

TP ATTACHMENT 500-1 – MAINTENANCE TABLE

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
1 –Public Appearance									20%
1.1	Debris and obstructions	Travelled way and roadside is free from debris and obstructions	N/A	2 hours traffic lanes, 48 hours other areas	Visual	Weekly	No debris on travelled way or roadside areas	100%	
1.2	Litter	Keep project in neat condition. Remove and dispose of litter regularly,	N/A	1 week, except that significant incidents of litter deposited on the Project require 2 hour response	Visual – no more than 20 pieces of litter per auditable section when travelling at highway speed.	Weekly	Inspection records showing compliance	<20 pieces of litter per auditable section	
1.3	Sweeping	Keep all hard shoulders, gore areas, ramps, intersections, islands, and frontage roads swept clean. Remove and dispose of all sweepings without stockpiling in the ROW	N/A	1 week except gores and ramps – 2 weeks	Visual No un-swept areas greater than 24 inches wide, 50 feet in length or ½ inch deep	Weekly	Inspection records showing compliance	100%	
1.4	Graffiti	All surfaces within the right-of-way shall be maintained free of graffiti.	N/A	24 hours for profanity, areas visible to travelling public and for specific call outs. 1 week for other graffiti discovered in course of Maintenance activities	Visual / Inspection	1 month	Inspection records.	100%.	
1.5	Traffic Signals	All signals including cabinets, signal supports wiring, lenses, and detection loops are functional, clean, aligned, structurally sound, and power supply is maintained. Cabinet electronics are not included.	2 hours	2 weeks	Visual	Monthly	Inspection records.	100%	
1.6	Landscaped areas (Character Areas 1,3,4,5)	All landscaped areas are maintained to their originally constructed condition. Landscaped areas are as designated in the Plans. Irrigation system maintenance and operation; plant maintenance; pruning; insect, disease, and pest control; fertilization; and watering are undertaken according to MMP. Desert pavement, granite mulch, rock mulch, and decomposed granite areas are kept free of weeds. Backflow preventers are operating properly. Damaged or dead vegetation is replaced.	N/A	1 month	Visual Backflow preventers: Certified by qualified inspector	Monthly Annually	Inspection records showing compliance. .		

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
1.7	Landscaped areas (Character Area 2)	Plant maintenance; pruning; insect, disease, and pest control; fertilization; and watering are undertaken according to MMP. Vegetation removal at intersections, ramps, or other areas maintains visibility of appurtenances and sight distance. Vegetation does not encroach into or on paved shoulders, main lanes, sidewalks, islands, riprap, traffic barriers, or curbs. A herbicide program is undertaken to control noxious weeds and to eliminate vegetation in pavement or concrete. The height of grass and weeds is kept between 2 in. and 8 in. Mowing begins before vegetation reaches 8 in.	N/A	1 month	Visual	Monthly	Inspection records showing compliance.	100%	
1.8	Fire Hazard	Fire hazards are controlled	N/A	24 hours	Visual	Monthly	Instances of dry brush or vegetation presenting a fire hazard	0	
2 – Roadway – Pavement Ride									35%
2.1	Pavement Ride	All roadways have a smooth, quiet surface course (including bridge decks, covers, gratings, frames and boxes) free from Defects.	30 days	1 year	Ride quality: Measurement of International Roughness Index (IRI) according to ADOT Standards, Operating Inertial Profilers. (New Construction is subject to Construction Standards).	Once every other year	Mill and replace AR-ACFC when: Number of Performance Sections with an average IRI greater than or equal to 150 inches/mile. Mainline lanes and ramps, 0.1 mile average IRI greater than or equal to 150 inches/mile. Frontage roads, 0.1 mile average IRI greater than or equal to 170 inches/mile	0 0 0	
3.0 Roadway – Other Pavement Distress Factors									10%
3.1	Other pavement distress factors	Pavement does not exhibit other pavement distress factors listed in FHWA publication on distress identification manual for long term pavement performance program	48 hours for distress affecting traffic on mainline lanes, ramps, and frontage roads. 30 days for less severe distress on travelled way	1 year	Visual	Monthly	Severity rating of "low" or better" for all pavement areas for all distress factors	100%	
					Ruts – Mainline, shoulders, frontage	Every other year	Number of Performance Sections with average rut depth greater than 1/2	0	

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
					roads, crossroads, and ramps: Depth as measured using automated device in compliance with ADOT Standards. 10-foot straightedge used to measure rut depth in localized areas.		inch. Depth of rut at any location greater than 1 inch.		
			N/A	6 months	Shoulder/Edge drop offs: Physical measurement of edge drop-off level compared to adjacent paved surface.	Monthly	Repair when: Abrupt vertical differential between the travel lane and paved shoulder reach 2 inches.	100%	
			48 hours	1 year	Potholes	Monthly	Repair when: Occurrence of potholes of low severity or higher.	100%	
			48 hours for distress affecting traffic on mainline lanes, ramps, and frontage roads. 30 days for less severe distress on travelled way	1 year	Base failures	Annually	Repair when: Occurrence of Base failures of low severity or higher.	100%	
			N/A	6 months	Cracks	Annually	Clean and seal cracks when: Occurrence of individual cracks 1/4 inch wide or wider. All areas with extensive finer cracking.	100%	
			48 hours for distress affecting traffic on mainline lanes, ramps, and frontage	1 year	Settlement / Heave / Distortion	Annually	Repair when: Surface deviations reach 1-1/2- inches in a length of 50 feet. International Roughness Index (IRI) exceeds 150 inches/mile.	100%	

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
			roads. 30 days for less severe distress on travelled way				Surface deviations exceed 1/2 inch between adjacent slabs.		
			48 hours for distress affecting traffic on mainline lanes, ramps, and frontage roads. 30 days for less severe distress on travelled way	1 year	Joints separation or displacement	Annually	Repair when: Concrete pavement joints and shoulder joint separations between concrete pavement and adjacent asphaltic concrete pavement exceed 1/4 inch in width. Concrete pavement joint width more than 1 inch or faulting more than 1/4 inch.	100%	
			48 hours for distress affecting traffic on mainline lanes, ramps, and frontage roads. 30 days for less severe distress on travelled way	1 year	Spalling	Annually	Repair when: Transverse spall which exceeds 4 inches in length in the direction of travel or which adversely affects ride quality. Longitudinal spall which adversely affect ride quality.	100%	
3.2	Curbs, sidewalks ADA ramps	Concrete curbs, sidewalks are ADA compliant and are not displaced or damaged.	1 week for conditions affecting ADA requirements. 1 month for other conditions	6 months	visual	Monthly	Inspection records and physical measurements showing compliance	100% for ADA requirements. 90% in auditable section for curb	
4.0 Safety and Security									15%
4.1	Safety Barriers, attenuators, barrier end treatments	All barriers, guard rail / bridge rail transitions, guard rail end treatments, and attenuators are fully functional, not damaged or displaced and are in proper location and orientation	2 hours	1 week for attenuators and barrier end treatments, 30 days for other failures	Visual	Annual	Inspection records showing compliance	100%	
4.2	Fence/Gates and noise walls	All ROW fence and gates are in good repair, gates are closed and locked. Noise walls are undamaged and functional;	24 hours for ROW fence and gates, Repairs on	1 week for ROW fences and gates, 6 months for	Visual	Monthly	Inspection records showing compliance	100%	

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
			noise walls that function as ROW fence must be within 24 hrs. 30 days for other noise wall; repairs	noise wall					
4.3	Signage and delineators	All signs and delineators are clean, oriented properly, legible, retro-reflectivity greater than 75% of new, unauthorized signs are removed, obsolete signs are removed or replaced,	2 hours for safety critical signs (regulatory and warning); 1 week for other signs.	2 weeks	Visual	Annual	Inspection records showing compliance	100%	
4.4	Lighting	Luminaires are illuminated, clean free from defects, properly aligned; sign lighting is functional. Electrical supply is maintained,	2 hours for restoration of electrical supply; 2 hours for sign lighting for safety critical signs, 24 hours for other sign lighting, N/A for street lighting luminaires	1 month	Visual	Annual	Number of auditable sections with less than 90% of luminaires functioning; instance of 3 or more consecutive luminaires not functioning; lack of sign lighting creating an illegible condition for the sign	90% 0%	
4.5	Pavement marking	Pavement markings are complete, of correct color and configuration. Retro-reflectivity is 75% of new condition	48 hours	3 months	Visual	Annual	90% of pavement markings are present and compliant; no incorrect markings are present	90%	
5.0 Structures									10%
5.1	Bridges	FHWA mandated inspections – these inspections are not delegated. ADOT will perform the required inspections. Developer will be required to carry out temporary and permanent repairs as indicated in the inspection reports	2 hours for conditions that affect life safety; 1 week or as indicated in bridge inspection report for other issues.	3 months or as indicated in bridge inspection reports.	By ADOT	Once every other year	Bridges in full repair with no condition rating below 7	100%	
		Visual inspections of bridge components	2 hours for conditions that affect life safety; 1 week	3 months or as indicated in bridge inspection	Visual	Annual	No visually apparent defects	100%	

TP Attachment 500-1 Maintenance Table									
Ref.	Element	Performance Requirement	Repair Response		Inspection Method	Inspection Frequency	Measurement Record	Target	Weight
			Temporary	Permanent					
			or as indicated in bridge inspection report for other issues.	reports.					
5.2	Retaining walls	Mechanically stabilized earth and other types of retaining walls are free from impact damage, dislocation, are properly drained, have no loose components, and no exposed resteel.	2 hours for conditions that affect life safety, 30 days for other conditions	6 months	Visual	Annual	Inspection records showing compliance	0	
5.3	Sign and lighting supports	Sign and lighting supports are structurally sound, have no loose hardware or anchorages and are properly positioned and aligned.	2 hours for conditions that affect life safety, 1 week for other conditions	3 months	Visual	Annual	Inspection records showing compliance	0	
6.0 Ponding/Flooding, Drainage and Slopes									10%
6.1	Ponding and flooding	Roadway is free from standing water after 50 year storm event	2 hours	1 month	Visual	Monthly and after storm event in compliance with SWPPP requirements	Areas of standing water within travel lanes are less than 50 SY in extent.	100%	
6.2	Detention and retention basins	Detention and retention basins are substantially free from standing water after 50 year storm event	24 hours	1 month	Visual	Monthly and after storm event in compliance with SWPPP requirements	Areas of standing water within detention and retention basins are less than 1,000 SY in extent.	100%	
6.3	Drainage systems	All ditches, channels, culverts, piped drainage systems, including pressure or syphon drainage systems work as designed to carry design flows. Catch basins, inlets, and culverts are substantially free from debris and obstructions in order to carry the design flows.	24 hours as required to maintain capacity in case of storm event	6 months or as required to maintain capacity in case of storm event	Visual and CCTV methods a appropriate.	Annual	Drainage system capacity is unimpaired	100%	
6.4	Slopes	Cut and fill slopes are maintained at design configuration without slope failures or erosion. Erosion debris is kept from roadway.	2 hours for failures that affect or threaten travelled way. 1 month for other issues.	6 months	Visual	Annual	Erosion materials or slope failures affecting travelled way	none	