or iron product to which the coating is applied (e.g. epoxy, galvanizing, painting, etc.).

## (1) Exemptions

The following materials are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Raw materials (iron ore or alloys)
- Scrap
- · Pig iron
- · Processed, pelletized, and reduced iron ore material
- Aluminum
- Brass
- Copper

For recycled steel, only the manufacturing processes to produce steel products must occur domestically, beginning at the point where the recycled steel is melted.

## (2) Minimal Use Request

Federal regulations allow a minimal use of foreign steel or iron if the cost of the steel and iron products as they are delivered to the project does not exceed 0.1 percent of the total Contract

amount, or \$2,500, whichever is greater. This threshold applies to the cumulative amount of all foreign steel and iron used on the project. The Contractor must submit a written request to the Resident Engineer which includes the origin and value of any foreign material to be used. This request must be submitted prior to the work being performed and preferably at the preconstruction conference. The Contractor must track the amount of incorporated foreign steel and iron throughout the life of a project to ensure the minimal use threshold amount is not exceeded.

## (3) Preconstruction Conference Discussion

The Department will host a project preconstruction conference. At this conference, the Contractor should be prepared to present and/or discuss the following items as part of the Buy America requirements for all steel and iron products permanently incorporated into projects:

- Project Specific Certification letters from the Contractor and Subcontractors demonstrating their understanding and intent to comply with the Buy America Requirements (see Subsection 106.B.(4).(a)).
- A list of all steel products and suppliers to be used on the project
- Required documentation verifying compliance with Buy America for each known steel or iron product at the time of the meeting (see Subsection 106.B.(4).(b)).
- Minimal use requests (see Subsection 106.B.(2))
- Change order work involving steel must be in compliance and documented similarly to Contract work.

## (4) Compliance with Buy America Requirements

Steel or iron products incorporated into the project that the origin was not domestic the Contractor may be subject to removal and replacement of the work, forfeiture of payment for the work, and/or assessment of penalty.

## (a) Certification Letters

Before any work begins that incorporates steel or iron products into the project, the Contractor shall submit a project specific certification letter stating that all manufacturing processes involved with the production of these products will occur in the U.S., along with project specific certification letters from each Subcontractor for each steel or iron products to be used on the project. Acceptable language for these letters can be found in the ODOT CCD for Buy America. Alternative statements will not be considered.

## (b) Submittals and Forms

For each steel or iron product, the Contractor and Subcontractor will be responsible for providing to the Department all documentation required to verify that each product complies with Buy America in accordance with the requirements of the corresponding category listed below. The Contractor must provide a completed:

• Material Use Statement & Certifications (MDT-1) for each steel or iron product in Category 1 incorporated into the project.

- Certificate of Materials Origin (MDT-2) for each steel or iron product in Categories 1 and 2 incorporated into the project.
- Programmatic Certificate of Materials Origin (MDT-3) for each steel or iron product in Category 3 incorporated into the project.

In most instances, determination of compliance with Buy America requirements should be achieved prior to incorporating the product into the work. If not, the Resident Engineer will be responsible for withholding payment for this work until compliance has been determined.

## (5) Product Categories

The various steel and iron products (referred to herein as 'steel') that are permanently incorporated into projects have been grouped into the following categories with the roles and responsibilities listed to ensure compliance with the Buy America requirements:

## (a) Category 1

Steel products covered in this category are as follows:

- Products used in pavements, bridges, or other structures cast at the project site:
  - Structural steel (girders, diaphragms, anchor bolts, high-strength bolts, sealed expansion joints, etc.)
  - Reinforcing steel (epoxy coated or black)
  - Welded wire fabric
  - Steel spiral wire (drilled shaft cages, bridge rail, etc.)
  - Steel piling
  - Drill shaft casing (permanent)
  - Dowel bars and baskets for paving
  - Steel sheet piling (permanent)
  - Bridge bearing assemblies (fixed and expansion)
  - Post-tensioning steel (strands, wedges, anchor plates, etc.)
- Steel monotube structures
- Galvanized steel supports for overhead and cantilevered sign structures
- Sign posts and bases (2 ½" diameter and larger and wide flange posts)

For items in this category, the Contractor is responsible for the following:

- Submitting completed MDT-1 and MDT-2 forms for each item with steel to both the Resident Engineer and Materials Engineer.
- The MDT-1 will include the Mill Test Reports, and the MDT-2 will list each corporate entity involved in the manufacturing of the steel item from melting through all fabrication processes.
  - Mill test reports and certification letters must include a statement similar to the following: "All manufacturing processes for these steel and iron products, including the application of coatings have occurred in the United States."
  - Certifications for a particular item should be retained in one location to allow easy access for auditing purposes.

 Certifications should be retained by the Contractor until final acceptance of the project.

## (b) Category 2

Steel and iron products covered in this category are as follows:

- Cast iron products (frames, grates, hoods, manhole covers, etc.)
- Fencing materials
- · Corrugated steel pipe
- Corrugated steel pipe end treatments
- Steel pipe
- Ductile iron pipe
- · Underground utility encasement conduit
- · Stay-in-place forms

For items in this category, the Contractor is responsible for the following:

- Submitting completed MDT-2 forms for each item with steel to the Resident Engineer.
- The MDT-2 will list each corporate entity involved in the manufacturing of the steel item from melting through all fabrication processes.
  - The MDT-2 forms should be retained by the Contractor until final acceptance of the project.

## (c) Category 3

This category covers traffic related items which typically have been placed on the ODOT Traffic Engineering Division's Qualified Products List (QPL). For items in this category listed on the QPL, the MDT-3 will be on file with the Traffic Division. For items in this category that are not listed on the QPL, the Contractor is responsible for submitting a completed MDT-3 form for each pay item with steel to the Resident Engineer. The MDT-3 lists all corporate entities involved throughout the manufacturing process for each steel and iron product used on the project.

The steel products covered in this category are as follows:

- Traffic signal poles and mast arm
- · Highway lighting poles and mast arm
- · High mast lighting towers
- Cable barrier
- · Guardrail, guardrail posts, end sections, terminals, impact attenuators
- Sign posts and bases (less than 2 ½" in diameter and square tubing)
- Steel electrical conduit

## (d) Category 4

This category covers pre-stressed and precast concrete items receiving full-time inspection by ODOT as the concrete items are cast. Items in this category are required to have a signed and dated project specific certification for each corporate entity involved in the manufacturing of the steel item from melting through all fabrication processes. This includes the Mill Test Reports with a certification from the supplier/fabricator that references the Buy America requirements and lists each corporate entity involved throughout the manufacturing processes. Mill test reports and certification letters must include a statement similar to the following:

"All manufacturing processes for these steel and iron products, including the application of coatings, have occurred in the United States."

The pre-stressed and precast concrete items covered in this category are as follows:

- Pre-stressed concrete beams and girders
- · Precast panels
- · Precast MSE and sound walls
- Precast bridge arches

## (e) Category 5

This category covers non-structural precast concrete items that do not receive full-time inspection by ODOT. Fabricators for items in this category have been placed on the ODOT Materials Division Approved Products List (APL). The fabricator is required to provide a signed and dated project specific certification which lists each corporate entity involved in the manufacturing process, including melting and all fabrication processes. The certification must reference the Buy America requirements using a statement similar to the following:

"All manufacturing processes for these steel and iron products, including the application of coatings, have occurred in the United States."

The steel used in the fabrication of these items will be certified by the fabricator for general use in production and cannot be tied specifically to any individual item.

The pre-stressed and precast concrete items covered in this category are as follows:

- · Precast box culverts
- Reinforced concrete pipe and precast end sections
- Precast inlets and catch basins
- · Precast manholes

## (f) Category 6

This category covers miscellaneous steel or iron components, subcomponents and hardware necessary to encase, assemble and construct certain highway products and manufactured products. For items in this category, the Contractor is responsible for the following:

- Ensure that all manufacturing processes for these steel and iron products including the application of coatings have occurred in the United States.
- Provide documentation to verify compliance upon request.
- Certifications should be retained by the Contractor/supplier until final acceptance of the project.

The following items are included in this category:

- Cabinets
- Covers
- Clamps
- Fittings
- Sleeves
- Miscellaneous hardware (washers, bolts, nuts, and screws)
- Tie wire
- Spacers
- · Chairs or other steel reinforcement supports
- · Lifting hooks
- Pipe Valves
- Electronic components
- Temporary falsework
- · Mailbox and installation assembly

# OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR ADMINISTRATION AND EXTENSION OF CONTRACT TIME

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

(WINTER TIME SUSPENSION)

## 108.07 ADMINISTRATION AND EXTENSION OF CONTRACT TIME

## **B.** Calendar Day Contract (Replace the 2<sup>nd</sup> paragraph with the following:)

The Contractor may request a winter time suspension of time charges and work during the time period between December 21<sup>st</sup> and the following February 15<sup>th</sup>. The Contractor must make this request in writing to the Engineer at least ten (10) working days prior to the beginning date of the winter time suspension.

Upon receipt of the Contractor's written request, the Engineer will perform a field review of the project to determine if a winter time suspension is suitable. As part of the review, consideration will be given to the following applicable project components:

- more than 85% complete
- adverse impacts to the prosecution and progress of other projects
- on the interstate system
- lane or ramp closures
- lane or edge drop offs without a recoverable slope
- areas that require patching,
- obstructions (i.e. manholes, valve boxes, etc.) in the roadway that could hamper snow and ice removal
- exposed structural surfaces or subgrade
- areas that could pond water
- · construction debris, materials, or equipment in the roadway clear zone
- temporary erosion control measures in place
- proper signage and striping in place
- driveways and side roads are accessible
- scheduled project deliveries and services (i.e. materials, inspections, etc.)
- · expiring permits
- environmental mitigation as required by the contract
- items of work which, if left undone or unattended, would not be in the best interest of the Department or traveling public

After this review, the Engineer will notify the Contractor in writing that the request for suspensions is approved, or that the request for suspension is denied, citing the justification for such denial.

If the Resident Engineer approves the request, make all necessary arrangements to leave the project in a safe manner. The Contractor will continue to maintain the project work site during this time suspension in accordance with Subsection 105.14, "Maintenance During Construction." Items which do not affect the operational capacity or safety of the roadway that is open to traffic will not be subject to the 24 hour correction requirement. Any maintenance performed during the winter time suspension will be performed by the Contractor at no additional cost to the Department.

Upon completion of the winter time suspension, the Engineer will perform a field review of the project to ensure that any previously constructed elements of the project have not been damaged. If any damage is discovered, the Contractor will return these elements to their condition prior to the winter time suspension at no additional cost to the Department.

The winter time suspension is not to be used as a means for the Contractor to avoid time charges for weekends and holidays. If the Contractor chooses to perform work during the winter time suspension, the suspension will cease to be in effect and time charges will resume.

Notify the Resident Engineer if work is to resume prior to February 15th.

Liquidated damages will not be assessed for any portion of a winter time suspension that occurs after expiration of the contract time.

A winter time suspension will not suspend time charges subject to an incentive/disincentive provision.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR FLEXIBLE NOTICE TO PROCEED

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 108.03 PROSECUTION AND PROGRESS (Add the following:)

The Notice to Proceed for this project will be issued in the normal time period (approximately 30 days after the award). The Contractor may begin work any time after the issuance of the Notice to Proceed, but no later than <u>September 8, 2020</u>. Time charges will begin on the date the Contractor begins work, or at the date specified in the Notice to Proceed, and will continue until the project is completed. Once the work begins, construction is expected to continue at an optimum rate until the work is done.

Notify the Resident Engineer, and when applicable the County Commissioner, at least 14 calendar days prior to beginning work.

There will be no additional compensation for any increased costs due to beginning work at or near the end of the flexible period.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR PRICE ADJUSTMENT FOR ASPHALT BINDER

These special provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

(Add the following:)

## 109.12 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 Department 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

Payment will be made to the Contractor for monthly fluctuation in the price of asphalt binder used in performing the applicable items of Asphalt Concrete work as listed in the table below when the asphalt binder price 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 price fluctuation that exceeds the 3% specified above. Payments or deductions for the asphalt binder price 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.

The Asphalt Binder Price Adjustment will be a dollar amount paid as compensation to the Contractor, or as a credit to the Department as reflected on the Progressive (or Final) Estimate Summary Report as Line Item Adjustments.

## B. Asphalt Binder Price Adjustment (ABPA)

The Asphalt Binder Price Adjustment (ABPA) for the current estimate will be computed according to the following formula:

			$ABPA = Q \times F \times D$
where			
	ABPA		Asphalt binder price 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 Table 109:1;
	D	==	Allowable price differential, in dollars.

Table 109:1								
Asphalt Binder Use Factor								
ITEM OF WORK	SPECIFICATION NUMBER	ASPHALT BINDER USE FACTOR PER UNIT (English and Metric units)						
Permeable Friction Course	405	0.062 ton of binder per ton of mix						
Open Graded Friction Surface Course	406	0.058 ton of binder per ton of mix						
Asphalt Concrete, Type S-2	411(A)	0.037 ton of binder per ton of mix						
Asphalt Concrete, Type S-3	411(B)	0.042 ton of binder per ton of mix						
Asphalt Concrete, Type S-4	411(C)	0.048 ton of binder per ton of mix						
Asphalt Concrete, Type S-5	411(D)	0.053 ton of binder per ton of mix						
Asphalt Concrete, Type S-6	411(E)	0.058 ton of binder per ton of mix						
SMA	411(F)	0.062 ton of binder per ton of mix						
Asphalt Concrete, Type RBL	411(G)	0.054 ton of binder per ton of mix						
Asphalt Concrete, Type RIL	411(J)	0.054 ton of binder per ton of mix						

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.

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<sub>(b)</sub>.

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

P, the asphalt binder current price in dollars per ton (mton), is the Monthly Asphalt Binder Price Index for the month in which the estimate pay period ends.

P<sub>(b)</sub>, the asphalt binder base price in dollars per ton (mton), is the Monthly Asphalt Binder Price Index for the month in which the bids for the work were received.

The Department will establish the Monthly Asphalt Binder Price Index each month and post the information to the Department website at:

http://www.okladot.state.ok.us/contractadmin/pdfs/binder-index.pdf

## C. Asphalt Binder Index Determination

The Monthly Asphalt Binder Price Index will be determined by calculating the average of the minimum and maximum prices for performance-graded binder using the Selling Price of PG64-22 paving grade, as listed under "Midwest/Mid-Continent Markets - MISSOURI/KANSAS/OKLAHOMA - Tulsa, Oklahoma/Southern Kansas". The publication used to establish each Monthly Asphalt Binder Price Index will be the <u>Asphalt Weekly Monitor</u>® furnished by Poten & Partners, Inc. The issue of the <u>Asphalt Weekly Monitor</u>® used will be for the last full week in the previous month received by the Department prior to the first day of the index month. If the specified publication ceases to be available for any reason, the Department at its discretion will select and begin using a substitute price source or index to establish the Monthly Asphalt Binder Price Index.

## D. Supplemental Items Subject to Adjustment

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 will be determined accordingly.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR PAYMENTS TO SUBCONTRACTORS

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## **109.11 PAYMENTS TO SUBCONTRACTORS** (Replace with the following:)

The Code of Federal Regulations requires that Contractors pay subcontractors, suppliers, and vendors promptly for work performed or materials provided, and release retainage promptly after the subcontractor, supplier, or vendor completes the work or provides materials certifications. The Department has established that, when criteria for payments are met, 15 calendar days is a reasonable time to make payment or release retainage, and requires that payment be made within that time. The 15 calendar day period for subcontracted work or materials and services provided will commence on the date the Contractor receives payment from the Department for the work. If the Contractor holds retainage for subcontracted work or materials/services provided, the 15 calendar day period shall commence on the date that the Resident Engineer determines that the subcontracted unit or portion of the Contract has been completed in accordance with Subsection 105.17, "Project Completion and Acceptance," or the project is deemed complete by the Department. Services provided to a Contractor for support of construction operations or as deemed necessary by the Contractor for upkeep of machinery or facilities used directly or indirectly for construction operations shall be paid within 15 calendar days of the last service provided. If payment is not made for work, material or services, or if retainage is not released within the required 15 calendar day period, the subcontractor will be entitled to make a formal written complaint to the Department detailing the amounts and date due, and the work performed or material provided. The Department will then institute a formal investigation and, if warranted, conduct a formal hearing. Upon a finding that the Contractor failed to perform in accordance with the terms of the Contract requirements, the Department may impose sanctions as provided in Subsection 102.04, "Refusal of Proposals," Subsection 102.14, "Rejection of Proposal," or both.

A subcontractor may initiate a request for a determination that a subcontracted unit or portion of the Contract has been completed by making a written request for such determination to the Resident Engineer, with a copy to the Contractor, as provided in Subsection 105.17, "Project Completion and Acceptance." At the time the written request is made, the subcontractor shall have submitted to the Resident Engineer required documentation including material certifications, payrolls, and other such documents as may be required to audit the completed work. If the Resident Engineer, upon inspection, finds that a unit or portion of the Contract has been satisfactorily completed, the Resident Engineer will report the fully audited final quantities to the Contractor and the subcontractor. Upon receipt from the Resident Engineer of a determination that the subcontracted work is deemed complete, the audited final quantities and payment for those quantities, the Contractor shall release any retainage held within 15 calendar days. However, if the Contractor or Subcontractor working under the direction of the Contractor damages the work, the Contractor shall repair or replace the damaged work at no additional cost to the Department to the satisfaction of the Contract requirements and the Resident Engineer.

Failure of the Contractor to complete Contract work within the designated Contract Time or accumulation by the Contractor of deductions due to producing non-specification work may result in the

assessment of negative progressive estimates representing the Department's overpayment to the Contractor for a given Contract period. The assessment of negative progressive estimates does not relieve the Contractor of the requirements for prompt payment of subcontractors and for timely release of retainage. However, if the subcontractor's work is directly responsible for the liquidated damage or non-specification work deduction, such deduction may be assessed against that subcontractor. Amounts thereafter due to the subcontractor will be the balance owed for the work less the imposed deductions.

Payment disputes between the Contractor and subcontractors relating to allocation of chargeable Contract Time and any resultant Liquidated Damages, quantity or quality of items of work subject to a subcontract or other agreement shall be referred to a neutral alternative dispute resolution forum for hearing and decision with the costs for such mediation or arbitration to be shared equally by the parties. Funding for mediation of payment disputes involving Disadvantaged Business Enterprises is available from the Department through the DBE Supportive Service Program. Such services are reimbursed by the Federal Highway Administration and are authorized by 23 CFR § 230, Subpart B. The Contractor shall include a clause in any subcontract notifying the subcontractor of their right to resolution of payment disputes through alternative dispute resolution mechanisms.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR PAYMENT FOR MATERIAL ON HAND

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 109.7 PAYMENT FOR MATERIAL ON HAND

## **A.** Payment Before Incorporation (Replace with the following:)

The Department may pay for material purchased by the Contractor before the material is actually incorporated into the project under the following conditions:

- The Contractor specifically purchased the material for incorporation into the work;
- The material meets the Contract requirements;
- The Contractor delivered the material to the project, other approved locations, or an approved fabricator's yard;
- The Contractor will store the material longer than 60 calendar days;
- The material is not living, perishable, or susceptible to degradation through weather or other natural phenomenon through the anticipated period of storage; and
- The Contractor can verify the purchase of the material with paid invoices.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR

## OSAGE NATION MINERAL RESERVATION SANDY SOIL MINING PERMIT SBR-257B(079)SB, JP NO. 31074(04), OSAGE COUNTY

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 202.04 CONSTRUCTION METHODS

## A. Excavation and Borrow

- (1) Unclassified Excavation (Add the following:)
  - (c) Osage Nation Mineral Reservation Sandy Soil Mining Permit

Apply for a Sandy Soil Mining Permit through the Bureau of Indian Affairs when constructing projects in which excavation of material will only occur within the project limits on the Department's right-of-way and only requires the movement of road fill within the project limits. Submit the application along with the following:

- Any application fees associated with obtaining the permit
- Submission of a one-time flat royalty payment of \$500
- (2) Muck Excavation (Add the following:)
  - (a) Osage Nation Mineral Reservation Sandy Soil Mining Permit

Apply for a Sandy Soil Mining Permit through the Bureau of Indian Affairs when constructing projects in which excavation of material will only occur within the project limits on the Department's right-of-way and only requires the movement of road fill within the project limits. Submit the application along with the following:

- Any application fees associated with obtaining the permit
- Submission of a one-time flat royalty payment of \$500
- (3) Rock Excavation (Add the following:)
  - (a) Osage Nation Mineral Reservation Sandy Soil Mining Permit (For Excavation Within the Limits of the Department's Right-Of-Way)

Apply for a Sandy Soil Mining Permit through the Bureau of Indian Affairs when constructing projects in which excavation of material will only occur within the project limits on the Department's right-of-way and only requires the movement of road fill within the project limits. Submit the application along with the following:

- Any application fees associated with obtaining the permit
- Submission of a one-time flat royalty payment of \$500

## (b) Osage Nation Mineral Reservation Sandy Soil Mining Permit (For Aggregate Production and Processing)

If aggregate production and processing of excavated material within the Osage Nation Mineral Reservation is utilized, the contractor shall pay a royalty of ten percent (10%) of the material cost at the nearest shipping point, not including freight and/or installation cost. This royalty shall be made payable to the Osage Minerals Council. However, any aggregate material purchased from a commercial quarry and produced from the Osage Nation Mineral Reservation, upon which a royalty fee has been paid, shall not be subject to any further royalty fee for use by the contractor.

## (4) **Borrow** (Add the following:)

## (a) Osage Nation Mineral Reservation Sandy Soil Mining Permit

Apply for a Sandy Soil Mining Permit through the Bureau of Indian Affairs when constructing projects requiring the use of an off-site borrow pit within the Osage Nation Mineral Reservation and transported off the borrow site to the project limits on the DEPARTMENT's right-of-way. Submit the application along with the following:

- Any application fees associated with obtaining the permit
- Pay an annual minimum royalty fee of \$100 pursuant to the terms of the Sandy Soil Lease
- Pay a royalty fee of ten percent (10%) of the material cost at the nearest shipping point, not including freight and/or installation cost, for Sandy Soil borrow material excavated from a borrow bit within the Osage Nation Mineral Reservation

Submit applications for Sandy Soil Mining Permits to the following:

Agency Archeologist Bureau of Indian Affairs Osage Agency P.O. Box 1539 Pawhuska, Oklahoma 74056 (918) 287-5700

Submit a copy of the approved Sandy Soil permit to the resident engineer prior to beginning work on the project.

## 202.06 BASIS OF PAYMENT

All costs of the Sandy Soil Mining Permit and associated fees shall be considered incidental to the work specified in the contract. There will be no additional payment for this cost.

Expenses associated with the work required to reestablish the borrow pit to the conditions specified in the Contract, or as agreed between the Department and the property owner will be borne by the Contractor, including costs of materials, labor, equipment, and permits.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR LONGITUDINAL JOINT DENSITY ON ASPHALT CONCRETE PAVEMENT

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## 411.04 CONSTRUCTION METHODS

**J. Joints** (Add the following:)

## (1) Longitudinal Joint Density

For each lot, or sublot at locations where roadway density tests are to be taken, perform a joint density evaluation at each pavement edge that is or will become a longitudinal joint. Determine the joint density in accordance with OHD L-14, Appendix B. The joint density is considered failing if the density at the joint is more than 3.0 pcf below the density at the random sample location at the same station and the measured (by core or correlation) joint density is less than 90%.

Investigate joint density failures and take corrective actions during production and placement to improve the joint density. Suspend production if two (2) consecutive evaluations fail unless otherwise approved. Resume production after the Engineer approves changes to production or placement methods.

# OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR WARM MIX ASPHALT

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## **411.01 DESCRIPTION** (Add the following:)

Warm Mix Asphalt (WMA) is defined as an asphalt binder and aggregate mixture which, by additive or process, can be produced and placed at a reduced temperature from normal HMA temperatures. WMA requirements are the same as for HMA except where noted.

## 411.04 CONSTRUCTION METHODS

## K. Compaction

(1) General (Add the following:)

Ensure that the WMA immediately behind the paver is at least 215°F [102°C].

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR COMPACTION OF HOT MIX ASPHALT

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

(Revise as follows:)

## 411.04 CONSTRUCTION METHODS

## K. Compaction

## (2) Acceptance

(a) Layers At Least 1½ in [38 mm] Thick (Replace the first paragraph with the following:)

Ensure the target density of each lot is 94 percent of the Maximum Theoretical Density, determined by the specific gravity of the HMA in accordance with AASHTO T 209.

(Replace Table 411:2 with the following:)

Table 411:2 Pay Adjustments for Lot Density		
Pay Adjustment Factor (PAF) <sup>a</sup> % of Maximum Theoretical Density	Average Lot Density (ALD)	
> 97.0	Unacceptable <sup>b</sup>	
92.0 – 97.0	1.00	
91.0 – 91.9	1.00 - (0.07)(92.0 - ALD)	
88.1 – 90.9	0.93 - (0.15)(91.0 - ALD)	
< 88.1	Unacceptable b	

<sup>&</sup>lt;sup>a</sup> Use PAF for Roadway Density in the Combined Pay Factor equation in accordance with Subsection 411.04.N.(2).(a), "Basis of Acceptance and Payment."

<sup>&</sup>lt;sup>b</sup> Unless otherwise directed by the Engineer, remove and replace unacceptable lots at no additional cost to the Department.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR FIBER-REINFORCED POLYMER MATERIAL

These special provisions amends and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

(Add the following:)

## **524.01 DESCRIPTION**

This work consists of structural strengthening using Fiber-Reinforced Polymer (FRP) composite wrap. Fiber may be either Carbon (CFRP) or E-Glass (EGFRP) as specified in the plans. Reference is made to ACI 440.2R-02 Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures.

## **524.02 MATERIALS**

## A. Material Properties

Provide a unidirectional, high-strength fiber fabric fully saturated with compatible epoxy resin per manufacturer's recommendations. Provide FRP which meets or exceeds the following requirements:

Table 524:1 FRP Cured Laminate Properties		
Property	CFRP	EGFRP
Tensile Strength*	550 ksi [3,800 MPa]	330 ksi [2,270 MPa]
Tensile Modulus*	33,000 ksi [227 GPa]	10,500 ksi [72.4 GPa]
Ultimate Elongation*	1.50%	4.00%
Weight	9 oz/yd² [300g/m²]	27 oz/yd² [900g/m²]

<sup>\*</sup>Verified by ASTM D3039 test procedure

Provide flexible, waterproofing, non-vapor barrier protective top coating compatible with the FRP manufacturer's recommendations to protect the FRP from ultraviolet radiation and mild abrasion. Match the color and texture of the protective top coating to adjacent concrete.

## B. Product Data

Provide to the Engineer a copy of the Manufacturer's Safety Data Sheets (MSDS) for all materials to be used on site and certification that the materials conform to local, state, and federal environmental and worker safety laws and regulations. Include mechanical, physical, and chemical properties, and material specifications for the proposed primer, putty, resin, saturant, fiber, and protective top coating. Provide to the Engineer the manufacturer's maintenance recommendations for the protective top coating and the complete FRP system.

## **524.03 EQUIPMENT**

Furnish all materials, tools, equipment, transportation, necessary storage, access, labor and supervision required for the proper application of the composite system.

## **524.04 CONSTRUCTION METHODS**

Provide a technical representative from the composite system manufacturer at the start of work. Use a contractor certified by the manufacturer by means of written verification to install the composite system. In addition, provide the names of the applicator's key personnel (superintendent and assistant) who will perform the actual work with the written verification from the manufacturer. The Engineer may suspend the work if an unauthorized composite system is substituted for an authorized composite system, or if unauthorized personnel is substituted for authorized personnel during construction.

## A. Shop Drawings

Provide complete shop drawings for each installation of the composite system. Show details of the number and thickness of layers, orientation of the layers, joint and end details, and locations to be applied in accordance with the plans and specifications. Show locations of all gaps and laps.

### B. Calculations

When plans show a minimum and/or maximum required strength for shear or flexure, provide complete calculations to the Bridge Engineer for approval. Design the composite system, per ACI 440.2R-02 Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures to achieve the structural performance shown on the structural drawings for required tensile forces and strain limits. Provide calculations stamped by a Registered Professional Engineer, registered in the state of Oklahoma.

## C. Delivery and Storage

Deliver epoxy materials in factory-sealed containers. Verify that the manufacturer's labels are intact and legible (including brand, system identification number, and batch number) with verification of date of manufacture and shelf life. Store materials in a protected area at a temperature between 35°F [2°C] and 100°F [38°C]. Store products according to the manufacturer's requirements and avoid contact with moisture. Do not use components that have exceeded their shelf life.

## D. Concrete Repairs

Epoxy inject all cracks in the concrete surface wider than 0.01 in. [0.3 mm] in accordance with Section 520 "Structural Concrete Repair by Sealing and Injection". Allow epoxy used for crack sealing to cure in accordance with the manufacturer's recommendations. Apply pneumatically placed mortar to the dimensions shown on the plans or as specified by the Engineer in accordance with Section 521. Ensure that pneumatically applied mortar is cured as specified in subsection 521.04.D.(4).

## E. Surface Preparation

Once all concrete repairs are made and cured, prepare concrete substrate surfaces to promote continuous intimate contact between the FRP and the concrete by providing a clean, smooth, and flat or convex surface. Grind away all irregularities, unevenness, and sharp protrusions to provide less than 1/16 in [2 mm] surface profile deviation. Fill all voids or depressions of diameters larger than ½ in or depths greater than 1/8 in with a type G epoxy in accordance with 701.13.B.(7), or as approved by the fiber-reinforced polymer (FRP) manufacturer. At a minimum, allow all patching materials to cure a minimum of 2 days and reach a minimum of 3,000 psi [21 MPa] compressive strength prior to installation of the FRP wraps. Round or chamfer all inside and outside corners and sharp edges to a minimum radius of ½ in [13 mm]. Remove all laitance, dust, dirt, oil, foreign particles, disintegrated materials, and any other matter that could interfere with the bond of the concrete to the FRP using abrasive or water blasting techniques. Apply corrosion inhibitor in accordance with Special Provision 535-1, "Surface Applied Penetrating Corrosion Inhibitors." Ensure that the inhibitor product will not interfere with the bond of the fiber-reinforced polymer material using techniques recommended by the inhibitor manufacturer.

## F. Application of Composite Fabric

Insure that all patch work is complete and cured. Verify ambient and concrete temperatures are between 35°F [2°C] and 100°F [38°C]. Maintain epoxy curing temperatures in the temperature range designated for the formulation used. Temperature cure ranges and times to be determined by manufacturer. Protect the composite system from contact by moisture for a minimum of 24 hours. Prepare the epoxy matrix by combining components at a weight (or volume) ratio specified on the manufacturer's labeled units, with an allowable tolerance of  $\pm$  10%. Mix the components of epoxy resin with a mechanical mixer until uniformly mixed, typically 5 minutes at 400-600 rpm. Saturate and monitor the fabric according to manufacturer's specified fiber-resin ratio. A previously calibrated saturator can be used to achieve the specified ratio. Completely saturate fabric prior to application of contact surfaces in order to assure complete impregnation of fabric. Have a properly trained supervisor verify that saturation is correct. Measure and combine the epoxy resin and fabric and deposit uniformly at the rates shown on the approved working drawings and per manufacturer's recommendations. Completely saturate all fibers of the composite system with epoxy resin per proper ratio.

## G. Installation

Unless otherwise provided by the manufacturer, install the FRP fabric as follows:

- (1) Broom clean surfaces to receive the FRP.
- (2) Use a roller or trowel, apply one prime coat of thickened epoxy resin to the concrete surface [2 mil minimum [50 µm]]. Allow primer to become tacky to the touch.
- (3) Saturate fabric with epoxy matrix through calibrated saturator or according to manufacturer's specified fiber-resin ratio.
- (4) Apply saturated fabric to concrete surface by hand lay-up, using methods that produce a uniform, constant tensile force that is distributed across the entire width of fabric. Under certain application conditions the system may be placed entirely by hand methods assuring a uniform, even final appearance. Provide gaps when the length of member to be wrapped exceeds 5 ft

[1.5 m]. Use 2 in [50 mm] gaps spaced at 2 ft [0.6 m] centers. The gaps should only occur parallel to the primary fiber direction (the material would need to be continuous in the primary fiber direction). In cases where the primary direction of the fibers are placed both horizontally and vertically, provide a 2 in [50 mm] square gap every 2 ft [0.6 m] in both directions. Ensure that the gaps are completely free of all epoxy resin products used to bond FRP. Provide a lap length of at least 6" [150 mm] at all necessary over-laps in the longitudinal direction of the fabric.

- (5) Apply subsequent layers, continuously or spliced, until designed number of layers is achieved, per project drawings.
- (6) Using a roller or hand pressure, insure proper orientation of fibers, release or roll out entrapped air, and ensure that each individual layer is firmly bedded and adhered to the preceding layer or substrate.
- (7) Apply a final coat of thickened epoxy. Detail all fabric edges, including butt splice, termination points, and jacket edges, with epoxy.
- (8) Apply fire coating (if required) per manufacturer's published installation procedures in accordance with UL and Warnock Hersey testing and per ICBO ES Evaluation Report.
- (9) Apply top coat of paint as specified between 24 and 72 hours after final application of epoxy. Use paints that allow vapor transmission at gaps. Remove dust and residue prior to application of paint coats. If after 72 hours the epoxy is cured, the surface must be roughened by sanding or brush blasting.
- (10) System may incorporate structural fasteners but limitations and detailing must be verified with composite system manufacturer.
- (11) Record batch numbers for fabric and epoxy used each day, and note locations of installation. Measure square footage of fabric and volume of epoxy used each day.

## H. Testing

After the initial resin has cured at least 24 hours, perform the following test:

- Visually inspect for any defects in the FRP wrap.
- · Tap or sound any areas suspected to contain air pockets.
- Perform two direct pull-off tests for every 300 square feet wrapped in accordance with ASTM D7522. Ensure when testing prestress beams not to score the substrate more than ¼ in [6 mm]. Accept pull-off tests which fail in the concrete substrate (failure mode G) and not at the interface between the FRP and the concrete. At the discretion of the Engineer, pull-off tests may be performed at locations of similar substrate near the FRP installation area. Prepare test samples using identical application procedures at the same time that the project FRP is installed. Repair the damaged FRP and concrete at test areas after testing is complete.

## I. Repairs

Repair all defects (including bubbles, delaminations, and fabric tears) spanning more than 5% of the surface area as directed by the Engineer. Perform two types of repairs as follows:

- Inject or back-fill small defects (on the order of 6 inches [150mm] diameter) with epoxy.
- Inject bubbles less than 12" [300 mm] in diameter with epoxy by drilling two small holes into the bubble. The holes will allow injection of the epoxy and escape of entrapped air.
- Repair bubbles and delaminations greater than 12" [300 mm] in diameter by removing and re-applying the required number of layers of the composite and the required finish coatings.
   Small entrapped air pockets and voids naturally occur in mixed resin systems and do not require repair or treatment.

## **524.05 METHOD OF MEASUREMENT**

Measure by the square foot of FRP applied for the specified thickness or number of layer as indicated on the plans.

## **524.06 BASIS OF PAYMENT**

The Department will pay for each pay item at the contract unit price per the specified pay unit as follows:

Pay Item:	Pay Unit:	
CARBON FIBER-REINFORCED POLYMER	Square Feet [Square Meter]	
E-GLASS FIBER-REINFORCED POLYMER	Square Feet [Square Meter]	

The Department will consider the cost of all materials, equipment, labor, and incidentals necessary for proportioning, mixing, delivery, storage, handling, surface preparation, installation, sampling, testing, repairs and curing of the fiber-reinforced epoxy composite system to be included in the unit price bid for fiber-reinforced polymer.

Payment for epoxy injection will be in accordance with 520.06.

Payment for Pneumatically Placed Mortar will be in accordance with 521.06.

Payment for type G epoxy and surface applied penetrating corrosion inhibitor to be including in price bid for fiber-reinforced polymer (FRP).

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR SURFACE APPLIED PENETRATING CORROSION INHIBITORS

These special provisions amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

(Add the following:)

## 535.01 DESCRIPTION

This work consists of treating concrete surfaces with a penetrating corrosion inhibitor. The corrosion inhibitor is intended to treat reinforcing steel 1 to 3 in [25 to 75 mm] beneath concrete surfaces which have been contaminated with chlorides and may not be exposed at the time of treating.

#### 535.02 MATERIALS

Provide surface applied corrosion inhibitors that are *organofunctional silane* based. Use corrosion inhibitors that are designed to work on both anodic and cathodic areas. Use surface applied corrosion inhibitors on the Materials Engineer's list of approved products.

For a surface applied corrosion inhibitor to be considered for inclusion on the list of approved products, provide test data showing satisfactory test results from an approved independent testing laboratory as determined by the Materials Engineer. Include the manufacturer's name, test results and dates. Provide test results in accordance with FHWA RD-98-153 test protocol on crack slab black bars subjected to 48 weeks of cyclic salt water ponding. Demonstrate a 90% corrosion reduction using this test procedure.

## 535.03 EQUIPMENT

#### A. General

Furnish equipment meeting the requirements of Subsection 108.06, "Methods and Equipment," and the recommendations of the manufacturer of the corrosion inhibitor. Use spray equipment, brushes or rollers as recommended by the manufacturer.

## **B.** Surface Preparation Equipment

With written approval from the manufacturer, any of the following may be used:

## (1) Abrasive Blasting

Provide compressed air pressure type abrasive blasting equipment of proper size and capacity to clean concrete surfaces as specified.

## (2) Shot Blasting

Provide portable type machine designed especially for cleaning horizontal concrete surfaces utilizing recyclable steel shot blast techniques.

## (3) Hot Water Pressure Washers

Provide hot water pressure system for cleaning concrete surfaces as specified, utilizing 160°F [70°C] minimum water temperature at 3,500 psi [25 MPa] nozzle pressure.

## (4) Hydroblast Washer

Provide high pressure cold water washer unit for cleaning concrete surfaces as specified, using 7,000 psi [50 MPa] nozzle pressure.

## C. Application

Use low-pressure spray equipment as recommended by the manufacturer.

## 535.04 CONSTRUCTION METHODS

#### A. General

Follow the manufacturers recommendations for surface preparation and application. Keep traffic off treated surfaces until the treated surfaces have completely dried.

## B. Work Plan

Before starting work, submit to the Engineer a work plan describing the treatment procedures to be used. Include the following in the work plan:

- The identification of the treatment system to be used by brand name, name of manufacturers and a copy of the manufacturer's unabridged application procedures
- A description of the surface preparation methods and equipment to be used
- · A description of the application methods and equipment to be used
- · Weather limitations

## C. Surface Preparation

Clean all concrete surfaces as specified by the corrosion inhibitor manufacturer to be treated before applying the penetrating corrosion inhibitor treatment system. Clean all exposed reinforcing steel. Remove all traces of curing compound, existing coatings, laitance, dirt, dust, salt, oil, asphalt, algae, moss, or any other foreign materials. Use equipment as approved by the corrosion inhibitor manufacturer and in accordance with Subsection 535.03.B, "Surface Preparation Equipment." Provide a minimum profile in accordance with ICRI Guideline No. 03732 CSP-2. Obtain approval prior to use from the corrosion inhibitor manufacturer for any cleaning agents, solvents, hand tools, or detergents. If a water method is used for cleaning, remove any standing water or excess moisture, which may

delay surface drying or restrain surface penetration of the treatment system. Use brush, broom, sweeper or compressed air on surfaces as final cleaning before application.

## D. Application

## (1) General

Apply the corrosion inhibitor as shown in the Plans and as directed by the Engineer in accordance with the manufacturer's recommendations. Apply corrosion inhibitor to an area at least one foot beyond the perimeter of the areas to be treated in all directions. Unless otherwise recommended by the manufacturer, apply inhibitor directly to exposed reinforcement.

## (a) Column and Pier Cap Encasements Including FRP Wraps (6" - 9" Encasements)

Apply corrosion inhibitors to *contaminated concrete* prior to encasing concrete sections or wrapping with FRP. Remove all traces of the inhibitor product remaining on the concrete surface prior to encasing, patching or applying FRP wraps.

## (b) Concrete to Be Patched Without Encasement

Apply corrosion inhibitor after the patches have been placed and the fresh concrete has been cured for a minimum of 28 days.

### (2) Weather limitations

Apply the penetrating corrosion inhibitor in accordance with the manufacturer's recommendations and as follows:

- When the air and concrete surface temperatures are above 40°F [4°C] and less than 100°F [38°C]
- When the wind speeds are 15 mph [24 km/hr] or less
- When there has not been any precipitation in the last 72 hours
- Do not apply if the ambient temperature is expected to be below freezing within 12 hours of application.
- Do not apply when precipitation will occur in less than 8 hours after application.
- Comply with any other manufacturer's recommendations for weather limitations or seasonal limitations.

## (3) Fugitive Dye

Add a fugitive dye to the corrosion inhibitor for visual field inspection.

#### (4) Treatment Application

Notify the Engineer at least one week in advance of the application of treatment system so that the Engineer may inspect the work. Unless otherwise recommended by the manufacturer, apply two coats of corrosion inhibitor at a rate specified by the manufacturer. Apply inhibitor with a low-pressure spray equipment or as specified by the manufacturer. Apply additional coats as directed by the manufacturer's technical representative and in accordance with the manufacturer's

instructions. Confirm application of the corrosion inhibitor using a black light and reapply inhibitor as necessary. Carefully rinse concrete surface to remove any remaining residue from the surface.

## E. Sampling and Testing of Bridge Decks and Approaches

Field test to verify penetration will be required for deck slabs and approach slabs. No field testing will be required for pier caps, columns, prestress beams, or reinforced concrete T-beams. For bridge decks only, test silane based inhibitors in accordance with Subsection 515.04.C, "Sampling and Testing of Bridge Decks and Approaches."

## F. Acceptance

Silane based inhibitors for bridge decks will be accepted in accordance with subsection 515.04.D.(2), "Bridge Decks and Approach Slab Surfaces."

## 535.05 METHOD OF MEASUREMENT

Corrosion Inhibitor (Surface Applied) will be measured by the square yard [square meter] of treated concrete surface area.

## 535.06 BASIS OF PAYMENT

The Department will pay for accepted quantities, measured as provided above, at the contract unit price for:

Pay Item:	Pay Unit:
CORROSION INHIBITOR (SURFACE APPLIED)	Square Yard [Square Meter]

Payment will be considered full compensation for furnishing all materials, equipment, labor, testing, and incidentals necessary for mixing, delivery, storage, handling, surface preparation, and application.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR WARM MIX ASPHALT MATERIAL REQUIREMENTS

These Special Provisions amend and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 708.04 COMPOSITION OF MIXTURES (Add the following:)

## F. Warm Mix Asphalt

Unless otherwise shown on the plans, mixtures produced as Warm Mix Asphalt (WMA) will be accepted at the Contractor's option. For WMA, mixing temperatures may be reduced. Unless otherwise directed, use only WMA additives or processes listed on the Department's approved list maintained by the Materials Division. The Materials Division Engineer may accept new additives or processes with sufficient evidence of performance.

Prepare WMA mix designs in general accordance with AASHTO R 35 except where modified by these specifications. WMA requirements are the same as for HMA except where noted. When using the technology during a mix design, increase the oven aging period to four hours before preparing samples for moisture susceptibility and rut testing. Report the supplier's recommended temperatures for plant mixing and roadway compaction on the mix design. Report the supplier's recommended temperatures for laboratory mixing and compaction on the mix design.

For WMA using an additive technology, perform the mix design using the additive. For WMA designs that use a plant process, perform the mix design as an HMA mix design. If the laboratory has a foamer, the design may be performed using that process. Alternatively, use an existing approved HMA mix design except when the percent binder absorbed exceeds 1.00 percent. The percent binder absorbed formula is shown at the end of this paragraph. When the percent binder absorbed exceeds 1.00 percent, use the plant-produced WMA material for moisture susceptibility and rut testing. Report the additive or process used by name, supplier source, and application rate (if applicable) on the mix design.

$$P_{ba} = \frac{100 G_b (G_{se} - G_{sb})}{G_{se} G_{sb}}$$

Where:

P<sub>ba</sub> = Percent binder absorbed by total mass of aggregate,

 $G_b$  = Specific gravity of the binder,

G<sub>sc</sub> = Effective specific gravity of the combined aggregates, and

 $G_{sb}$  = Bulk specific gravity of the combined aggregates.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR HAMBURG RUT TESTING OF HOT MIX ASPHALT

These special provisions amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## **708.04 COMPOSITION OF MIXTURES** (Revise the following:)

Remove references to APA rut depth in Tables 708:8, 708:9, 708:10, and 708:11.

Add the following Table between Tables 708:11 and 708:12:

Table 708:11a Hamburg Rut Test Requirements <sup>a, b</sup>				
Binder Grade	Minimum Number of Passes to 12.50 mm Rut Depth, Tested at 122 °F			
PG 64	10,000			
PG 70	15,000			
PG 76	20,000			

Note: For the purposes of this table PG64, PG70, and PG76 refer to the high temperature grade of the binder.

## **708.06 SAMPLING AND TESTING** (Amend Table 708:13 to include the following:)

Table 708:13				
Sampling and Testing of Aggregates, Bituminous Mixtures, and Asphalt Materials				
Materials	Testing Method			
Bituminous Mixtures				
Rutting susceptibility using the Hamburg Rut Tester	OHD L-55			

<sup>&</sup>lt;sup>a</sup> Rut test requirements apply to Superpave, SMA, and RIL mixes only.

<sup>&</sup>lt;sup>b</sup> Pre-existing mix designs meeting the APA rut requirements may be accepted by the Materials Engineer.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR PLANT MIX BITUMINOUS BASES AND SURFACES (SUPERPAVE)

These special provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

**708.02 MINERAL AGGREGATE** (Replace Table 708:1 with the following:)

Table 708:1 Physical Properties of Aggregates											
		Aggregates to be used in:									
Test	Superpave		Stone Matrix Asphalt	Permeable Friction Course	Rich Bottom Layer	Open Graded Friction Surface Course	Open Graded Bituminous Base				
	PG64	PG70	PG76	PG76	PG76	PG64	PG76	PG64			
L.A. Abrasion <sup>a</sup> , % wear	≤ 40	≤ 40	≤ 40	≤ 30	≤ 30	≤ 40	≤ 30	≤ 40			
Micro-Deval <sup>a</sup> , % wear			≤25	≤25	≤25	<u></u>	≤ 25				
Sand equivalent b	≥ 40	≥ 45	≥ 50			≥ 40					
Mechanically Fractured Faces <sup>b. c, h</sup> , %	≥ 85/80	≥ 95/90	≥ 98/95	≥ 98/95	≥ 98/95	≥ 85/80	≥ 98/95	≥ 85/80			
Aggregate Durability Index <sup>a</sup>	≥ 40	≥ 40	≥ 40	≥ 40	≥ 40	≥ 40	≥ 40	≥ 40			
Insoluble Residue <sup>d.e</sup> , %	≥ 30	≥ 40	≥ 40	≥ 40	≥ 40		≥ 40				
Flat and Elongated b, c, f, %	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10			
Natural Sand and Gravel <sup>b</sup> , %	≤ 15	≤ 15	≤ 15	0	0	≤ 15	0	0			
Clay Balls and Friable Particles <sup>g</sup> , %	≤ 1.0	≤ 1.0	≤ 1.0	0	0	≤ 1.0	0	0			
Soft Particles *, %	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5			
Sticks or Roots <sup>a</sup> ,	≤ 0.5	≤ 0.5	≤ 0.5	0	0	≤ 0.5	0	0			

## Table 708:1 Physical Properties of Aggregates

Note: For this table: PG64, PG70, and PG76 refer to the high temperature grade of the binder. Unless otherwise noted, specifications for PG binder grades higher than PG76 will use PG76 specifications.

- <sup>a</sup> Applies to each source.
- <sup>b</sup> Applies to the combined aggregate.
- <sup>c</sup> Applies to the aggregate retained on the No. 4 [4.75 mm] sieve.
- <sup>d</sup> Applies to the combined coarse aggregate.
- <sup>e</sup> Applies to the coarse aggregate in the surface course. Does not apply to shoulders, driveways, and temporary detours.
- <sup>1</sup>A flat and elongated piece has a length greater than five times the thickness.
- <sup>2</sup> Applies to combined aggregate. If the maximum for the combined aggregate is not exceeded, the Department will allow 1.5% for one source.
- <sup>h</sup> In the mechanically fractured faces requirement format "xx/yy," "xx" is the minimum percentage of coarse aggregate requiring one fractured face, and "yy" is the percentage requiring two fractured faces.

## 708.04 COMPOSITION OF MIXTURES

## A. Asphalt Mix Design and Initial Job-Mix Formula (Replace the 3<sup>rd</sup> paragraph with the following:)

Ensure the initial JMF is in accordance with Tables 708:6, 708:8, and 708:9, or Tables 708:7, 708:8, and 708:9 for the type of mix required by the Contract. Prepare a trial mixture in accordance with Subsection 411.04.C. Propose changes to the JMF if the trial, prepared at the initial JMF proportions, fails to meet the requirements of Tables 708:6, 708:10, 708:11, and 708:12, or Tables 708:7, 708:10, 708:11, and 708:12. If the changes do not produce a mix design in accordance with these tables, the Resident Engineer will require a new mix design. If the changes do produce a mix design in accordance with these tables, the Department's Materials Engineer will approve the changes for adjustment of the JMF.

## **B.** Plant Produced Mixtures (Replace the 1<sup>st</sup> and 2<sup>nd</sup> paragraphs with the following:)

Provide a uniform, plant produced mixture of the combined aggregate and asphalt in accordance with Tables 708:6, 708:10, and 708:11, or Tables 708:7, 708:10, and 708:11 within the specification limits established by the JMF with allowable tolerances.

After the plant is in operation, propose any necessary adjustments to the JMF in accordance with Table 708:6 or Table 708:7. If test results indicate the adjustments are in accordance with Tables 708:10 and 708:11, adjust the JMF accordingly.

## **C.** Reclaimed Asphalt Pavement (Replace the 2<sup>nd</sup> paragraph with the following:)

Regardless of the layer or binder type, the Department's Materials Engineer will accept superpave mixtures with no greater than 25 percent RAP for shoulders, driveways, and layers serving as a bond breaker under PCC pavements if the mixture meets the Contract requirements for the type or grade. Superpave mixtures containing up to 35 percent RAP will be accepted in temporary detours if the mixture meets the Contract requirements for the type or grade, and if the mixture can be produced meeting air quality standards set forth by the Oklahoma Department of Environmental Quality. Temporary is defined as any material that will not become part of any permanent pavement. Temporary material must be removed before the end of the project.

(Replace Table 708:6 with the following:)

Table 708:6 Mixtures for Superpave							
Sieve Size *		Percent Passin	g per Superpav	e Mixture Type			
Sieve Size	S2	S3	S5	<b>S</b> 6			
1½ in [37.5 mm]	100		AAAAA PARA				
1 in [25.0 mm]	90 - 100	100			Management		
3/4 in [19.0 mm]	≤ 90	90 – 100	100	10-10-10-10-1	*********		
1/2 in [12.5 mm]		≤ 90	90 – 100	100			
3/8 in [9.5 mm]			≤ 90	90 – 100	100		
No. 4 [4.75 mm]	≥ 40			≤ 90	80 - 100		
No. 8 [2.36 mm]	29 – 45	31 – 49	34 – 58	37 – 67	54 – 90		
No. 16 [1.18 mm]							
No. 30 [0.600 mm]					was a second		
No. 50 [0.300 mm]					Manada Andrews		
No. 100 [0.150 mm]							
No. 200 [0.075 mm]	$1.0 - 7.0^{\ b}$	$2.0 - 8.0^{\ b}$	2.0 - 10.0 b	2.0 - 10.0 b	5.0 - 15.0		
Other Mixture Requi	rements						
NMS °	1 in [25 mm]	¾ in [19 mm]	½ in [12.5 mm]	% in [9.5 mm]	No. 4 [4.75 mm]		
Asphalt Cement d, %	≥ 3.9	≥ 4.3	≥ 4.8	≥ 5.3	≥ 5.8		
of mix mass	≥ 3.9	≥ 4.3	≥ 4.0	∠ 3,3	≥ 3.8		
Performance grade	e	e	e	e	c		
asphalt cement							

<sup>\*</sup> Table 708:6 reflects the sieve size boundaries for design and JMF purposes. After the design is established, the JMF will designate combined aggregate sieve requirements with tolerances in Table 708:12.

<sup>&</sup>lt;sup>b</sup> Ensure the ratio of the percent passing the No. 200 [75 μm] sieve to the percent effective asphalt cement is from 0.6 to 1.6.

<sup>&</sup>lt;sup>c</sup> Nominal Maximum Size (NMS) is defined as one size larger than the first sieve to retain more than 10 percent.

<sup>&</sup>lt;sup>d</sup> The Department's Materials Engineer may adjust the lower limit if the effective specific gravity of the combined aggregates is greater than 2.65. The Department's Materials Engineer may allow adjustments if a theoretical lab molded specimen at the JMF asphalt content meets the VMA requirement at 4% air voids.

<sup>&</sup>lt;sup>e</sup> The Contractor may substitute a higher grade of asphalt than that shown on the Plans at no additional cost to the Department.

(Replace Table 708:8 with the following:)

<b>Table 708:8</b>									
PG64		PG76			PG64				
{									
6	7	8							
50	65	80	50	50	50				
% of G <sub>mm</sub>									
85.5 – 91.5	85.5 <i>–</i> 90.5	85.5 – 89.0							
96.0	96.0	96.0	96.0	≤ 82.0	98.0				
See Table 708:9									
		See Table 708	:9						
≤ 12.5	≤ 12.5	≤ 12.5	≤ 12.5		≤ 12.5				
0.80	0.80	0.80	0.80		0.80				
		≥75			**********				
**********			≤ 0.20	≤ 0.20	***************************************				
10,000	15,000	20,000	20,000		5,000				
	PG64 yrations 6 50 % of G <sub>mm</sub> 85.5 − 91.5 96.0  ≤ 12.5	Mix Design Properties of La Superpave           PG64         PG70           yrations         6         7           50         65           % of G <sub>mm</sub> 85.5 - 90.5           96.0         96.0           ≤ 12.5         ≤ 12.5           0.80         0.80           —         —           10,000         15,000	Mix Design Properties of Laboratory Molde           Superpave         PG64         PG70         PG76           yrations         8         9	Mix Design Properties of Laboratory Molded Specimer           Superpave         SMA           PG64         PG70         PG76         PG76           yrations         96.0         PG76         PG76         PG76           yrations         96.0         96.0         S0         S0 <td>Mix Design Properties of Laboratory Molded Specimens           Superpave         SMA         PFC           PG64         PG70         PG76         PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG78           PG79           PG79     </td>	Mix Design Properties of Laboratory Molded Specimens           Superpave         SMA         PFC           PG64         PG70         PG76         PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG76           PG78           PG79           PG79				

Note: For this table: PG64, PG70, and PG76 refer to the high temperature grade of the binder. Unless otherwise noted, specifications for PG binder grades higher than PG76 will use PG76 specifications.

(Replace Table 708:9 with the following:)

<b>Table 708:9</b>								
	Mix Design Properties of Laboratory Molded Specimens							
D			Superpav	e		C/B/F A	DEC	DDI
Property	S2	S3	S4	S5	S6	SMA	PFC	RBL
VMA*, %	≥ 12.5	≥ 13.5	≥ 14.5	≥ 15.5	≥ 16.5	≥ 17.0		≥ 14.0
VFA, b, %	67 - 73	70 - 75	72 - 77	73 - 78	75 - 79		Wildelmann	

<sup>&</sup>lt;sup>a</sup> VMA is based on the bulk specific gravity of the aggregates.

<sup>&</sup>lt;sup>a</sup> Indirect Tensile Strength from AASHTO T 283, preconditioned specimen average, in psi.

<sup>&</sup>lt;sup>b</sup> VFA is defined as the percentage of VMA containing asphalt binder.

	Table 708:10 Field Properties of Laboratory Molded Specimens								
Th	T TOTAL TO	Superpave			PFC	RBL			
Property	PG64	PG70	PG76	PG76	PG76	PG64			
Number of SGC G	C Gyrations								
N <sub>ini</sub>	6	7	8						
$N_{des}$	50	65	80	50	50	50			
Required Density,	% of G <sub>mm</sub>								
N <sub>ini</sub>	85.5 – 91.5	85.5 – 90.5	85.5 – 89.0						
$N_{des}$	94.5 - 97.4	94.5 - 97.4	94.5 - 97.4	94.5 - 97.4	≤ 82.0	96.5 - 99.4			
VMA, %	See Table 708:11								
VFA, %			See Table 708	:11					
Lab									
Permeability,	ACT OF THE PARTY O	***************************************	National Confession of Confess						
$cm/s \times 10^{-5}$									
TSR, Min.	0.75	0.75	0.75	0.75		0.75			
ITS <sup>a</sup> , psi									
Draindown, %									
Hamburg Rut									
Test, Min. No.									
of Cycles to		-			***************************************				
12.50 mm,									
122 °F						***************************************			

Note: For this table: PG64, PG70, and PG76 refer to the high temperature grade of the binder. Unless otherwise noted, specifications for PG binder grades higher than PG76 will use PG76 specifications.

## (Add the following:)

<b>Table 708:11</b>								
	Field Properties of Laboratory Molded Specimens							
Duamante		Superpave SMA DEC DRI					RBL	
Property	S2	S3	S4	<b>S5</b>	<b>S6</b>	SMA	PFC	KDL
VMA <sup>a</sup> , %	≥ 12.0	≥ 13.0	≥ 14.0	≥ 15.0	≥ 16.0	≥ 16.5		≥ 13.5
VFA, b, %								

 $<sup>^{\</sup>circ}$  VMA is based on the bulk specific gravity of the aggregates. Compute a new bulk specific gravity from each AASHTO T 209 test. Calculate the value by multiplying the aggregate Effective Specific Gravity ( $G_{se}$ ) calculated from the latest AASHTO T 209 test by the aggregate Bulk Specific Gravity ( $G_{sb}$ ) from the design. Afterwards, divide the product by the aggregate  $G_{se}$  from the design.

<sup>&</sup>lt;sup>a</sup> Indirect Tensile Strength from AASHTO T 283, preconditioned specimen average, in psi.

<sup>&</sup>lt;sup>b</sup> VFA is defined as the percentage of VMA containing asphalt binder.

## 708.06 SAMPLING AND TESTING

(Delete the following row from Table 708:13 under the "Aggregates" section:)

Uncompacted void content of fine aggregate	AASHTO T 304, Method A
(Delete the following row to Table 708:13 under the "Bituminous M	Aixtures" section :)
Rutting susceptibility using the asphalt pavement analyzer	OHD L-43
(Add the following row to Table 708:13 under the "Bituminous Mix	tures" section :)
Rutting susceptibility using the Hamburg Rut Tester	OHD L-55

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR MULTIPLE STRESS CREEP RECOVERY (MSCR) TESTING

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## **708.03 ASPHALT MATERIALS** (*Replace Table 708:2 with the following:*)

Table 708:2 Additional Requirements to AASHTO M 320 for Asphalt Cement								
Test   PG 64-22 OK   PG 70-28 OK   PG 76-28 O								
MSCR Recovery a, 147.2°F [64°C], %		≥50	≥80					
Separation <sup>b</sup> , %		≤10	≤10					
Original DSR G*/sin(δ), kPa	≤2.50	≤2.50	≤2.50					
RTFO DSR G*/sin(δ), kPa	≤5.50	≤5.50	≤5.50					
PAV DSR Change in testing temperature, °F [°C]		77 [25]	77 [25]					
Spot test <sup>c</sup>	Negative		***************************************					
Flash point, °F [°C]	≥500 [260]	≥500 [260]	≥500 [260]					
Solubility in trichloroethylene, %	≥99	≥99	≥99					

Note: Asphalt binder suppliers will provide handling requirements and recommended field mixing and compaction temperatures for their product to the hot-mix producer.

#### 708.06 SAMPLING AND TESTING

(Revise Table 708:13 to add the following row to the Asphalt Materials section):

Table 708:13					
Sampling and Testing of Aggregates, Bituminous Mixtures, and Asphalt Materials					
Materials	Testing Method				
Multiple Stress Creep Recovery (MSCR) Test of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)	AASHTO TP 70				

(Revise Table 708:13 to remove the following row, and its associated footnote:)

Elastic recovery test by means of ductilometer <sup>c</sup>	ASTM D 6084

<sup>&</sup>lt;sup>a</sup> AASHTO TP 70 average percent recovery at 3.2 kPA, R<sub>3.2</sub>.

<sup>&</sup>lt;sup>b</sup> Separation test samples are prepared in accordance with ASTM D 5976, but are reported as the difference in G\* between the top and bottom samples.

<sup>&</sup>lt;sup>c</sup> Spot test using solvent blend of 65 percent heptane and 35 percent xylene by volume.

# OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR TEMPORARY TRAFFIC SIGNALS SBR-257B(079)SB, J/P 3107404, Osage County

These special provisions amend and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

#### 823.01 DESCRIPTION

This work consist of furnishing portable traffic signal systems as shown on the Plans, or as required by the Engineer.

## 823.03 EQUIPMENT

Provide one portable traffic signal system consisting of two signal units capable of dual indication. Include one additional signal unit to be held at the project site to replace a malfunctioning or damaged unit.

Maintain the system in good operating condition until the system is delivered to the specified destination. The Engineer will deem the system to be in good operating condition prior to delivery and acceptance.

# OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR TRAFFIC STRIPE (MULTI-POLYMER)

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## 856.02 MATERIALS

## A. Physical Properties of the Mixed Compound

(Replace Table 856:1 with the following:)

	Table 856:1 Color Requirements									
Chromaticity Coordinates										
	Federal 595 Color		1 2		3 4		1	Brightness (Y)		
	.01	Х	у	X	у	х	у	х	у	
White	17886	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	80 min
Yellow	13538	0.560	0.440	0.490	0.510	0.420	0.440	0.460	0.400	60 min - 70 min

## **B.** Multi-Polymer Composition

(Replace Table 856:4 with the following:)

Table 856:4 Multi-Polymer Composition			
Pigment Composition	Percent by Weight		
White:			
Titanium Dioxide Rutile (94% minimum purity, ASTM D476, Type III)	33 - 38		
Multi-Polymer Resin	60.0 - 82.0		
Yellow:			
Organic Non-Lead Yellow	7.0 - 8.0		
Titanium Dioxide (ASTM D476, Type III)	14.0 - 17.0		
Multi-Polymer Resin	77.0 - 79.0		

## C. Sampling and Certification (Replace with the following:)

Submit a Type A certification to the Department's Materials Division for each batch of stripe used on every project along with the Pretest Report for the glass beads.

- The Engineer may require a one (1) qt sample representing each batch of multi-polymer resin material be submitted to the Department's Materials Division.
- Ensure the manufacturer's multi-polymer striping is listed on the Department's Traffic Engineering Division's Qualified Products List (QPL).
- If the manufacturer makes any formulation changes to the multi-polymer striping material, ensure the manufacturer submits a written explanation of the changes to the formulation, the new physical and chemical properties for the resin, and a new material safety data sheet (MSDS) for the stripe to the Department's Traffic Engineer for re-evaluation and approval at least 30 days prior to its use.

## D. Non-Reflectorized Contrast or Shadow Markings (Replace with the following:)

Ensure the marking material used for the contrast or shadow marking conforms to the same formulation, material, and pre-approved sampling requirements, except for the following items:

- · Color pigments used
- · Color requirements listed
- Use 24 lb per 100 ft<sup>2</sup> min [10.8 kg per 10 m<sup>2</sup>], of a black, color-fast, medium mesh, anti-skid material

## **856.03 EQUIPMENT** (Add the following:)

Use equipment fitted with a functional data logging system equipment listed on the Department's qualified products list (http://www.okladot.state.ok.us/traffic/qpl/index.php). Ensure the data logging system is operational, calibrated, and in use prior to striping operations. Provide the Engineer with a certification that the data logging system equipment meets the manufacturer's recommended calibration, along with the manufacturer's recommendations for equipment calibration frequency.

## 856.04 CONSTRUCTION METHODS

## A. Surface Preparation (Replace with the following:)

Remove foreign material from the road surface before applying the dual component material. Ensure the pavement surface is dry.

Use abrasive blasting, grinding, or high-pressure water jet to remove existing, temporary, or permanent traffic markings until at least 95 percent of the underlying pavement is visible, unless otherwise specified by the manufacturer. Minimize interference between temporary pavement markings and the permanent dual-component pavement marking materials.

Remove the curing compound at least 1 in [25 mm] beyond the width of the marking. After removing the curing compound, sweep and use a high-pressure air spray.

## B. Pavement Temperature and Condition (Replace with the following:)

Apply dual component pavement markings to Portland cement concrete pavement surfaces at least 30 calendar days after paving, and new asphalt concrete pavement a minimum of three (3) calendar days after paving under the following conditions:

- On a dry roadway (no standing water or significant dampness),
- At a pavement surface temperature of at least 40 °F [4.4 °C] and rising, and
- At wind chill temperature of at least 35 °F [1.7 °C].

Measure the pavement surface temperatures 30 minutes before beginning striping installation. If critical temperatures exist, as determined by the Engineer, measure the pavement surface temperature every 1 hr to 2 hr, or at shorter intervals as directed by the Engineer, until the end of the day. Measure the pavement surface temperature with a standard surface temperature or infrared non-contact thermometer.

In the event that temperatures and conditions are not conducive to the installation of permanent pavement markings within the specified time frame, including time for curing of PC pavement, the Engineer may allow and accept the installation of temporary pavement markings in lieu of permanent markings at no additional cost to the Department until such time as the permanent markings can be installed. Maintain the temporary markings until temperatures and conditions are conducive for permanent striping. Furthermore, the Engineer may suspend the contract and/or milestone time until temperatures and/or conditions improve such that the permanent markings can be placed. In order for time suspension to be considered all contract work which is unaffected by the inability to place the permanent paving markings must be completed.

## **C.** Application (Replace with the following:)

Apply large glass beads at a coverage rate of at least 12 lb per 100 ft<sup>2</sup> [5.4 kg per 10 m<sup>2</sup>] before applying standard beads. Apply standard glass beads at a coverage rate of at least 12 lb per 100 ft<sup>2</sup> [5.4 kg per 10 m<sup>2</sup>]. For hand-machine applied markings, apply large glass beads at a coverage rate of at least 12 lb per 100 ft<sup>2</sup> [5.4 kg per 10 m<sup>2</sup>] before applying standard beads. Apply standard glass beads at a coverage rate of at least 12 lb per 100 ft<sup>2</sup> [5.4 kg per 10 m<sup>2</sup>].

Alternatively, for Portland cement concrete pavement apply a non-reflectorized contrast marking, of the same dimensions as the white skip lines shown on the plans, immediately after each upstream white skip line.

Use a computerized data logging system for monitoring the application of multi-polymer stripe to measure the thickness of the multi-polymer stripe. Collect data for any pavement marking application of 1,000 linear feet or greater. Report the following data as an average for each 1,000 feet:

• Application speed to the nearest 0.1 mph

- Weight (lbs) and/or volume (gallons as measured through a piston displacement pump mechanism) amount of material used by color
- Weight (lbs) of glass beads/elements used
- Pavement surface temperature (°F)
- Air temperature (°F)
- Dew point (°F)
- Humidity (%)
- Material application rates and film thickness over the section painted.

In addition to the above data, record the highway number with the beginning and ending reference point rounded to the nearest hundredth of a mile, project number, and job piece number.

Provide an electronic or printed record of the data to the Engineer daily. The Engineer may determine that more frequent submission is necessary, particularly if equipment malfunctions occur. Produce either the printed or electronic records in their final form prior to the records being removed from the striping equipment (i.e. the Contractor presents this to the Engineer in the field). If only one record is produced at the striping equipment, the other may be produced in an office. However, present the first record to the Engineer prior to any of the data entering an office environment. Ensure the electronic record is a comma or space delimited text file, adequate for insertion into a computerized spreadsheet software package, or a spreadsheet format acceptable to the Engineer.

Provide the Engineer the above records for all longitudinal non-handwork line painted.

Prior to the start of striping operations, travel a distance of 100 ft to verify the consistency of physical and electronic measurements of distance traveled.

Ensure longitudinal and edge line markings meet the minimum mil thickness values in accordance with Table 856:5 for concrete pavement, and Table 856:6 for asphalt pavement:

Table 856:5 Minimum Mil Thickness (PC Pavement)			
mils Contract Unit Price Adjustme			
≥ 20	100%		
19 - 18	90%		
17 - 16	75%		
15 - 14	50%		
< 14	Remove and replace		

Table 856:6 Minimum Mil Thickness (AC Pavement)			
mils	Contract Unit Price Adjustment		
≥ 25	100%		
24 - 23	90%		
22 - 21	75%		
20 - 19	50%		
< 19	Remove and replace		

## E. Retro-reflectivity (Replace with the following:)

Measure stripes with a portable reflectometer that uses 30 m geometry in accordance with ASTM E1710 and the manufacturer recommendations. Ensure the manufacturer calibrates the reflectometer annually. Keep the annual calibration certification with the reflectometer. All reflectometer readings must be in conjunction with line thickness gauge measurements.

## (1) Minimum Retro-reflectivity

Ensure longitudinal markings on Portland cement concrete and asphalt concrete pavement surfaces meet the minimum retro-reflectivity values in accordance with Table 856:7.

### (2) Measurement

Measure retro-reflectivity of markings within 7 to 21 calendar days of placement, after removing loose beads.

Measure marking retro-reflectivity in the direction of traffic, except the Department will allow yellow skip stripes to be measured in either direction of travel. One measurement (multiple readings) will represent each 2,500 ft [762 m] lot of single-color longitudinal stripe. The Department will not allow readings for adjacent lots to be taken closer than 1,000 ft [305 m] from each other.

For solid longitudinal stripes, one measurement represents the average of five readings per lot, taken at 3 ft [1 m] intervals along a randomly selected 15 ft [4.5 m] section of solid stripe.

For longitudinal skip stripes, one measurement represents the average of six readings per lot, two readings taken from each of three adjacent skip stripes. The Department will not allow readings taken within the first or last 1 ft [0.3 m] of skip stripes.

For non-compliant measurements, the Engineer will require additional measurements to determine the extent of non-compliance.

The Department will not require measurements of the following:

- Stop-bars, crosswalks, gores, words, symbols;
- · Longitudinal striping installed using hand line machines; and
- Projects less than 1 mi [1.6 km] long.

Obtain the Engineer's approval in writing before using a mobile retro-reflectometer system as an alternative measurement method.

## (3) Acceptance

(Replace Table 856:6 with the following:)

Table 856:7 Minimum Retro-reflectivity (PC Pavement)				
1	White Yellow			
med/m²/lx	Pay Adjustment	mcd/m²/lx	Pay Adjustment	
≥ 500 *	100%	≥ 325 *	100%	
450 - 499 *	75%	275 - 324 *	75%	
300 - 449 *	50%	225 - 274 *	50%	
< 300	Remove and replace	< 225	Remove and replace	

<sup>\*</sup> The Contractor has the option to replace the stripe at no additional cost to the Department, or take the deduction.

(Add the following:)

	Table 856:8 Minimum Retro-reflectivity (AC Pavement)				
W	White Yellow				
mcd/m²/lx	Pay Adjustment	mcd/m²/lx	Pay Adjustment		
≥ 400 *	100%	≥ 250 *	100%		
350 - 399 *	75%	225 - 249 *	75%		
200 - 349 *	50%	175 - 224 *	50%		
< 200	Remove and replace	< 175	Remove and replace		

\* The Contractor has the option to replace the stripe at no additional cost to the Department, or take the deduction.

## **856.05 BASIS OF PAYMENT** (Replace the second paragraph with the following:)

The Department will consider the cost of preparing the pavement to be included in the contract unit price for the relevant pay item.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR CONSTRUCTION ZONE PAVEMENT MARKINGS

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## **857.01 DESCRIPTION** (Add the following:)

This work consists of removing pavement markings along with other debris from asphalt concrete and Portland cement concrete pavement surfaces.

## **857.02 MATERIALS** (Add the following:)

Provide potable water. Lake or river water will not be allowed. Use of chemicals, abrasive materials, grinders, detergents or salt water will not be allowed.

## **857.03 EQUIPMENT** (Revise as follows:)

## A. General

Apply pavement markings in accordance with the manufacturer's recommendations. Use a paint machine and a bead dispenser in accordance with Subsection 854.03, "Equipment," to apply the painted construction traffic stripe. Use equipment for removing pavement markings that will not damage the pavement surface or pavement material texture.

(Add the following:)

## B. Hydroblasting Equipment

Use cleaning or pavement marking removal equipment capable of removing 100% of the pavement marking using high-pressure water. Ensure the equipment is capable of maintaining 36,000 psi water pressure at a maximum flow rate of 16 gpm. Provide a self-propelled vehicle with all functions programmable and repeatable for long lines of road marking removal. The removal head must be capable of rotating at a minimum of 1,500 rpm. Ensure the equipment is capable of removing a minimum of 1,200 linear feet of 4 inch strip per hour.

Use trolley mounted water jetting equipment to remove pavement markings in areas inaccessible to the truck mounted equipment such as hatched areas, words, arrows and symbols. Ensure the equipment is capable of maintaining 36,000 psi water pressure. The removal head must be capable of rotating at a minimum of 1,500 rpm.

Use equipment capable of removing the traffic stripe from the surface, including cracks, to thoroughly remove all dust, dirt, and other foreign materials without causing damage to the surface by etching or exposing coarse aggregate. Use a wet vacuum in conjunction with the removal head to remove all debris to a secure holding tank on the truck. After removal of the pavement markings leave the surface clean and ready to accept the new road marking once drying has occurred.

Operate all equipment in the same direction as traffic flow.

Ensure all equipment meets applicable OSHA requirements.

#### 857.04 CONSTRUCTION METHODS

## **D.** Removal (Replace with the following:)

If a detour or permanent pavement markings conflict with the permanent pavement markings of the next traffic control phase, remove as approved by the Engineer before switching traffic. Remove existing pavement markings and replace with temporary markings before roadway opens to traffic. Remove temporary pavement markings before installing final striping.

When additional pavement marking is necessary due to overlays, redirection of traffic, restoration, or Engineer direction, start the pavement marking within 24 hr of notification from the Engineer.

Remove the removable pavement marking and adhesive, as directed by the Engineer. Install additional pavement markings according to traffic conditions, as approved by the Engineer. Immediately dispose of removed pavement marking tape and pavement markers.

Remove pavement markings without damaging the pavement surface, or pavement material texture. Pavement material texture will be considered damaged if more than 5 mils are removed below the original stripe. Repair any damage to the pavement surface and joints caused by the Contractor's operation at no additional cost to the Department. Obtain the Engineer's approval of the proposed method of repair prior to performing the repair.

The Department will not allow painting over or blotting out the existing pavement markings. When removing pavement markings, immediately remove the residue using a vacuum attachment operated concurrently with the operation, or by other methods approved by the Engineer.

When the method of Hydro-blasting is utilized, the work shall be performed at locations shown on the plans or as directed by the Engineer. Thoroughly remove the specified pavement markings such that the markings are no longer visible to highway users, and/or to the satisfaction of the Engineer.

Operation of the ultra-high pressure water jets shall be performed and supervised by qualified personnel certified by the equipment manufacture. Do not perform work unless the ambient temperature and pavement temperature is a minimum of 34 degrees Fahrenheit.

Use collection systems to prevent the escape of debris. If spills or releases occur, immediately cease operations, clean up the debris, and take appropriate corrective actions to prevent similar releases from occurring.

Properly dispose of wastes generated during the pavement marking removal, in compliance with all applicable federal, state and local laws, regulations, and rules.

Ensure the work site is clear of visible debris at the end of each work day.

## 857.05 METHOD OF MEASUREMENT (Add the following:)

Pavement Marking Removal (Traffic Stripe) will be measured by linear foot of four inch wide traffic stripe where a narrower or wider stripe is to be removed, that is, prorated to a four inch strip. Count each unit of arrows, words or symbols to be removed.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR PORTABLE LONGITUDINAL BARRIER

These special provisions amend and where in conflict, supersede applicable sections of the 2009 Standard Specifications for Highway Construction, English and Metric.

## **877.02 MATERIALS** (*Replace with the following:*)

Provide materials in accordance with the following sections:

Material:	Section:
Portland Cement Concrete, Class A	701
White Concrete	701.14
Reinforcing Steel	723

Submit alternative designs for approval by the Engineer before starting the manufacture of concrete barriers. The Engineer will consider alternative and special design features influencing the casting of a section, and attachments or holes that facilitate the handling and lifting of a section. Ensure alternative designs meet the exterior dimensions as shown on the Plans and performance criteria in accordance with NCHRP 350 test level three (TL-3) guidelines.

The Contractor may choose to utilize a steel barrier section in lieu of a concrete barrier section. The steel barrier system must be approved for use and listed on the ODOT Traffic Division Qualified Products List (QPL). Ensure the steel barrier system meets all performance criteria in accordance with NCHRP-350 test level three (TL-3) guidelines.

Ensure all structural elements for the steel barrier system are fabricated from galvanized steel. Ensure all bolts, nuts and washers are galvanized.

## **877.04 CONSTRUCTION METHODS** (Replace with the following:)

At the locations shown on the Plans, or as directed by the Engineer, provide crashworthy impact attenuators or end treatments for portable longitudinal barrier systems. Ensure the portable longitudinal barrier systems and end treatments satisfy the NCHRP Report 350 for test level three (TL-3) guidelines. Submit certified test results meeting the test and performance criteria in accordance with NCHRP 350 guidelines.

Deliver, locate, and align the portable longitudinal barrier system as shown on the Plans, or as directed by the Engineer. Ensure the surface between the portable longitudinal barrier system and the edge of the traveled way is smooth, without edge drop-offs, holes, depressions, or slope changes.

When the Project no longer requires portable longitudinal barriers to protect the work site or traveling public, remove the barriers and hardware from the Project.

If utilizing Department owned portable longitudinal barrier, deliver it to the Department storage facility shown on the Plans upon completion of the work requiring its use. At the storage facility, stockpile the barrier sections and store hardware in sturdy containers marked for future use.

## A. Concrete Longitudinal Barrier

Before casting the portable longitudinal barrier, notify the Engineer of the casting site and start date. Mix, place, finish, and cure the longitudinal barriers in accordance with Subsection 627.04, "Construction Methods."

Submit written certification indicating barrier fabrication in accordance with the Specifications before delivering portable longitudinal barriers to the Project.

Prevent damage to longitudinal barrier sections and hinges during fabrication, storage, handling, and placement. Repair minor chipping, spalling, and scars as directed by the Engineer. Make repairs, or replace damaged sections and hinges at no additional cost to the Department.

Finish surfaces supporting the portable longitudinal barrier units to provide a full and uniform bearing over the entire bearing area. Correct bearing defects as approved by the Engineer. Connect or join units as shown on the Plans. Align joint units horizontally and vertically to present a uniform appearance.

## B. Steel Longitudinal Barrier

Construct the steel barrier system from a series of individual sections. Ensure each barrier section is no longer than 50 ft [15.24 m] and no shorter than 13 ft [4 m]. Anchor each end section of the barrier to the roadway in accordance with the manufacturer's recommendations. Accomplish barrier system section connections in accordance with the manufacturer's recommendations.

## **877.05 METHOD OF MEASUREMENT** (Add the following:)

Measure *Deliver Portable Longitudinal Barrier* as the quantity of Department approved Contractor owned barrier delivered to the project, and placed in its first functional location and removed from its last functional location on the project.

Measure *Relocation of Longitudinal Barrier* as the quantity of barrier moved from one functional location to another functional location on the project site, when specified on the plans.

## **877.06 BASIS OF PAYMENT** (Replace with the following:)

The Department will pay for each pay item at the contract unit price per the specified pay unit as follows:

Pay Item:	Pay Unit:
(A) Deleted	
(B) DELIVER PORTABLE LONGITUDINAL BARRIER	Linear Foot [Meter]
(C) RELOCATION OF PORTABLE LONGITUDINAL BARRIER	Linear Foot [Meter]

The Department will pay 80 percent of the contract unit price for *Deliver Portable Longitudinal Barrier* upon delivery and placement of the portable longitudinal barrier to the project in its first functional location, as shown on the Plans. The Department will pay the remaining 20 percent after removal of the barrier from its last functional location on the Project.

For *Relocation of Portable Longitudinal Barrier*, the Department will pay the contract unit price after the barrier is moved from one functional location to another functional location within the project limits, as shown on the Plans.

## OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISIONS FOR PLASTIC DRUMS

These special provisions amend, and where in conflict, supersede applicable sections of the <u>2009</u> Standard Specifications for Highway Construction, English and Metric.

## **880.02 MATERIALS** (Replace with the following:)

## **B.** Construction Signing and Traffic Control Materials

### (10) Plastic Drums

Provide two-piece breakaway drums in accordance with the MUTCD. The drums must accommodate conventional barricade warning lights that are in accordance with the NCHRP 350, Category I device requirements. These drums will be used as channelizing devices for construction and maintenance operations.

Provide plastic drums at least 36 in [900 mm] high and at least 18 in [450 mm] wide regardless of orientation. The plastic drum must be capable of withstanding 60 mph [100 km/h] winds, turbulence created by vehicles, and repeated movements during construction and maintenance operations. Ensure the top portion of the unit deforms and breaks away from the base upon vehicular impact. Ensure the base remains in place, allowing the vehicle to pass over it. Ensure the base weighs at least 40 lb, and the outside edge does not exceed 4 in [100 mm]. Provide rubber base collars that are clean cut, the proper size, black in color, and not curved at the top edges. Ensure the maximum diameter of the base does not exceed 36 in [900 mm].

Provide bright orange plastic drums that resist color fading. Ensure the plastic drum is crash worthy in accordance with the NCHRP 350. Ensure sheeting surfaces provide maximum adhesion of reflective sheeting to the drum body.

Provide weather tight drums designed to accept horizontal, circumferential bands of reflectorized sheeting, 4 in to 6 in [100 mm to 150 mm] wide. Provide drums with a D-shaped configuration at the base attachment point to minimize rolling after impact. Provide drums with enclosed tops, and drains to prevent water accumulation. Ensure that stacking the drums will not damage the reflective surface. Ensure each drum allows the attachment of two Type A or Type C conventional barricade warning lights. Provide warning lights capable of remaining attached during repeated impacts at speeds of at least 55 mph [88 km/h] and in accordance with NCHRP 350.

Provide drums that have alternating fluorescent orange and white horizontal circumferential stripes of retro-reflectorized sheeting. Ensure there shall be a minimum of two fluorescent orange and two white stripes, beginning with a fluorescent orange stripe at the top of the drum. If there are non-reflectorized spaces between the horizontal orange and white stripes, ensure they are no more than 2 in [50 mm] wide. Ensure the non-reflectorized portions of the drum are orange. Provide reflective sheeting that meets the requirements of the latest ASTM D4956, and the Federal Highway

Administration Luminance Factor for fluorescent orange, Type VI reboundable sheeting (see Table 880:2).

Table 880:2				
Luminance Factor, Y <sub>T</sub>				
Sheeting Type	Min	Max	Fluorescence Luminance Factor Limit Y <sub>F</sub>	
Fluorescent Orange	25	None	15	

## **OSAGE COUNTY**

**DIVISION 8** 

J/P: 31074(04)

## SH 11 REHAB BRIDGE OVER BIRD CREEK, 0.1 MI S JCT US 60

## U.S. ARMY CORPS OF ENGINEERS

## NO PRECONSTRUCTION NOTICE REQUIRED PERMIT

DATE OF AUTHORIZATION: December 24, 2019
DATE OF EXPIRATION: March 18, 2022

INDEX OF ATTACHMENTS

Nationwide Permit – NWP 3

Section 401 Clean Water Act

Water Quality Certification

Tulsa District Regional Conditions

#### Nationwide Permit 3 - Maintenance

Effective Date: March 19, 2017; Expiration Date: March 18, 2022 (NWP Final Notice, 82 FR 1860)

Nationwide Permit 3 - Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

- (b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.
- (c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

**Notification**: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act (Sections 10 and 404))

**Note**: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act section 404(f) exemption for maintenance.

Authority: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act

### A. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/ or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
- 3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
- 7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects

to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

- 9. **Management of Water Flows.** To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

#### 16. Wild and Scenic Rivers.

- (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre- construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.
- (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. **Tribal Rights.** No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

## 18. Endangered Species.

- (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If preconstruction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre- construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by

paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete preconstruction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide Web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.
- 19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. **Historic Properties.** (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting

parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

- (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. **Discovery of Previously Unknown Remains and Artifacts.** If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects

are no more than minimal:

- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).
- (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permitteeresponsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2- acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee- responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee responsible mitigation may be environmentally preferable if there are no mitigation banks or in- lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. **Water Quality.** Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of

water quality.

- 26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. **Use of Multiple Nationwide Permits.** Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3- acre.
- 29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the
property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will
continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit an
the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and
date below."

(Transferee)	)		
(Date)			

- 30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.
- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.
- 32. **Pre-Construction Notification.** (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
- (1) Name, address and telephone numbers of the prospective permittee;

- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require preconstruction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands. other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require preconstruction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
- (8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

- (9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and
- (10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.
- (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.
- (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- (2) Agency coordination is required for: (i) All NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
- (3) When agency coordination is required, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of

preconstruction notifications to expedite agency coordination.

#### B. District Engineer's Decision.

- 1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2- acre.
- 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.
- 3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than

minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) That the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### C. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

#### D. Definitions

**Best management practices (BMPs):** Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

**Compensatory mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term "discharge" means any discharge of dredged or fill material into waters of the United States.

**Ecological reference:** A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Ephemeral stream:** An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

**High Tide Line:** The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

**Historic Property:** Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

**Independent utility:** A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Indirect effects:** Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

**Intermittent stream:** An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from

rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that are filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

**Navigable waters:** Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open water:** For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

**Ordinary High Water Mark:** An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas.

**Perennial stream:** A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Preconstruction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where preconstruction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Protected tribal resources: Those natural resources and properties of traditional or customary religious or

cultural importance, either on or off Indian lands, retained by, or reserved by or for, Indian tribes through treaties, statutes, judicial decisions, or executive orders, including tribal trust resources.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: Reestablishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization. Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater management facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream channelization:** The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

**Structure:** An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

**Tidal wetland:** A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

**Tribal lands:** Any lands title to which is either: (1) Held in trust by the United States for the benefit of any Indian tribe or individual; or (2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

**Tribal rights:** Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

**Vegetated shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

**Waterbody:** For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

#### **ADDITIONAL INFORMATION**

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be accessed at http://www.swt.usace.army.mil/Missions/Regulatory.aspx or http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx



SCOTT A. THOMPSON Executive Director

### OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN Governor

February 24, 2017

Mr. Andrew R. Commer Chief, Regulatory Office U.S. Army Corps of Engineers, Tulsa District 1645 South 101st East Avenue Tulsa, OK 74128-4609

Re: Water Quality Certification for the U.S. Army Corps of Engineers (Corps) Nationwide Permits

Dear Mr. Commer:

The Department of Environmental Quality (DEQ) has received your request for a Water Quality Certification under Section 401 of the Federal Clean Water Act [33 U.S.C. §1251 et seq. (1972)], for activities to be permitted under the Nationwide Permits issued pursuant to Section 404 of the Act with an effective date of March 19, 2017. The Department of Environmental Quality rules governing 401 Certification are contained in Oklahoma Administrative Code (OAC) 252:611-3-1 through 252:611-3-6 pursuant to 27A Oklahoma Statue, Section 2-6-103(C)(2). For copies of the DEQ rules and regulations related to the 401 procedures, please access it online at www.deq.state.ok.us/rules/611.pdf or contact the DEQ Office of External Affairs at (800) 869-1400.

This Water Quality Certification supersedes all previous Water Quality Certifications for the Nationwide Permits in the State of Oklahoma.

The DEQ requests that all Pre-Construction Notifications (PCN) and information pertaining to any project, regardless of size, located within any designated Critical Resource Water which is proposed to be authorized under NWP 19, 20, 23, 27, 33, or 37 be provided to the DEQ. Additionally, the DEQ requests the opportunity to review and comment on these proposed actions following the time frames specified in the NWP General Condition 32. The DEQ will expedite the review and notification process when practicable. This request is not a condition of certification.

Water Quality Certification for Nationwide Permits 3, 13, 18, 41, 45, 46, and 53 is denied for all activities located within any designated Critical Resource Water.

Water Quality Certification for Nationwide Permits 49 and 50 are denied for all activities in all watersheds of Oklahoma. We are concerned that use of these permits could lead to more than minimal impacts on waters of the State.

For Nationwide Permit 16, Return Water From Upland Contained Disposal Areas, the certification is conditioned as follows: a DEQ approved set of Best Management Practices for sediment control in return water shall be submitted to the DEQ, approved, and implemented before commencing any discharge.

The DEQ acknowledges that the potential to use NWP 34, 48 or 54 in Oklahoma is not likely. However, for administrative clarity the Water Quality Certification is denied for NWP 34, 48, and 54.

U.S. Army Corps of Engineers Nationwide Permits February 24, 2017 Page 2

Subject to the exceptions noted above, the DEQ grants Clean Water Act 401 Water Quality Certification for the Corps Nationwide Permits subject to the following conditions:

- All spills of fuel or other pollutants in excess of five gallons shall be reported to the DEQ, within twenty-four (24) hours, to the pollution prevention hotline at 1-800-522-0206.
- 2. All fueling and servicing of vehicles and equipment shall be done above the Ordinary High Water Mark (OHWM).
- 3. The permittee shall provide access to the property for DEQ inspection purposes.
- 4. Any material and fuels used in the project shall be stored and/or stockpiled above the Ordinary High Water Mark (OHWM) and shall be removed from a likely flood zone prior to any predicted flood.
- 5. If a stormwater discharge permit for construction activities is required, one can be obtained from the DEQ at (405) 702-6100.
- 6. If the project is located on or may affect water impaired for turbidity and/or sediment, Best Management Practices and other controls shall be selected and implemented in order to control soil erosion and maintain compliance with Water Quality Standards (Oklahoma Administrative Code, Chapter 45). The permittee shall maintain sufficient records to document the type of practices implemented to maintain compliance with this condition, during the term of the permit. A copy of the current EPA-approved list of impaired waters (303(d) list) can be viewed at http://www.deq.state.ok.us/wqdnew/305b\_303d/index.html
- 7. For any project involving bank stabilization, the permittee shall consider installing bioengineering practices in lieu of structural practices (e.g. riprap) to minimize impacts to an aquatic resource and enhance aquatic habitat.

If you have any questions regarding this Certification, please contact Elena Jigoulina at (405) 702-8200.

Sincerely,

Joe Long, Environmental Programs Manager

Watershed Planning Section

Water Quality Division

David Carraway, Regulatory Project Manager, Regulatory Branch, Corps, Tulsa cc: J.D. Strong, Director, Oklahoma Department of Wildlife Conservation

Lauren Poulos, Life Scientist, Wetland Section, EPA Region 6

Julie Bays, Public Protection Unit Chief, Attorney General of Oklahoma

Brooks Tramell, Director, Monitoring, Assessment & Wetlands Programs, Oklahoma Conservation Commission

William Cauthron, Interim Director, Water Quality Programs Division, Oklahoma Water Resources Board,

Darrell Townsend II, Ph.D., Director, Ecosystems Management, Grand River Dam Authority

### Regional Conditions for all Nationwide Permits in Oklahoma March 21, 2017

- 1. <u>Unique Wetlands</u>: For all discharges proposed for authorization under nationwide permits (NWP) 3, 6, 7, 12, 14, 18, 19, 21, 23, 25, 27, 29, 39, 40, 41, 42, 43, 44, 49, 51, 52, 53, and 54, into the following habitat types or specific areas, the applicant shall notify the Tulsa District Engineer in accordance with the NWP General Condition 32, Pre-Construction Notification (PCN). The Corps of Engineers (Corps) will coordinate with the resource agencies as specified in NWP General Condition 32(d) (PCN). The habitat types or areas are:
  - a. <u>Pitcher Plant Bogs</u>: Wetlands typically characterized by an organic surface soil layer and include vegetation such as pitcher plants (*Sarracenia spp.*), sundews (*Drosera spp.*), and/or sphagnum moss (*Sphagnum spp.*).
  - **b.** <u>Bald Cypress-Tupelo Swamps</u>: Wetlands dominated by bald cypress (*Taxodium distichum*) and/or water tupelo (*Nyssa aquatic*).
- 2. <u>Designated Critical Resource Waters (CRWs)</u>: CRWs are Outstanding Resource Waters (ORWs) and their watersheds, and High Quality Waters (HQWs) designated by the State of Oklahoma in Appendix A of the Water Quality Standards (OAC 785, Chapter 45). The ORWs include all waters in the supporting watersheds, HQWs do not. Both ORWs and HQWs include adjacent wetlands. The current list of CRWs is available on the Corps website: http://www.swt.usace.army.mil/portals/41/docs/missions/regulatory/wqc/crw.pdf (See GC 22 Designated CRWs).
- 3. <u>Upland Disposal</u>: Except where authorized by Nationwide Permit 16, material disposed of in uplands shall be placed in a location and manner that prevents discharge of the material and/or return water into waters or wetlands unless otherwise authorized by the Tulsa District Engineer.
- **4. <u>Major Rivers</u>**: The prospective permittee shall notify the Tulsa District Engineer for all NWP 14 verifications which cross major rivers within Tulsa District. For the purposes of this condition, major rivers include the following: Arkansas River, Canadian River, North Canadian River, Cimarron River, Grand-Neosho River, Illinois River, Red River, Verdigris River, and Washita River.

"Indian Country" WQC: In its letter dated March 2, 2017, EPA, Region 6 denied water quality certification (WQC) of the 2017 NWPs for use in Indian Country¹ in the State of Oklahoma where a tribe has not received treatment in the same manner as a state for the Clean Water Act (CWA) Section 401 program. Rather, EPA is requiring anyone wanting to perform work, which may result in a discharge, on such Tribal land to obtain an activity-specific water quality certification or waiver from EPA before proceeding under the NWP. If the Corps receives a request for a NWP verification on Indian Country lands, for an activity which may result in a discharge, and the request is not accompanied by EPA's WQC, we will review and, if applicable, issue a provisional NWP verification with instructions for the applicant to contact EPA Region 6 for a site-specific WQC. A request to the Corps for NWP verification on Indian Country lands, for an activity which may result in a discharge, should be accompanied with an individual 401 water quality certification from EPA or a copy of the application to EPA for such certification. Requests for Indian Country WQC may be directed to EPA Region 6 via the following address:

Chief Wetlands Section U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 (6WQ-EM) Dallas, TX 75202

Pawnee Nation WQC: Tulsa District requested water quality certification (WQC) from the water quality certifying agencies in January 2017. As of the date of this document, the Corps has not received WQC from the Pawnee Nation, which is authorized to address WQC for the Trust lands as it has received treatment in the same manner as a state for the water quality standards and 401 certification programs. In the absence of a WQC from the Pawnee Nation, when the Corps receives a request for a NWP verification on Pawnee Nation lands, for an activity which may result in a discharge, and the request is not accompanied by Pawnee Nation's WQC, we will review and, if applicable, issue a provisional NWP verification with instructions for the applicant to contact the Pawnee Nation for a site-specific WQC. A request to the Corps for NWP verification on Pawnee Nation Trust lands, for an activity which may result in a discharge, should be accompanied with an individual 401 water quality certification from Pawnee Nation or a copy of the application to Pawnee Nation for such certification. Requests for Pawnee Nation WQC may be directed to the following address:

<sup>&</sup>lt;sup>1</sup> "Indian Country", as defined in 18 U.S.C. 1151, means: (1) all land within the limits of any Indian reservation under the jurisdiction of the United States government, not withstanding the issuance of any patent, and including rights-of-way running through the reservation; (2) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

Pawnee Nation of Oklahoma Division of Natural Resources and Safety 301 Agency Rd. Pawnee, OK 74058

State of Oklahoma WQC: The Oklahoma Department of Environmental Quality (ODEQ) has denied WQC for NWPs 3, 13, 18, 41, 45, 46, and 53 in Critical Resource Waters (CRWs); and 34, 48, 49, 50, and 54 in all waters. If the Corps receives a request for such a verification (without WQC), for an activity which may result in a discharge, and the request is not accompanied by ODEQs WQC, we will review and, if applicable, issue a provisional NWP verification with instructions for the applicant to contact ODEQ for a site-specific WQC. Such a request to the Corps for NWP verification, for an activity which may result in a discharge, should be accompanied with an individual 401 water quality certification from ODEQ or a copy of the application to ODEQ for such certification.

Subject to the exceptions referenced above, ODEQ granted Water Quality Certification (WQC) to the NWPs subject to the following conditions. The Corps has determined the following WQC standard conditions issued by the ODEQ on February 24, 2017, pursuant to Section 401 of the CWA, are acceptable for CWA Section 404 NWPs.

- 1. All spills of fuel or other pollutants in excess of five gallons shall be reported to the ODEQ, within twenty-four (24) hours, to the pollution prevention hotline at 1-800-522-0206.
- 2. All fueling and servicing of vehicles and equipment shall be done above the Ordinary High Water Mark
- 3. The permittee shall provide access to the property for ODEQ inspection purposes.
- 4. Any material and fuels used in the project shall be stored and/or stockpiled above the Ordinary High Water Mark and shall be removed from a likely flood zone prior to any predicted flood.
- 5. If a stormwater discharge permit for construction activities is required, one can be obtained from the ODEQ at (405) 702-6100.
- 6. If the project is located on or may affect water impaired for turbidity and/or sediment, Best Management Practices and other controls shall be selected and implemented in order to control soil erosion and maintain compliance with Water Quality Standards (Oklahoma Administrative Code, Chapter 45). The permittee shall maintain sufficient records to document the type of practices implemented to maintain compliance with this condition, during the term of the permit. A copy of the current EPA-approved list of impaired waters [303(d) list] can be viewed at http://www.deq.state.ok.us/wqdnew/305b 303d/index.html
- 7. For any project involving bank stabilization, the permittee shall consider installing bioengineering practices in lieu of structural practices (e.g. riprap) to minimize impacts to the aquatic resource and enhance aquatic habitat.

For Nationwide Permit 16, the ODEQ WQC is conditioned as follows: an ODEQ approved set of Best Management Practices (BMPs) for sediment control in return water shall be submitted to the ODEQ, approved, and implemented before commencing any discharge.

**NOTE:** <u>Invasive Species</u> - For all activities proposed for authorization under NWP, the applicant shall consider utilizing Best Management Practices (BMPs) to reduce the risk of transferring invasive plant and animal species to or from project sites. The following BMPs, as a minimum, shall be considered:

- a. Clean: Clean both the inside and outside of equipment and gear by removing all plants, animals, and mud and thoroughly washing the equipment using a high pressure spray nozzle. Equipment should be decontaminated in accordance with State of Oklahoma procedures prior to relocation.
- b. Drain: Drain all water from receptacles before leaving the area, including livewells, bilges, ballast, and engine cooling water on boats.
- c. Dry: Allow time for your equipment to dry completely before relocating in other waters. Equipment should be dried a minimum of 20 days prior to relocation. High temperature pressure washing (at least 140 degrees Fahrenheit) or professional cleaning may be substituted for drying time.

Expires: March 18, 2022

### OKLAHOMA DEPARTMENT OF TRANSPORTATION SECTI

ON 404 PERMIT APPLICATION FORM FOR STATE PROJECTS	<b>DATE:</b> 11/21/2019	
	-	

Project No.:	SBR-257B(079)SBJ/P:	31074(04)	Facility:	SH-11	County:	Osage			
Description:	Rehabilitation of bridge, SH-11 over Bird Creek								
Let Date:	May 2020		Division:	8	Programm	ned Construction Project	\$685,840.93		

Sta or Str. No.		Location		Waterbody	Description				Calculations					
	Latitude	Longitude	Legal	Critical Resource Water?	Type	Existing Structure/Condition	New Structure	Area acre	Cubic Yards of Fill*	Linear Feet of Impacts	Notes			
Structure name and Station from plans	Decimal Degrees	Decimal Degrees	Township, Range, Section	Name of Waterbody and if it is a Critical Resource Water	See below	Size, Type, and Condition of Structure	Size and Type of Structure	Area of Fill below OHWM	Cubic Yards of fill	Length of Impacts to Blue Line Stream	Number 1, 2, etc. List note description below			
Bridge A	36.6660°	-96.3139°	T25N, R9E, Section 2	Bird Creek	SB	70-70'-90'-90' PCB Spans, 42'-9" CLR Roadway		0.00	0.00	0.00	(1)			

BP-Bank Protection, CC-Channel Change, Chan-Channel Work, RCB-Reinforced Concrete Box, SB-Span Bridge,\*\* Wet-Wetlands, Misc-Miscellaneous Types:

\*Only necessary if impacts are over 0.1

\*\*Wetland Information will be added from the delineation report by ODOT

Notes:

(1) No impact to Channel

EIS: Pending: FHWA Approved Clearance type: Date: None: CE: FONSI/EA: Phone No: (405) 522-0734 Oklahoma Department of Transportation Applicant: Name: 200 Northeast 21st Street, Oklahoma City, OK 73105-3204 Address: Phone No: CEC Corporation **Application Prepared By:** Name: **Processing Agent:** Oklahoma Department of Transportation

CS000300

REQUIRED LABOR PROVISIONS SAP PROJECTS

1-1-81

REV. 5-20-91 REV. 10-14-96 REV. 9-1-97 REV. 8-21-07 REV. 6-23-08 REV. 6-19-09

State Aid Labor Provisions will govern on this project.

The minimum wage required per hour for labor employed on this project shall be as follows;

Unskilled Labor

\$7.25 Per Hour

Intermediate Labor

\$7.25 Per Hour

Skilled Labor

\$7.25 Per Hour

CS000350

SPECIAL LABOR PROVISIONS FOR PROJECTS FINANCED W/STATE FUNDS

10-27-97

These contract provisions shall apply to all work performed on the contract by the contractor.

These provisions are supplemental elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The Contractor shall pay not less than these rates.

The time books of the Contractor shall be open to the inspection of the Engineers at any time.

The wages of labor shall be paid promptly in legal tender of the United States, except that this condition will be considered satisfied in payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payment, the Contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

DATE: May 8, 2017

### OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

CS001600 SAMPLE MAINTENANCE BOND

04-17-17

KNOW ALL MEN BY THESE PRESENTS:

That, as Principa	•
and, a	
corporation organized under the laws of the state of	_and
authorized to transact business in the State of Oklahoma, as Suret	у,
are h e ld and firmly bound unto the State of Oklahoma, in the pend of	al sum
Of	
America, said sum being equal to the contract price, for the paymen	nt
of which, well and truly to be made, we bind ourselves and each	
of us, our heirs, executors, administrators, trustees, successors,	
and assignees, jointly and severally, firmly by these presents.	
DATED this day of,19 The condition of the	his
obligation is such that:	
WHEREAS, said Principal entered into a written Contract with the	
State of Oklahoma, Department of Transportation,	
dated, for	
SAMPLE	

all in compliance with the plans and specifications, therefore, made a part of said contract and on file in the office of the State of Oklahoma, Department of Transportation, 200 N.E. 21st Street, Oklahoma City, Oklahoma 73105.

Now, therefore, if said Principal for the period of one year after project completion, shall maintain said projects against any failure due to defective workmanship or materials, then this obligation to be void, otherwise to remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that this bond is extended to cover the payment of all labor and materials incurred in any maintenance or corrective work which may be required under the contract aforesaid.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no

hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure therein fixed shall have the effect of releasing the surety from the obligations of this Bond.

DATE: May 8, 2017

## OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

04-17-17

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to the hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written. ATTEST: (Corporation)

PRINCIPAL (Surety Seal)							
(SEAL)	Ву						
Secretary of the Corporation. In	ndividual-A Member of the Firm						
Vice President							
(Acknowledgment for Contractor)							
Subscribed and sworn to before me							
thisday of,	Surety						
	Ву						
Notary Public Its Atto	orney-in-Fact V. President						
APPROVED: State of Oklahoma, Dept.	Transportation						
My Commission Expires							
(NOTARY SEAL) By							
Director-Oklahoma Dept. Transportat	ion						

# OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

CZ002300

CONTRACT DISPUTE RESOLUTION PROCEDURE

OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR CONTRACT DISPUTE RESOLUTION PROCEDURE

Rev. 09-27-12

This Special Provision supplements and where in conflict supersedes the provisions of Sections 104.06, 105.18, 108.07, 109.04 and 109.10 of the 2009 Standard Specifications for Highway Construction, English and Metric, as applicable. Units of measurement are provided in the subsections in both English and Metric equivalents. The units applicable for this project will be those specified in the project plans.

CONTRACT DISPUTE RESOLUTION PROCEDURE

#### SECTION 1.

- Contractors and Resident Engineers should use all reasonable (a) efforts to reach accord as to changes and perceived changes in the nature and quantity of work to be performed. However, if the Contractor and the Resident Engineer cannot reach an immediate agreement which can be supported by a supplemental agreement under the contract or a change in plans, it will be the responsibility of the Contractor to initiate a claim. Claims must be initiated by providing oral notice of intent to file a claim followed, with written confirmation of the notice within seven(7) calendar days as provided in the Standard Specifications Section 104.06. The Contractor must provide written notice of intent to file a claim to the Resident Engineer identifying work which the Contractor believes is not covered by the contract before starting on the disputed work. If the Contractor believes that work in progress may, due to changed conditions, have become subject to a claim, the Contractor must submit his written notice of intent to file a claim before continuing with the affected work. The submission of a notice of intent to file a claim by a contractor in accordance with the Standard Specification Section 104.06 is a mandatory prerequisite for the consideration by the Department of any claim submitted under the terms of this contract. Failure to provide the required notice of intent to file a claim shall constitute a waiver of the claim. It is a condition precedent to any recovery on a claim under this Contract, that the Contractor must provide a written notice of intent to file a claim to the Resident Engineer pursuant to this Section 1.
- (b) The claim must be submitted in the form required by Section 105.18 within ninety (90) calendar days of completion of the disputed or affected work. Failure to submit the claim within ninety (90) calendar

1 OF 5

#### OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

days will preclude recovery of extra compensation or award of additional time for the disputed or affected work.

- (c) The claim will be complete and will contain all of the information and the certification required by Section 105.18 when submitted. Requests for additional compensation will be documented as required by Section 109.04. Only those items listed in Section 109.04 will be considered as compensable for disputed or affected work. Requests for extension of contract time for completion of disputed or affected work will be considered in accordance with Section 108.07. Requests for extension of contract time must be supported by a critical path method (CPM) schedules prepared in accordance with the Standard Specification Section 108.03(b) reflecting both the planned construction schedule and the actual sequence of the construction. Compensation for delays caused by disputed or affected work will be paid only for those items listed in Section 109.10.
- The Resident Engineer will review and respond to the claim pursuant to the provisions of Section 105.18(D). Time for claims review by the Resident Engineer as specified in Section 105.18 will begin upon receipt of the claim by the Resident Engineer and determination by the Resident Engineer that the claim is complete. A claim is complete when the claim contains all information specified by Section 105.18 and such additional supporting information or documents as the Resident Engineer may deem necessary for proper evaluation of a specific claim. If the Resident Engineer requires additional information or documentation, the Contractor shall have fifteen (15) calendar days from the date of the Resident Engineer's request to provide the required information or documentation. Failure to provide requested information or documentation within the specific time will preclude recovery of extra compensation or award of additional time for the disputed or affected work. It is specifically agreed by the parties herein that, as a condition precedent to appeal the denial of a Contractor's claim to the Director of Operations, the Resident Engineer must deny the Contractor's claim in whole or in part pursuant to, and in compliance with, the provisions of this Section 1.

#### SECTION 2.

- (a) In the event that a Contractor's claim is denied in whole or in part by the Resident Engineer, the Contractor may appeal this denial to the Director of Operations by:
- 1. Forwarding a copy of his claim in person or by certified mail with all supporting documents, the written response of the Resident Engineer if any, or a statement by the Contractor that no written response was issued by the Resident Engineer pursuant to Section  $105.18\,(D)$ , and any written agreement concerning the claim.

2 OF 5

#### OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

- 2. Submit a statement setting forth in detail the grounds upon which the Contractor appeals the Resident Engineer's decision.
- 3. The appeal must be submitted to the Director of Operations within thirty (30) calendar days of the denial of the claim. If the appeal is not submitted within this time frame, the decision of the Resident Engineer shall become final and binding.
- 4. It is a condition precedent to any recovery on a written appeal of any denial of a Contractor's claim under this Contract, that the Contractor must provide a written appeal to the Director of Operations at the Department of Transportation at 200 NE 21st St., Oklahoma City, OK 73105-3204
- Upon receipt of the appeal and all documents set forth in Subsection (a) of this section, the Director of Operations shall review the Contractor's claim and determine if additional documentation, information, or other factual data are required to make a final decision on the Contractor's claim. If additional information is required, the Director of Operations shall, within thirty (30) calendar days, notify the Contractor in writing stating what additional information is required. The Contractor shall thereafter have fifteen (15) calendar days to provide the requested information unless otherwise agreed in writing. Failure to provide the requested information within the time provided shall void any claims dependent upon such additional information and shall result in the decision of the Resident Engineer becoming final and binding as to all matters for which additional information was requested. Within forty-five (45) calendar days of receipt of the requested additional information, or if additional information is not requested within forty-five (45) calendar days of the receipt of the appeal, the Director of Operations may dispose of the claim by change order or supplemental agreement in accordance with Section 104.04 of the Standard Specifications. If no agreement is executed between the Department and the Contractor within that forty-five (45) calendar days, the Director of Operations within five (5) calendar days thereafter shall issue his decision on each item of the Contractor's appeal. The decision shall state, as to each item of the appeal, whether the item is approved in whole or in part, or disapproved. If all or part of an item is disapproved, the Director of Operations shall cite his basis for disapproval. The Director of Operations' decision shall be mailed to the Contractor by certified mail. In the event that the Director of Operations shall fail to issue his decision in the time provided in this section and any extensions agreed to in writing by the Department and the Contractor, the claim shall be deemed denied as to any matter not previously agreed to in writing and the Contractor may proceed with his claim as set forth in Section 3 to mediate the claim dispute or the Contractor will forfeit any further

#### OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

right to pursue the claim in any forum. It is specifically agreed by the parties herein that, as a condition precedent to mediating a Contractors claim, the Contractor's appeal must be denied in whole or in part by the Director of Operations pursuant to, and in compliance with, the provisions of this Section 2.

#### SECTION 3.

- (a) If the Contractor is dissatisfied with the final decision of the Director of Operations, the Contractor must request mediation of his claim in accordance with the most current Edition of the Construction Industry Mediation Rules of the American Arbitration Association, as such rules are herein modified. The request for mediation shall be made within forty-five (45) calendar days of the date of the Director of Operations' final decision or denial of the claim pursuant to the provisions of Section 2.
- (b) The Construction Industry Mediation Rules of the American Arbitration Association as applicable to Contractor's claims resulting from contracts with the Department are modified and amended to provide that the mediation shall be held at the Department of Transportation Building in Oklahoma City, Oklahoma, or at any other convenient location agreeable to the mediator and the parties.
- (c) Mediation may be continued as required to promote optimum utilization and success with this dispute resolution procedure. If mediation is considered at an impasse by the mediator, the mediator may terminate mediation as provided by the Mediation Rules. It is specifically agreed by the parties herein that, as a condition precedent to filing any legal action in the District Court of the State of Oklahoma, the Contractor's claim must be mediated pursuant to this Section 3, and the mediation must have been terminated under the Mediation Rules without a settlement agreement of the parties.

#### SECTION 4.

(a) If mediation is unsuccessful and the Contractor desires to further pursue resolution of a disputed claim, the Contractor may seek relief by filing an action in district court within ninety (90) days of the termination of mediation as provided by the laws of the State of Oklahoma. In all such instances, only those claims which have been presented for consideration in accordance with the Standard Specifications and the dispute resolution procedure provided in these special provisions may be the subject of an action in district court. In all such actions, venue shall be the District Court in Oklahoma County. It is specifically agreed by the parties to this contact that, as an exception to 12 O.S. Section 936, actions brought under this contract shall not be subject to the award of costs or attorney's fees to the prevailing party. It is specifically agreed by the parties that,

#### OKLAHOMA DEPARTMENT OF TRANSPORTATION BAMS/LAS - LETTING AND AWARD SYSTEM SPECIAL PROVISIONS

as a condition precedent to the filing of any Contractor claim, counterclaim, third-party claim or set off, and any recovery thereon in a legal action in district court, such Contractor claim, counterclaim, third-party claim or set off must have been included as part or all of the Contractor's claim presented pursuant to Sections 1, 2, and 3 of this Contract Dispute Resolution Procedure or it will be waived by the Contractor in any further action.

- (b) The Department and the Contractor may agree to jointly petition for any action to be referred for binding arbitration by order of the district court. As a part of any joint petition for binding arbitration, the parties shall stipulate that such arbitration shall be conducted under the most current Edition of Construction Industry Arbitration Rules of the American Arbitration Association and that such rules shall be modified and amended as follows:
- 1. Hearings shall be held at the Department of Transportation building in Oklahoma City, Oklahoma, except as may be otherwise agreed by the arbitrator and the parties.
- 2. Except as mutually agreed by the parties, the dispute shall be heard and determined by one neutral arbitrator.
- 3. The arbitrator shall not award interest, costs of the prosecution, or defense of the claim, or attorney fees.
- 4. The decision or award by the arbitrator when made shall be final and non-appealable except as provided in the Uniform Arbitration Act, 12 OS Section 1851 et seq. Both the Contractor and the Department of Transportation shall be bound by the arbitration award for all purposes, and judgment may be entered upon it in accordance with applicable law.

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CZ002850

NO.2 PROPOSAL SHEET

Jan., 1962 Rev. October 1986 Rev. January 1988

The undersigned, as bidder, declares under oath that the only person or parties interested in the foregoing proposal as principals are those named herein: that this proposal is made without either, directly or indirectly, entering into any agreement, participating in any collusion or otherwise taking any action in restraint of free competitive bidding in connection therewith; that the undersigned has no financial interest in, or other affiliations in a business way with any other bidder for the contract on this project; that careful examination of the form of contract, instructions to bidders, profiles, grades, specifications, an the plans has been made, and that careful examination of the locations, conditions and classes of materials of the proposed work has been made; and the undersigned agrees to provide all the necessary machinery, tools, apparatus, and other means of construction, and will do all the work and furnish all the materials called for in the contract and specifications in the manner prescribed therein and according to the requirements of the Engineer, at the unit price as above set forth.

It is understood that in case of any discrepancy between the plans, general specifications and the special provisions, the plans will govern over Standard Specifications and Supplemental Specifications; Supplemental Specifications will govern over Standard Specifications; Special Provisions will govern over Standard Specifications, Supplemental Specifications and plans.

The undersigned further proposes to enter into the contract and furnish satisfactory bond to the Department of Transportation within ten days of award to the undersigned; to commence work as directed by the work order from the Construction Engineer; and to complete the entire work within the allotted contract time after work is authorized. The time limit and other limiting conditions herein set forth are hereby accepted and if such requirements are changed by bidder, it is understood that such change will invalidate this bid.

In considering award of contract the Oklahoma Transportation Commission may require a s c hedule of equipment the bidder proposes to use on this project and a schedule showing progress to be made during construction.

Attached is a Certified or Cashier's Check or Bid Bond equal to five percent (5%) of the bid made payable to the Oklahoma Department of Transportation as a guarantee of good faith and which if the contract is awarded to the undersigned, it is agreed will be forfeited as liquidate damages to the State of Oklahoma in the event of failure of the undersigned to enter into contract and furnish satisfactory bond to the Department of Transportation within ten days after award.

CZ002975 \* BIDDER'S AFFIDAVIT - STATEMENT UNDER PENALTY BID PROPOSAL AFFIDAVIT STATEMENT UNDER PENALTY OF PERJURY OF PERJURY 09/29/11

Ι				as the	prospec	tive	
participant	or as the aut	horized ag	ent of				
the Firm, As	ssociation or	Corporatio	n submitt	ing th	is bid,	and with	n full
knowledge an	nd authority,	do hereby	make and	sign t	his unsw	orn stat	ement
under penalt	y of perjury:						

- A. I have read and agree to be bound by the provisions of Special Provisions Text CZ002300, Special Provisions For Contract Dispute Resolution which provides a required succession of actions for contract dispute resolution which is incorporated with this bid and made a part of this bid proposal.
- B. I have read and agree to comply with and be bound by the provisions of Special Provisions Text 109-8(a-b)09, Special Provisions For Payments To Subcontractors, to which requires prompt payment for services or materials provided by subcontractors, service companies or material suppliers which is incorporated with this bid and made a part of this bid proposal. (49 CFR 26.29)
- C. I understand that the provisions of FHWA Form 1273 are incorporated by reference into this agreement and that all subcontracts which may be entered into for the purposes of performing work required in this bid shall be subject to the provisions of FHWA Form 1273 shall have FHWA Form 1273 incorporated therein.
- D. I state under penalty of perjury that neither I nor any owner, officer or employee of the above named firm, association or corporation I represent, have either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with the bid submitted herewith. (23 CFR 635.112)
- E. I hereby make the following disclosures concerning business relationships:
- 1. As the prospective participant or as the authorized agent of the above named firm, association or corporation, I am authorized to submit this bid. As the maker of this unsworn statement, I hereby disclose the nature and existence of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, consulting engineer, or other party to the project, or any of their employees is as follows:

<ol><li>That any such business relationship presently in effect or which</li></ol>	ch
existed within one (1) year prior to the date of this statement between	
any officer or director of the above named company, and any officer or	
director of the architectural or engineering firm, or other party to the	
project is as follows:	

	3.	That	the	names	of	all	per	sons	having	any	such	business
relationship	p and	l the	pos	ítions	the	ey h	old	with	their	respe	ective	<u> </u>
companies of	r fir	ms an	re as	s follo	SWC	:						

(If none of the business relationships herein above mentioned exist, maker of this unsworn statement should so state by entering the word NONE after each statement.(61 O.S. Section 108))

- F. For purposes of submission of this competitive bid, I certify:
- 1. I am the duly authorized agent of the above named firm, the bidder submitting the competitive bid which is attached to this statement, for the purpose of certifying the fact pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached;
- 2. I am fully aware of the facts and circumstances surrounding the making of Lhe bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and
- 3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
- a. to any collusion among bidders in a restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
- b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
- c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract.  $2\ \text{Of}\ 5$

- 4. I certify, if awarded the contract, whether competitively bid or not, neither the Contractor nor anyone subject to the Contractor's direction or control has paid, given or donated, or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring the contract to which this statement is attached. (74 O.S. Section 85.22)
- G. I certify that neither I nor any owner, officer or other principal of the firm, organization or corporation submitting this bid;
  - 1. Are presently excluded or disqualified;
- 2. Are presently indicted for or otherwise criminally charged by a governmental entity, (Federal, State or local) with commission of, or have been convicted or subject to civil judgment within the past three (3) years for, any of the following offenses:
- a. Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public or private agreement or transaction;
- b. Violation of Federal or State antitrust statutes, including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging;
- c. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; or
- d. Commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects my present responsibility;
- 3. Have had one or more public transactions, (Federal, State or local), terminated within the preceding three (3) years for cause or default.  $(49 \ \text{CFR} \ 29.335)$
- H. I understand that if the project which is subject to this bid proposal is financed in whole or part by federally furnished funds, that if I or the firm, association or corporation I represent or any owner, officer, employee or agent thereof knowingly makes a false statement, representation, report or claim as to the character, quality, quantity or cost of materials used or to be used, the quantity or quality of work performed or to be performed, or make any false statement or representation as to a material fact in any statement, certificate or report, that I, other responsible individual, or the firm, association or corporation I represent, may be subject to prosecution under the laws of the United States. (18 USC Sections 1001, 1020)

Name of Contractor as shown on Prequalification Application

Date and Place

Signature of Prospective Participant

Printed name of Prospective Participant

The Maker of this Statement's title or position with Prequalified Contractor

UNSWORN STATEMENT UNDER PENALTY OF PERJURY INFORMATION:

By affixing his/her signature to this unsworn statement, the bidder understands that he/she is under penalty of perjury and is fully bound thereby.

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STATUS VERIFICATION SYSTEM AFFIDAVIT

STATE OF	) ) SS:
COUNTY OF	_)
I,	duly sworn, on oath states:
bid proposal to the State of Oklahom and circumstances surrounding the ma	
	and fully participates in the Status Title 25 O.S. Section 1313(B)(1), to of all new employees of the bidder.
FURTHER AFFIANT SAITH NOT.	
	AFFIANT
Subscribed and sworn before me this	day of, 20
My Commission Expires: My Commission Number:	NOTARY PUBLIC

5 OF 5