ARDOT Preventive Maintenance Plan

December 2018

The Arkansas Department of Transportation (ARDOT) and the Federal Highway Administration (FHWA) have come to an agreement defining which project activities shall fall under the category of ARDOT Preventive Maintenance Plan (PM).

This plan's directive shall be used by ARDOT personnel to determine when the activities involved in a project will fall under the Preventive Maintenance Plan. These PM activities are greater defined in the current <u>Preservation Strategy Guidelines for Arkansas</u> <u>Department of Transportation</u> (hereafter the "PM Guide") attached in the Appendix.

I) ARDOT Involvement:

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- A) ARDOT agrees to utilize the following procedures to determine, evaluate, and implement preventive maintenance strategies.
 - i) The identification of possible projects for preventive maintenance treatment may originate with:
 - ARDOT Staff, based on engineering observation or performance data
 - Local agencies or the public, based on comments/complaints
 - ii) The most recently collected pavement information will be used on the identified roadways as follows:
 - Pavement Type,
 - Traffic,
 - Safety (crash history),
 - International Roughness Index (inches per mile),
 - Asphalt Pavement (includes composite pavements):
 (a) Rutting,
 (b) Creating
 - (b) Cracking,
 - Jointed Concrete Pavement:
 - (a) Faulting, and
 - (b) Fractured Slabs
 - Continuously Reinforced Concrete Pavement (a) Cracking.
 - iii) The following pavement attributes shall be used to determine a pavement's condition. For asphalt pavement the three attributes shall be international roughness index (IRI), rutting, and cracking. For continuously reinforced concrete pavement the two attributes shall be IRI and punch-outs. For jointed concrete pavement the three attributes shall be IRI, faulting, and fractured slabs. The aforementioned pavement attributes shall be ranked as good, fair, or poor, as defined in the PM Guide.

- iv) The appropriate PM strategy activities will be considered from the following categories:
 - Asphalt Pavement:
 - (a) Crack Treatments,
 - (b) Patching,

- (c) Pavement Correction,
- (d) Non-Structural Wearing Course,
- (e) Surface Treatments.
- Concrete Pavement:
 - (a) Crack and Joint Treatment,
 - (b) Faulting Treatments,
 - (c) Void Treatments.
- A full list of PM treatments is in the PM Guide.
- v) All preventive maintenance projects will consider appropriate ways to maintain or enhance the current level of safety and accessibility. Isolated or obvious deficiencies shall be addressed in any PM project.
 - Safety enhancements to be considered for inclusion in PM projects include but are not limited to:
 - (a) Adjusting guardrail as necessary due to resurfacing,
 - (b) Upgrading guardrail terminals, barrier terminals, crash cushions, impact attenuators, and bridge transitions as necessary,
 - (c) Eliminating pavement edge drop-off; safety edge may be considered as a method to eliminate edge drop off,
 - (d) Installing or replacing traffic signs and pavement markings,
 - (e) Removing or shielding roadside obstacles,
 - (f) Installing curb ramps as required by the Americans with Disabilities Act Accessibility Guidelines,
 - (g) Installing or replacing traffic control devices that do not meet the standards in the Manual on Uniform Traffic Control Devices (MUTCD) (required),
 - (h) Installing paved or stabilizing unpaved shoulders, and
 - (i) Installation of milled rumble strips may be included in projects where they are determined to be a cost effective way to improve safety. If rumble strips are obliterated by a PM treatment replacement is required.
 - If a pavement does not meet the requirements for a preventive maintenance treatment but is deemed a safety issue due to low pavement friction or high crash rates, a non-structural wearing, or high friction surface course (for asphalt pavement) or a texture enhancing treatment (for concrete pavement) may be applied as long as the underlying pavement is deemed structurally sound.

- The Department will maintain an inventory of slope failures and rank each location based on maintenance history, slope conditions, potential for traffic interruptions, and public safety concern. Locations will be rated on a scale of 1 through 4 with a ranking of class 4 being considered the most severe.
- B) The pavement condition data, PM strategy/rehabilitation strategy, and proposed safety and accessibility additions and/or improvements will be provided to FHWA for their information.
- C) PM activities will be executed by a combination of in-house resources (force account) and contract efforts. The contract efforts will be awarded based on competitive bid. Competitively bid contract formats include Job-Order Contracts, General Services Contracts/Proposals, maintenance contracts, and Performance based maintenance contracts. In-house efforts are typically smaller in scale and geographically dispersed, which reduces the efficiency of contracting efforts. Cost tracking will be performed to demonstrate force account work is advantageous to the State through lower cost and quicker response due to length of time to bid a project. FHWA memorandum, <u>FHWA Policy on Agency Force Account Use</u>, dated March 12, 2012 will be utilized to determine force account eligibility.

II) FHWA Involvement:

- A) FHWA agrees to utilize the data provided in Section I for informational purposes only except when:
 - i) A proposed project is rated poor,
 - ii) A slope failure is determined to be Class 3 or Class 4,
 - iii) A proposed project where ARDOT determines safety improvements are essential but are not feasible to implement with the PM project. These safety improvements shall be included in a later project, and
 - iv) ARDOT proposes to
 - Add new proven preventive maintenance strategies,
 - Remove existing preventive maintenance strategies when they are determined to be ineffective,
 - Reassign preventive maintenance strategies to new or different categories, or
 - Modify treatment thresholds.
- B) FHWA concurrence with the proposed project will be required for cases listed in §II.A.
- C) FHWA will provide Federal oversight and/or perform programmatic reviews of the process in accordance with the current FHWA / ARDOT Stewardship and Oversight Agreement.

III) Projects with Multiple Category Activities:

Projects may involve different activities which can be categorized as PM, resurfacing, restoration, rehabilitation (3R), or reconstruction activities as part of the scope of work. If 90% or more of the total project length is PM, then the project will be considered a PM activity. For example, a project may consist of five miles of a PM overlay and involve 100 feet of pavement replacement at the end of the project. This project may be categorized as a PM activity.

ARDOT may request from FHWA to use the PM criteria where less than 90% of the planned work is preventive maintenance.

IV) Preventive Maintenance Project Requirements:

All projects categorized as PM shall be designed per all current applicable design policies.

V) Administrative Details:

This agreement supersedes the ARDOT Preventive Maintenance Plan between ARDOT and FHWA dated March 4, 2016.

Upon mutual agreement by FHWA and ARDOT, this Preventive Maintenance Plan and the processes and procedures supporting it may be modified to include any changes resulting from programmatic reviews performed.

Angel Correa, P.E. FHWA Division Administrator

1-16-2019

Date

Scott E. Bennett, P.E. ARDOT Director 12 - 17 - 18

Date

APPENDIX

Preservation Strategy Guidelines for the Arkansas Department of Transportation

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ASPHALT PAVEMENT						
Treatment Type	Definition					
Crack Treatment						
Crack Filling	The placement of materials into non-working cracks to substantially reduce infiltration of water and to reinforce the adjacent pavement. Working cracks are defined as those that experience significant horizontal movements, generally greater than 0.1". Crack filling should be distinguished from crack sealing.					
Crack Sealing	Crack Sealing is a rigorous operation that involves thorough crack preparation followed by the placement of specialized crack seal material. Crack sealing is typically used on working cracks with vertical/horizontal movement of 0.1" or more. This movement is caused by temperature changes and/or traffic loading.					
	Patching					
Partial Depth	Partial depth patching (PDP) consists of removal and replacement of small, shallow areas of deteriorated pavement with: cold- and hot-asphalt mixture, spray injection methods, as well as slurry and microsurfacing materials, to repair distress and improve ride quality.					
Full Depth	Full-depth patching (FDP) restores structural integrity and rideability of the pavement. This involves removing the deteriorated pavement down to the base, repairing the disturbed base, and refilling the excavated area with: cold- and hot-asphalt mixture, spray injection methods, as well as slurry and microsurfacing materials.					
	Pavement Correction Category I					
Profile Milling	Profile milling is the process of removing a portion of pavement surface to correct the pavement profile or roughening the existing surface for a new thin Hot Mix Asphalt (HMA) overlay. This surface milling is frequently used with a thin HMA overlay, but may be used without additional treatments.					
Leveling	1.0" or less					
	Non-Structural Wearing Course Category I					
Rejuvenation	Rejuvenating agents are added to existing aged or oxidized HMA pavements in order to restore flexibility and retard cracking.					
Fog Seal	A light spray application of slow setting asphalt emulsion diluted with water. It is used to restore asphalt surfaces and to seal small cracks and surface voids. It can also be used to prevent raveling.					
Rejuvenating Fog Seal	A light spray application of quick breaking polymer-modified emulsion that has rejuvenator as one of its components. It is used to restore asphalt surfaces and to seal small cracks and surface voids. Rejuvenating Fog Seals are typically used on oxidized pavements that are in good condition to extend the service life. It can also be used to prevent raveling.					

	Asphalt Pavement Continued						
Treatment Type	Definition						
Non-Structural Wearing Course Category I (Continued)							
High Performance Fog Seal	A light spray application of quick breaking polymer-modified emulsion with added performance qualities such as reduced tracking and blacker appearance. It is used to restore asphalt surfaces and to seal small cracks and surface voids. High Performance Fog Seals are typically used on oxidized pavements that are in good condition to extend the service life. It can also be used to prevent raveling.						
	Non-Structural Wearing Course Category II						
Chip Seal	An asphalt surface treatment in which a paved surface or primed base course is sprayed with a rapid setting asphalt emulsion and then immediately covered with mineral aggregate and rolled. Chip Seals are used primarily to seal the surface of a pavement with non- load associated cracks and to improve surface friction. They are also commonly used as a wearing course on low volume roads.						
Scrub Seal	A Mass Crack Treatment consisting of the spray application of rejuvenating polymer-modified emulsion, followed by a series of broom heads (scrub broom sled) which forces the emulsion into the cracks. Cover aggregate is then applied using a self-propelled chip spreader. The aggregate is then rolled similar to that of a chip seal.						
Slurry Seal	A surface treatment composed of a mixture of dense graded aggregate, emulsified asphalt, mineral fillers, additives, and water. Slurry seals improve texture uniformity, fill cracks, and seal pavement surfaces. Slurry Seals can also be used as the final wearing course on a Cape Seal.						
Sand Seal	A spray application of asphalt emulsion that is covered with fine aggregate. It may be used to improve the skid resistance, arrest oxidation, and prevent water intrusion.						
Sandwich Seal	A surface treatment that consists of the application of large cover aggregate, followed by a spray application of asphalt emulsion that is in turn covered with an application of smaller aggregate. Chip seal rolling procedures are used after applying the final course of aggregate. Sandwich seals are used to seal the surface and improve skid resistance. Sandwich Seals have also been used to correct flushed or bleeding pavements.						
Double/Triple Chip Seal	A multi-layer chip seal whereby each subsequent chip seal uses a smaller mineral aggregate. These treatments are typically used to seal the pavement surface and may increase the pavements macro-texture.						
	Non-Structural Wearing Course Category III						
Cape Seal	A surface treatment that involves the application of a slurry seal or micro-surface to a newly constructed scrub seal or chip seal. Cape seals are used to provide a dense, waterproof surface with improved skid resistance.						

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	Asphalt Pavement Continued						
Treatment Type	Definition						
Non-Structural Wearing Course Category III (Continued)							
Ultra-Thin Bonded Wearing Course	An Ultra-Thin Bonded Wearing Course (UTBWC) consists of the application of a gap-graded hot mix into a thick polymer modified membrane using a spray paver. UTBWC ranges from 0.5"-1.0" in thickness. UTBWC is a pavement preservation application that reduces water spray and improves wet-weather visibility. It is a safety measure for pavements exhibiting low skid resistance.						
Open Graded Friction Course	An Open Graded Friction Course (OGFC) is a thin, open-graded permeable layer of hot mix consisting of predominantly single size aggregate particles. An OGFC allows for water drain down and has similar attributes to that of an UTBWC.						
Microsurfacing	A mixture of polymer modified asphalt emulsion, mineral aggregate, mineral filler, water, and other additives, properly proportioned, mixed and spread on a paved surface to add skid resistance and seal and protect the pavement surface. Microsurfacing can be used as a two-step process with the first step being to fill ruts and the second step being a full overlay of the pavement with the microsurfacing treatment.						
Thin Overlay	An HMA overlay of 1.0" or less						
	Pavement Correction Category II						
Cold Milling	A process of milling and removing pavement material from the surface of the pavement either to prepare the surface (by removing rutting and surface irregularities) to receive subsequent maintenance treatments or hot mix overlays. Cold Milling restores pavement cross slopes and profile and can re-establish the pavement's surface friction characteristics.						
Leveling	1.0" -2.0"						
	Surface Treatments						
Overlay	An HMA overlay of 1.0"-2.0".						
Cold In-Place Recycling	A process in which a portion of an existing bituminous pavement is pulverized or milled, the reclaimed material is mixed with new binder and, in some instances, virgin aggregates. The resultant blend is placed as a base for a subsequent overlay. Emulsified asphalt is especially suited for cold in-place recycling. Not necessarily required, a softening agent may be used along with the emulsified asphalt.						
Hot In-Place Recycling	An on-site, in-place method that rehabilitates deteriorated asphalt pavements and thereby minimizes the use of new materials. It is a four step process consisting of: 1) softening of the asphalt pavement surface with heat, 2) scarification and/or mechanical removal of the surface material, 3) mixing of the material with recycling agent, asphalt binder, or new mix, and 4) laydown and paving of a recycled mix on the pavement surface.						

	CONCRETE PAVEMENT					
Treatment Type	Definition					
	Crack and Joint Treatment Category IV					
Crack Sealing	Crack sealing/filling on Portland Cement Concrete Pavement (PCCP) is an					
Joint Resealing	Work consisting of routing (sawing to remove old sealant and reshape the joint seal reservoir), cleaning, and sealing joints in PCCP.					
ASR Pavement Sealing	Where Alkali Silica Reaction (ASR) is determined to be present a seal treatment may be placed on a pavement to delay the damage from ASR. The treatment placed shall be a proven technology for treating ASR.					
	Faulting Treatment Category VI					
Diamond Grinding	Diamond grinding is one of the most cost effective concrete pavement restoration techniques. It corrects irregularities such as faulting or roughness on concrete pavements. This treatment creates a texturized pattern on a concrete pavement surface using a diamond grinding machine, which grinds 0.2" to 0.25" of the concrete surface. It may reduce hydroplaning and crashes by creating water channels on the surface of the pavement.					
Diamond Grooving	Grooving consists of cutting channels into the pavement that provide better drainage of water between the tires and the pavement surface.					
Shot Blasting	The process of using an abrasive media to remove surface material from the pavement without damage to the subsurface pavement structure.					
	Void Treatment Undersealing					
Undersealing	Voids under PCCP cause faulting, pumping, corner breaks, and joint failure. Filling the voids with the proper material can extend PCCP life and improve rideability. This technique, called undersealing, consists of pumping cement grout or liquid asphalt under PCCP so that the filling material flows into the voids. It is noted that undersealing is not intended to lift the slab but to fill the voids to improve loss of support.					
	Faulting Treatment Dowel Bar Retrofit					
Dowel Bar Retrofit	Load transfer retrofit is the installation of dowel bars within a joint or crack in order to re-establish load transfer across the joint or crack. Load transfer is the mechanism by which the traffic load is conveyed from one slab to the next through shear action. Having poor load transfer efficiency can cause joint deterioration, spalling, pumping, corner breaks, etc. The dowel bar retrofit process should include diamond grinding and joint resealing.					

and the second	Concrete Pavement Continued						
Treatment Type	Definition						
Constanting states	Crack and Joint Treatment Category V						
Full Depth Repair	Full-depth patching (FDP) restores structural integrity and rideability of PCCP. This involves removing the deteriorated concrete down to the base, repairing the disturbed base, installing load transfer devices, and refilling the excavated area with new concrete. It is an effective and permanent treatment to repair pavement distress, particularly which occurs at or near deterioration, and restore the pavement close to its original condition.						
Partial Depth Repair	Partial depth patching (PDP) consists of removal and replacement of small, shallow areas of deteriorated PCCP at spalled or distressed joints with rapid-setting patching materials.						
Cross- Stitching	Cross-stitching uses deformed tie bars epoxied or grouted into holes drilled at an angle through a crack to address movement.						
Slot-Stitching	Slot-stitching uses deformed tie bars grouted into slots cut across a joint or crack.						
	Void Treatment Slab Jacking						
Slab Jacking	Pumping cement grout, liquid asphalt, or foam under PCCP so that the filling material flows into the voids and raises the slab back to its original elevation.						
	Other Preventive Maintenance Projects Qualifications and Explanations						
Treatment Type	Definition						
Slope Stabilization	Stabilization or minor reconstruction of impending or ongoing subgrade failures caused by unstable side slopes. Repair methods include drilled rail retaining structures, soil nails, aggregate piers, and shallow depth rock buttress.						
Shoulder Repair	Shoulder repairs may be completed where warranted as determine by ARDOT. This includes but is not limited to the same preventive maintenance treatments placed on asphalt and concrete pavements, even if the treatment is not placed on other pavement.						
Barrier Wall Repair	To prevent the infiltration of water into the barrier wall system, Category I crack and Joint Treatment may be placed on the barrier walls. In addition, other minor repairs may be made to the barrier wall as long as the repairs are not considered structural.						
Restoration of Drainage Systems	Restoration of drainage systems may be performed where the drainage system is not functioning properly. Methods may include cleaning of drains, resealing or relining of drains, and other methods of restoring functionality and structure to the drainage system.						
Cleaning of Underdrain Systems	This item shall consist of extricating any foreign material, soil, rocks, vegetation, or other impediments to the flow of water from the drainage facilities.						
Clearing of Trees and Shrubs	The clearing of trees and shrubs from right-of-way shall be considered preventive maintenance where the root system from the over growth of vegetation may cause excessive water loss in the shoulder, which may lead to shoulder damage.						

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Part II: Pavement Classification

The overall pavement condition for each PM project is determined by the pavement condition of individual tenth (0.1) mile pieces within the job limits. These individual tenthmile pieces of pavement are defined herein as a pavement segment. Each segment will be classified as Good, Fair, or Poor based on the pavements attributes as defined below.

Good Condition: A pavement segment shall be classified in good condition if all pavement attributes are classified as good.

Poor Condition: A pavement segment shall be classified as poor if two or more of the pavement attributes are classified as poor, unless the single poor classification is in cracking. If the poor classification is in cracking and is triggered by fatigue cracking then the pavement shall be classified as poor.

Fair Condition: A pavement segment shall be classified as fair condition if the pavement does not meet the classification of good or poor.

Asphalt Pavement						
Pavement Attributes	Good	Fair	Poor			
IRI (inches per mile) < 95 95 - 170 >						
Rutting (inches)	< 0.20	0.20 - 0.40	> 0.40			
Cracking (percent)	< 5	5 – 10	> 10			

Table 1 - Asphalt Pavement Attributes

Table 2 - Concrete Pavement Attributes

Concrete Pavement					
Pavement Attributes	Good	Fair	Poor		
IRI (inches per mile)	< 95	95 – 170	>170		
Faulting (number of faults > 0.25° per pavement segment) ¹	0	1 – 20	> 20		
Fractured Slabs (percent) ¹	< 5	5 – 15	> 15		
Punch-out's (per pavement segment) ²	0	<u>≤</u> 2	> 2		

1. For jointed concrete pavement (JCP) only.

2. For continuously reinforced concrete pavement (CRCP) only

Once the pavement segments have been evaluated the overall condition of the pavement shall be determined. A continuous grouping of pavement segments within the limits of a job is defined herein as a pavement section. If there is more than one pavement section within the job limits of a project, each of the pavement sections will be evaluated individually.

For pavement section condition classification, 70% of the pavement segments within the pavement section must meet the requirements of that pavement condition ranking. If a pavement section does not have 70% of the section in one of the three pavement

conditions, the predominant condition will determine the overall condition of the pavement. For example, if a pavement section has 35% in good, 45% in fair, and 20% in poor condition; the pavement would be considered in fair condition.

Part III: Preventive Maintenance Treatments

The tables below establish the eligible category of treatments based on the pavement condition for asphalt and concrete pavements. The appendix details all preventive maintenance treatments that accompany the preventive maintenance categories. Combination treatments may be allowed as long as all parts of the combination treatment fall within the given pavement treatment category.

			Asp	bhalt P	avement			
Pavement Condition	Crack Filling or	Patching	Milling and Leveling		Seal Treatments ²			Overlays and
Condition	Sealing		<u><</u> 1"	< 2 "	Category I	Category II	Category III	Recycling
Good	Х		Х		X	X		
Fair	Х	Х	Х	X ¹	X ³	Х	Х	X
Poor		Х		X	X ³		X	X

Table 3 -	Asphalt	Pavement	Treatment	Categories
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 Milling and Leveling ≤ 2" may be used on a pavement in fair condition if a two inch mill and inlay of the main lanes is more economical than a two inch overlay of the main lanes and shoulders.

- Category I: Rejuvenation, Fog Seal Category II: Chip Seal, Scrub Seal, Slurry Seal, Sand Seal, Double/Triple Chip Seal, Sandwich Seal Category III: Cape Seal, Open Graded Friction Course, Microsurfacing, Ultra-Thin Bonded Wearing Course, Thin Overlay < 1.0 inch
- 3. **Category I** Seal Treatments may be used on shoulders in conjunction with a **Category II** Seal Treatment for the travel lanes where the shoulder is structurally sound and ARDOT is not placing other preventive maintenance treatment on the shoulders.

able 4 - Cor	icrete Pave	ment i reati	ment Categ	ories		
		C	oncrete Pa	vement		
Pavement	Crack a Treat		Faulting	Treatment	Void Treatment	
Condition	Category IV ¹	Category V ²	Category Vl ³	Dowel Bar Retrofit	Undersealing	Slabjacking
Good	Х				Х	
Fair	Х	X	Х		Х	
Poor		X	Х	Х	Х	X

Table 4 - Concrete Pavement Treatment Categories

1. Category IV: Crack Sealing, Joint Resealing, ASR Pavement Sealing

2. Category V: Partial Depth Repair, Full Depth Repair, Dowel Stitching

3. Category VI: Diamond Grinding, Diamond Grooving, Shot Blasting

Part IV: Other Qualifying Preventive Maintenance Projects

Side slope failures often lead to subgrade failures and consequently pavement distress. Side slope issues shall be evaluated based on condition and probability of causing roadway failures. Slides requiring major reconstruction will not be considered. Each slope issue shall be classified as defined below.

Class 1: Requires little or no maintenance. Slope has been repaired in the past. Has very little potential to damage the roadway, but is occasionally monitored.

Class 2: Occasionally requires maintenance. Shallow slope failures or minor erosion issues exist. Failures occur on the uphill side of the roadway that may deposit material on the shoulder, but do not pose a threat to the overall stability of the roadway embankment.

Class 3: Visible signs of significant movement on the side slope. Leaning trees, moving boulders, or open cracks are visible on the side slope. Significant erosion issues that are moving closer to the roadway. Uphill failures with potential to cause overall subgrade failure are visible. Failures and cracking on the downhill slope that are moving toward the roadway.

Class 4: Cracks are visible in the roadway or shoulder as a result of overall slope movement. Location requires regular maintenance to sustain the roadway or shoulder. Site requires monitoring during rain events. Movement has caused separation or damage to drainage structures. Side slope failures shall be stabilized to prevent damage to the pavement. Repair methods shall include the construction of retaining structures, soil nails, aggregate piers, and rock buttress.

In addition to pavement preventive maintenance activities, shoulder repair, barrier wall repair, restoration of drainage systems, cleaning of underdrain systems, and the clearing of trees and shrubs from right-of-way in cases where vegetation has the potential to cause shoulder failures shall be considered preventive maintenance projects.



Arkansas Division

January 16, 2019

700 West Capitol, Rm. 3130 Little Rock, AR 72201-3298 (501) 324-5625

Mr. Scott Bennett Director Arkansas Department of Transportation PO Box 2261 Little Rock, AR 72203

Dear Mr. Bennett:

My office received your letter dated December 17, 2018, requesting our review and approval of ARDOT's updated Preventive Maintenance Plan. The updated (December 2018) Plan allows for slope stabilization to be performed as preventive maintenance.

Based on the information provided in the updated Plan and recent discussions between my staff and ARDOT staff regarding a systematic method of both maintaining a slope failure database and classifying the severity, we concur with ARDOT's request to include slope stabilization as a preventive maintenance activity. This decision supports our agreement to increase flexibility for using Federal-aid funds on cost-effective preventive maintenance treatments.

Please contact Lester Frank at (501) 324-6428 if you have any questions.

Sincerely,

Angel L. Correa Division Administrator

ARKANSAS STATE HIGHWAY COMMISSION

DICK TRAMMEL CHAIRMAN ROGERS

THOMAS B. SCHUECK VICE CHAIRMAN LITTLE ROCK

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SCOTT E. BENNETT, P.E. DIRECTOR

P.O. Box 2261 • Little Rock, Arkansas 72203-2261 Phone (501) 569-2000 • Voice/TTY 711 • Fax (501) 569-2400 www.ArDOT.gov • www.IDriveArkansas.com

December 17, 2018

Angel Correa Division Administrator Federal Highway Administration 3130 Federal Office Building Little Rock, Arkansas 72201

Dear Mr. Correa:

Enclosed for your review and approval is the updated Preventive Maintenance Plan (Plan). The updated Plan allows for slope stabilization to be performed as preventive maintenance. This Plan will supersede the current Plan approved March 4, 2016.

Thank you for your consideration of this matter. If you have any questions or need additional information, please contact Brad McCaleb at (501) 569-2946.

Sincerely,

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Scott E. Bennett, P.E. Director

Enclosure

c: Deputy Director and Chief Operating Officer Deputy Director and Chief Engineer Assistant Chief Engineer – Planning Assistant Chief Engineer – Operations Maintenance Program Management System Information & Research

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